

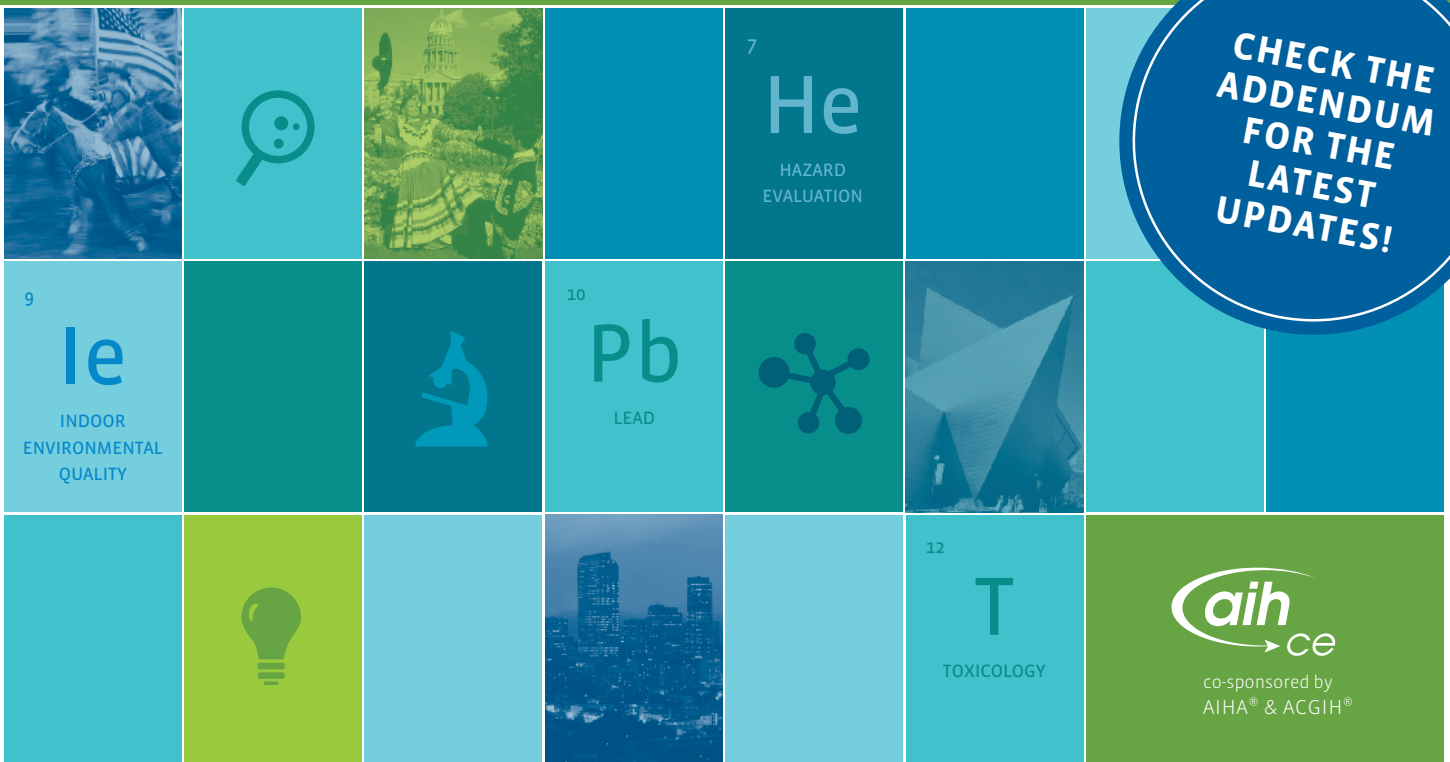
The Premier Conference & Exposition for OEHS Professionals



AIHce2010

NEW FRONTIERS IN SCIENCE AND PRACTICE

FINAL PROGRAM



**CHECK THE
ADDENDUM
FOR THE
LATEST
UPDATES!**

PHOTOS: DENVER CONVENTION + VISITORS BUREAU

denver, colorado | may 22-27, 2010 | aihce2010.org

aih
→ce
co-sponsored by
AIHA® & ACGIH®

FUMEGARD

setting the standard [in metal-free environments]

Durable Polypropylene Construction

NuAire® polypropylene Fume Hoods are constructed from stress-relieved, fully seam-welded, and reinforced white polypropylene for a long lasting, rust free product life.

Virtually Metal Free

All FumeGard™ cabinets are virtually metal free and do not use nylon components. "Double Wall" construction forms the plumbing chase for the routing and connection of all services required. This compartment is constantly under negative pressure to minimize any fume build up. Access panels are provided for front maintenance of HEPA filters, services, electronics system, and view screen counterweight balance system. Hinges, handles, screws, bolts, sinks, and miscellaneous items are also constructed of polypropylene.

Designed to Capture, Contain, and Exhaust

NuAire's HEPEX™ Zero Leak Airflow System maintains quiet uniform airflow. The HEPEX™ System also prevents uneven particulate loading by eliminating direct blower blasts to the HEPA filter and dispensing air over 100% of the HEPA filter surface.

FumeGard™ Polypropylene Fume Hoods

Models: NU-156 Vertical Laminar Airflow Fume Hood; NU-162 Conventional Fume Hood, and NU-164 By-pass Fume Hood.

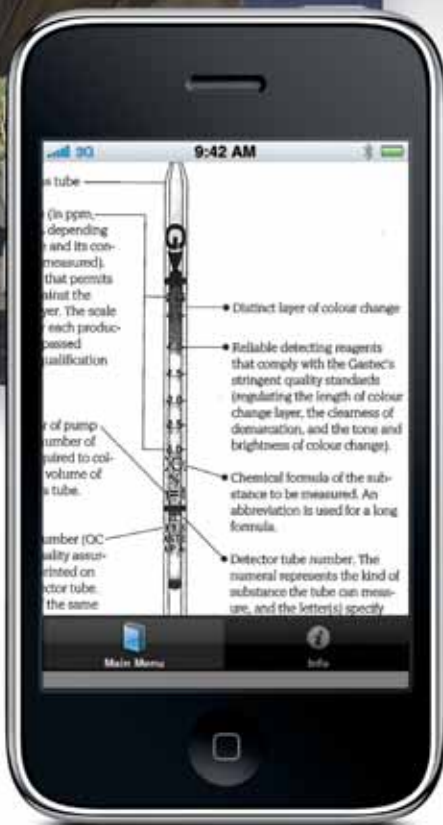
Polypropylene Fume Hoods



NuAire offers a wide variety of polypropylene laboratory furniture and equipment products

Made in the USA

AIHce
831
booth



The Nexteq App contains the complete Gastec Handbook. It's like having an IH on call 24/7.

Operation, Troubleshooting & Maintenance –

- Operation section includes Gastec Pump preparation and step-by-step operation and measurement procedures, hints for tube reading, correction information, tube disposal information, and much more.
- Maintenance section includes Pump Leak Test Procedure and tube storage instructions.
- Troubleshooting section includes everything from the basics on how to read a tube, reaction principals and interferences, to understanding accuracy and warnings on interchangeability.



Exact images of Gastec Handbook data sheets and tube Instructions for all Gastec detector tubes can be obtained instantly – no phone calls, no handbooks to carry, and no instruction sheet to unfold.

Nexteq App has pinch to zoom in or out so you can easily view:

- The actual tube drawing with the concentration scale printed on the tube,
- Performance chart data indicating the measuring ranges, correction factors and sampling times,
- Any chemical interferences with corresponding color change, and
- Any temperature and humidity correction factors if applicable.

Supporting you in the field with the Next Technology....

Download the Nextteq iPhone App today and the information you need is a tap away!



Access Gastec's complete line of Gastec pumps and tubes, sampling accessories and kits for Gas Detection, First Response/Hazmat Testing, Water and Soil Analysis, and Respirator Fit Testing. A prompt to upload updates ensures current data 24 hours a day.



The Main Menu is your gateway to a wealth of chemical detection information!

Product Category – access all Nextteq product offerings – view over 20 different product categories to narrow your search by Gastec Tube Type, Pumps, Accessories, Kits, Industry Kits, Respiratory Fit Testing equipment, etc. and get the product name, part number, image, and description. Carry a complete literature package on your phone!

Chemical, Tube Number, or Tube Name – Search by the chemical you're trying to detect, Gastec tube number or tube name and view the Instruction Sheet or Data Sheet. The technical information is at your fingertips when you need it most.

Visit us at Booth #1012 for your chance to win an iPhone with the Nextteq App.



For more information: NEXTTEQ LLC

Toll-free: 877-312-2333 • Email: info@nextteq.com
www.nextteq.com

Gastec tubes and pumps are manufactured by the Gastec Corporation. Nextteq is Gastec's exclusive U.S. master wholesale distributor.

Don't Buy Gas Detectors



iNet™ solves common gas detection problems:

“We can't possibly follow all the warnings in the user manuals.”

■ **“We don't know what's really happening in the field.”**

“We can't service our gas detectors ... and suppliers take too long.”

“We don't have time to keep records.”

“Costs are too high and unpredictable.”

Most people are surprised to learn that gas detectors go into high alarm **every 10 days** on average. Do you know how often your gas detectors go into alarm? Do you wonder if your people use calibrated gas detectors ... or if they use them at all? You won't have these and any other questions with iNet ... guaranteed.

iNet is Gas Detection as a Service. Our hosted software platform gives you a 360-degree view so you know what's happening out there: exposure and trend data, alarms, calibration, usage, and detector performance details. All the knowledge you need to take control of your gas detection program and save lives. **Don't buy gas detectors. There's a much better way ... iNet.**



Gas Detection as a Service is proven

- ✓ Over 7 years experience
- ✓ Over 27,000 gas detectors
- ✓ Over 1,100 customer sites

The Gas Detection People

Subscribe to iNet and receive Gas Detection as a Service. Visit www.indsci.com or call 1-800-DETECTS.

**INDUSTRIAL
SCIENTIFIC**

Visit our AIHce Booth #1213

Visit the 3M booth #1203 at AIHce 2010

- See the entire Quest Technologies product line, and other 3M™ Safety and Industrial Hygiene Products
- Watch a 15 minute presentation on the EVM-7 on **Monday, May 24, 2010, 1:00 PM, Expo Theatre**



One Solution Multiple Measurements



©2010 3M. All Rights Reserved.



The EVM-7 Environmental Monitor measures both particulates and air quality in one compact instrument. This durable monitor provides a lower cost of ownership by combining three instruments into one. Its patented dial-in rotary impactors, intuitive user interface and advanced reporting make the EVM-7 an instrument of choice for Safety and Industrial Hygiene Professionals worldwide.

Simultaneous Measurement of:

- Particulates (mass concentration)
- Toxic gas
- Relative humidity
- Air velocity (with optional accessory)
- Volatile organic compounds
- Carbon dioxide
- Temperature

For more information:

Visit: www.questtechnologies.com

Call: 800.245.0779

Email: quest.mail@mmm.com

3M.com/OccSafety

Visit us at
Booth
#1417

Environmental



Intelligent Wireless Gas Detection



Industrial



Oil & Gas

www.raesystems.com

Copyright © 2010 RAE Systems, Inc. All rights reserved.



Protection Through Detection

AIHce2010

NEW FRONTIERS IN SCIENCE AND PRACTICE

Welcome

to AIHce 2010 and to the beautiful city of Denver! Get ready for a week of interactive sessions that will leave you equipped with ideas and solutions to bring back and apply immediately to your daily work. AIHce 2010 is your opportunity to step back from everyday demands and focus on your most important asset—your professional development. Enjoy your week!

Education and Expo Highlights

- A robust Monday-through-Thursday Conference Program with **115 technical sessions**. Major in one track or mix and match sessions across various topics to customize your days.
- An **all-star lineup of General Session speakers**—come see if your question will be answered during the Wednesday session.
- **New programming tracks** in H1N1 Flu Planning & Response, Green Practices, and more.
- **Special Interactive Learning sessions**: Get on the IH Soapbox or participate in a Luncheon Discussion—both take place in the Expo throughout the week.
- **New in the Expo**: Exhibitor presentations and live demos.

Networking Musts

- **Monday Opening Reception in the Expo**—don't forget to bring your drink ticket. AIHce2010 Facebook Fans, meet at the AIHA® Booth during the reception.
- **MSA/AIHA® Reception**—an AIHce tradition, now cosponsored by AIHA®.
- Back by popular demand! **Speed Networking** at the AIHA® Career Development Fair on Tuesday.

Stay Connected

- Keep up with e-mail and fellow registrants at various **Cyber and Message Centers** throughout the Expo.
- Bring AIHce home with new, fully “synched” **AIHce multimedia Downloads and DVDs**.
- Keep the discussion going...connect with other AIHce attendees on **AIHA® pages on Facebook and LinkedIn**.

If you have any questions during the week, stop by the Information Kiosk or ask any AIHA® staff member—we will be happy to assist you.



aih
ce

Co-sponsored by
AIHA®
and ACGIH®

**Welcome
to Denver!**

» Contents

INFORMATION + ACTIVITIES

Boards and Conference Committees	9
General Information	10
Hotel Locator.....	15
Awards.....	16
Social Tours	20
Technical Tours	21
Student and Young Member Activities	22
<i>CareerAdvantage</i> Development Fair '10	23
NEW! Volunteer Collaboration Café.....	24
Board and Volunteer Group Activities.....	26

EDUCATION

Friday and Saturday At-a-Glance.....	28
Sunday At-a-Glance.....	30
Monday At-a-Glance	34
Monday Technical Program	38
• Luncheon Discussions	43
• Expo Theater	38 and 44
Tuesday At-a-Glance	50
Tuesday Technical Program	54
• Luncheon Discussions	60
• Expo Theater	54 and 61
Wednesday At-a-Glance	68
Wednesday Technical Program	72
• Luncheon Discussions	77
• Expo Theater	72 and 78
Thursday At-a-Glance	86
Thursday Technical Program	87
Poster Sessions.....	94
Multimedia Downloads and DVDs.....	53

EXPO

Expo Highlights	98
NEW! Expo Theater	99
AIHce 2010 Sponsors	100
Expo Floor Plan.....	102
Exhibitors by Aisle	104
Exhibitors by Alphabet	106
Exhibitors by Product and Services	124

FLOOR PLANS + INDICIES

Colorado Convention Center.....	132
Hyatt Regency Denver Hotel.....	133
Technical Program by Topic	134
Index of Advertisers	139

Introducing . . . the OHD
QUANTIFIT[®]
THE NEW GOLD STANDARD IN
RESPIRATOR FIT TESTING



The best just got better!

Using the same proven technology, the Quantifit takes accuracy, speed, and reliability to a new level.

- Complete a fit test in 3 minutes or less!
- On-board data storage
- USB keyboard and printer connection
- USB thumb-drive storage and data transfer
- USB Computer interface with included software
- Firmware upgrades and improvements may be downloaded from the internet
- Easy-to-read backlit display
- Smaller, lighter and quieter instrument
- Sleek new look with improved on-board software
- Optical knob for easier menu navigation
- World-wide universal power connection
- More audio feedback during testing

optimus

sound level meters

The new Optimus sound level meters from OHD & Cirrus Research have been designed to meet the new needs of our customers today and tomorrow.

- Measures everything at the same time
- Voice tag audio recording
- Real-time Octave Bands
- High resolution color screen
- Designed to make your noise measurements simple
- Software upgrades to future-proof your investment



OCCUPATIONAL HEALTH DYNAMICS
OHD

WWW.OHDUSA.COM

Toll Free: (888) 464-3872 • Fax: (205) 980-5764 • SALES@OHDUSA.COM

**Visit us at
booth #707**

**Call us for
money saving
rates!**

**TSI SidePak
Personal/Aerosol
Monitor**

**MiniRAE3000
VOG Monitor**

**Quest Noise Pro
Noise Dosimeter**

**We now offer repair
and calibration services!
Ask us for details.**

Let Us Be Your Complete Instrumentation Supplier!

We're not just rentals anymore! We've recently expanded our offerings to provide you with a range of sales and service plans. In addition to rentals, we now offer **Rent-To-Own** and **Perpetual Rental Programs** as well as **Repair & Calibration Services** and **New & Used Equipment Sales**. *Call us to learn more about these options* and our dependable 24/7 tech support to compliment our nationwide inventory.

Ashtead Technology carries an expansive inventory to cover the broad range of instruments for the industrial hygiene field:

- **Clean room inspections**
- **Detecting and identifying potentially hazardous working environments**
- **Indoor air quality**
- **Surveying confined spaces**
- **Ventilation studies**
- **Validating employee health and safety conditions**

A sample of our rental inventory:

- Air Quality Monitors
- Clean Room Performance Testing
- Confined Space Entry
- Hazardous Waste Investigation
- Heat Stress Monitors
- High Volume Samplers
- Moisture Meters
- Noise Dosimeters
- Particle Counters
- Personal Sampling Pumps
- Positive Material Identification

» Boards and Conference Committees

We thank the following volunteers for their time and expertise in assembling the 2010 program:

AIHce Program Co-Chairs

Michael T. Brandt, DrPH, PMP, CIH (AIHA®)
Lisa M. Brosseau, ScD, CIH (ACGIH®)

Permanent Conference Committee

Chair, Donna Doganiero, CIH
Vice Chair, Robert F. Wheaton, MPH, CIH

Members

Maritza Adams, CSP
Stacy Bucherl
Matthew Finucane, MS, CIH
Shannon Henshaw Gaffney, PhD, MHS, CIH
L. Faye Grimsley, PhD, CIH
Christine Lorenzo, CIH
Bill R. McArthur, PhD, CIH
Elizabeth L. Pullen, CIH

Continuing Education Committee

Chair, Kenneth R. Talley, CIH, CSP
Vice Chair, Camille Carraway, CIH
Secretary, Melissa M. Rupert, CIH, MS
Past Chair, Diane Zerbe, MHS, MT (ASCP)

Members

David S. Abrams, CIH
Dennis P. Bridge, CIH, CSP, PE
Rebecca Brown, CIH
Stephanie R. Carter, PhD, CIH
Kaleb Grittner, CIH, ROH, CRSP
Judith L. Healy, CIH, CSP
Randal J. Keller, PhD, CIH, CSP, DABT
Penelope E. Pietrowski, CIH

AIHA® Board of Directors

President, Cathy L. Cole, CIH, CSP
President-Elect, Michael T. Brandt, DrPH, PMP, CIH
Vice President, Elizabeth L. Pullen, CIH
Past President, Lindsay E. Booher, CIH, CSP
Treasurer, Allan K. Fleeger, CIH, CSP
Secretary, Cynthia A. Ostrowski, CIH
Treasurer-Elect, Harry J. Beaulieu, PhD, CSP, CIH

Directors

Daniel H. Anna, PhD, CIH, CSP
Cindy Coe, CIH
Barbara J. Dawson, CIH
Kevin G. Gara, CIH
Steven E. Lacey, PhD, CIH, CSP
Alan J. Leibowitz, CIH, CSP
Charles F. Redinger, PhD, CIH
David C. Roskelley, MSPH, CIH, CSP
Shelley R. Wheeling, MPH, CHMM, CSP, CIH

Executive Director, Peter O'Neil, CAE

Local Conference Committee

Chair, Christine Lorenzo, CIH

Opening General Session

Robert Acker, CIH; John Colvin, CIH, CSP; Cynthia Ellwood, PhD, CIH; Eric Esswein, MSPH, CIH; Chuck Koch, MPH, CIH; Edgar Reed, CIH, CSP

Community Service

Christine Lorenzo, CIH; Darrel Ruby, CIH, CSP

Entertainment

Cindy Becnel; Darrel Ruby, CIH, CSP; Jeffrey Stumpf, CIH, CSP

Hospitality

Joyce Anderson, CIH; Eric Esswein, MSPH, CIH; Denise Donnelly; Wendell Rahorst, CIH; Darrel Ruby, CIH, CSP

Student Liaison—Rocky Mountain AIHA Student Section, CSU

Stephen Reynolds, PhD, CIH; John Schaeffer

Technical Tours

Pam Baptiste; Michael Boyer, CIH; Cynthia Ellwood, PhD, CIH; Mary Ann Heaney, CIH, CSP; Linda Hendrix; Barbara O'Kane, CIH, CSP; Darrel Ruby, CIH, CSP

Volunteers

Robert Acker, CIH; John Colvin, CIH, CSP; Darrel Ruby, CIH, CSP; Robert Strode, CIH

Welcome to Denver Website

Linn Havelick, CIH; Joyce Anderson, CIH; John Colvin, CIH, CSP; Mary Ann Heaney, CIH, CSP; Kate McInnis-Serrano; Michael Richen, CIH; Robert Strode, CIH

The LCC, in partnership with AIHA®, works to organize and execute an outstanding AIHce. A special thanks to all who donated their time throughout the year to make our vision a reality.

ACGIH® Board of Directors

Chair, Stephen J. Reynolds, PhD, CIH
Vice Chair, Lisa M. Brosseau, ScD, CIH
Vice Chair-Elect, Bill R. McArthur, PhD, CIH
Immediate Past Chair, Jimmy L. Perkins, PhD, CIH
Secretary-Treasurer, Manuel R. Gomez, DrPH, MS, CIH
Secretary-Treasurer-Elect, Heather D. Borman, MS, CIH, CSP

Directors-at-Large

Stephanie R. Carter, PhD, CIH
Theodore J. Hogan, PhD, CIH
Robert F. Wheaton, MPH, CIH

Executive Director, A. Anthony Rizzuto, CAE



» General Information

The Colorado Convention Center is headquarters for conference activities.

AIHA® and ACGIH® board, committee and social activities are scheduled at the Hyatt Regency Denver. Refer to the At-a-Glance pages for the location of specific activities.

AIHce Information

Convention Center, Lobby » 303-228-8250

Contact AIHce staff for general conference information. Paging and message services are not available.

Denver City and Restaurant Information

Convention Center, Lobby Level

Friday	4:00 p.m.–6:00 p.m.
Saturday–Sunday	8:00 a.m.–5:30 p.m.
Monday	8:00 a.m.–6:00 p.m.
Tuesday	8:00 a.m.–5:30 p.m.
Wednesday–Thursday	8:00 a.m.–4:00 p.m.

The Welcome Center staff can provide directions in and around the Convention Center as well as general city information, shopping and restaurant recommendations.

Colorado Convention Center Gift Shop

Lobby Level, Lobby A Concourse

Daily, 7:30 a.m.–5:30 p.m.

The shop carries a myriad of items including sundries, office supplies, and souvenirs, featuring a specialized collection of Colorado arts and crafts and Native American, Aspen and turquoise jewelry.

Airport Transportation

SuperShuttle staff will be at the Info Kiosk, Wednesday, May 26, 2:00 p.m.–5:00 p.m. and Thursday, May 27, 9:00 a.m.–11:00 a.m. The discounted cost to the airport is \$19 one-way or \$32 roundtrip (discount code: 84ALS). For additional information call 1-800-BLUEVAN.

Taxi fare from downtown Denver to the airport is \$51, plus tip.

Spouse/Guest Hospitality Center

Hyatt Regency, Agate

Monday–Wednesday, 8:30 a.m.–11:30 a.m.

Catch up with old friends and plan your conference week. Enjoy a Welcome to Denver brunch on Monday and continental breakfast on Tuesday and Wednesday. A concierge will be available to assist with questions on what to see and do in Denver.

Center admission is limited to registered spouses and guests; tickets required for breakfasts.

16th Street Shuttle

Denver's 16th Street is the heart of downtown and a unique pedestrian mall. Free shuttles transport passengers the length of the mall, stopping at every block. The shuttles operate daily, Monday–Saturday, 6:00 a.m.–1:00 a.m. and Sunday, 7:00 a.m.–1:00 a.m. During peak times, the buses run every 2 minutes. All shuttles are wheelchair accessible.

Expo Highlights

Convention Center, Halls A and F

Monday	9:00 a.m.–5:30 p.m.
Tuesday	9:00 a.m.–3:00 p.m.
Wednesday	9:00 a.m.–1:30 p.m.

It's all happening at the Expo — the place to browse more than 300 exhibits, relax, dine and meet with colleagues. Each day features Expo-only hours affording time in the Expo between sessions.

- **NEW!** Expo Theater
- **NEW!** Photo Display, *Holding Mother Earth Sacred*, by Earl Dotter, photojournalist
- Clandestine Drug Lab display
- Expo Opening Cocktail Reception — don't forget your complimentary drink ticket
- Passport to Prizes
- Cyber/Message Centers
- Networking Lounges
- Daily non-compete Expo Time
- Conference-only publication discounts and prizes at the AIHA Booth
- Web and Software Showcase
- Technical and Student Posters
- Monday, Tuesday and Wednesday Lunch Discussions
- Restaurants
- University Row
- Annual Blood Drive
- Daily Prize Drawings

AIHce gratefully acknowledges the support of our 2010 sponsors. See p. 100 for details.

AIHA® and ACGIH®

AIHA® InfoCentral

It's all happening at AIHA's InfoCentral! Browse the latest AIHA publications and enjoy special discounts. Free shipping and easy online ordering for AIHA members. Information and special promotions for AIHA's products and services such as the Consultants Listing, membership, the *Synergist*, and Education. Contribute to the *AIHce Bits and Pieces* wall, get a Treat for a Tweet, and come meet fellow AIHce2010 Facebook Fans during the Monday Opening Reception in the Expo.

Check out these NEW publications debuting at AIHce 2010:

- The Occupational Environment: Its Evaluation, Control, and Management, 3rd edition
- Clandestine Indoor Marijuana Grow Operations — Recognition, Assessment, and Remediation Guidance

» General Information

- La Estrategia para la Evaluación de la Exposición Ocupacional
- ANSI/AIHA Z88.7-2010 Color Coding of Air-Purifying Respirator Canisters, Cartridges, and Filters
- 2010 ERPG/WEEL Handbook
- 2010 ERPG Update Set
- 2010 WEEL Update Set

AIHA's InfoCentral is the place to be! Visit us in booth 623.

The ACGIH® Pavilion, booth 1623, is always a popular stop for registrants. Staff will demonstrate how ACGIH® defines the science of occupational and environmental health by showcasing the member benefits, outstanding publications and software, and upcoming continuing education courses and webinars for which ACGIH® is renowned. Information regarding The Action Level®, our at-home, self-study continuing education course, the Foundation for Occupational Health and Safety (FOHS), and the Foundation's Sustainable TLV®/BEI® Program will be available. Please stop by and see us.

Poster Sessions, Hall F

More than 100 technical and student papers present the latest findings in OEHS. Posters are displayed 9:00 a.m., Monday, through 1:00 p.m., Wednesday. Authors are present during specified times to discuss their research. See p. 94.

Luncheon Discussions

Convention Center, Hall A

Luncheon Discussions are small conversational groups facilitated by AIHA Members and NIOSH researchers and technical staff. Discussions focus on current issues, trends, relevant topics and research. Purchase lunch from a concession and choose your discussion. Seating is limited and available first-come, first-served.

- **Student and Early Career Professionals**
Monday, 12:30 p.m.-1:30 p.m.
- **Implementing NORA Strategic Plans**
Tuesday, 12:30 p.m.-1:30 p.m.
- **Volunteer Group Tech Talks**
Wednesday, Noon-1:00 p.m.

26th Annual AIHF Fun Run/Walk

Tuesday, 6:30 a.m. » Cherry Creek

Lace up your tennis shoes and support the work of the AIHF. Run 5K or Walk 2K -all are welcome! Meet in the lobby of the Convention Center at 6:15 a.m. to walk to the starting line. New and advance registered participants must stop by Registration in the Convention Center to check-in, sign a waiver, and receive their T-shirt by 5:00 p.m., Monday. The on-site fee is \$40. No check in or new registrations accepted at the race site.



The Fun Run is sponsored by BP, Dupont, and Hygiene Technologies.

AIHce Pin

Spice up your badge and support the American Industrial Hygiene Foundation by purchasing the AIHce 2010 pin at the AIHA booth or at the Volunteer Collaboration Café. Wear it to show you support throughout conference week!



Annual Blood Drive

Convention Center, Expo, Hall F
Monday-Tuesday, 9:00 a.m.-3:00 p.m.

Donate in the name of **BONFILS BLOOD CENTER** your alma mater! The institution with the highest number of registered donors WINS. Although walk-ins are welcome, you are encouraged to make an appointment early in the day to reduce waiting time.

My Office Business Center

Convention Center, Lobby

T: 720-904-2300; F: 720-904-0796
Daily, 7:30 a.m.-5:30 a.m.

FedEx Office Business Center

Hyatt Regency Denver, Lobby

T: 303-486-4481; F: 303-486-4450
E-mail: usa5009@fedexkinkos.com
Monday-Friday, 7:00 a.m.-7:00 p.m.
Self-service business center is available 24-hours a day.

AIHA CareerAdvantage Development Fair 2010 Building Careers for Life

Sponsored by the Career and Employment Services Committee

Convention Center, Hall F » 303-228-8246

Monday	8:00 a.m.-4:00 p.m.
Tuesday	8:00 a.m.-4:00 p.m.
Wednesday	9:00 a.m.-2:00 p.m.

For those attendees actively seeking employment, the CareerAdvantage Development Fair has always been the place to search and apply for open OEHS positions online. You can also sign up for a personal videotaped mock interviewing session, and have your résumé critiqued for free. Even if you aren't currently looking for a new job, you'll want to increase your marketability as a job candidate in the future.

See page 23 for a list of scheduled events.

If you are an employer seeking to fill an open position, stop by and quickly post your jobs online, and candidates will be able to view your position immediately. You can also search through online résumés and select from hundreds of qualified OEHS professionals. Visit the Development Fair in Hall F today to find out more.

» General Information

Children

Children under 18 years of age are not permitted in courses or in the exhibit hall during the move-in/move-out. If accompanied by an adult, under-aged children are permitted in the hall during regular Expo hours.

Coat/Luggage Check

Convention Center, 101

Tuesday	7:30 a.m.–5:30 p.m.
Wednesday	7:30 a.m.–6:30 p.m.
Thursday	7:30 a.m.–5:00 p.m.

\$3.00 per item. Items may be left at the discretion of the owner; AIHce is not liable for lost articles. Please do not check valuables.

First Aid and Assistance

Convention Center, Lobby E

A first aid station is staffed daily, Saturday through Thursday. My Office Business Center at the Colorado Convention Center rents manual and electric scooters on a first-come, first-served basis.

Lost and Found

AIHce Information Kiosk, Lobby » 303-228-8250

Kindly bring articles left behind in meeting rooms or the Expo to the Information Kiosk.

Press Room

Convention Center, 303 » 303-228-8243

Monday-Tuesday	7:30 a.m.–5:00 p.m.
Wednesday	7:30 a.m.–3:00 p.m.

Members of the media are invited to attend education sessions and to visit the Expo. All representatives must register for the conference in the press room; proper credentials are required. The press room will include exhibitor media kits, high-speed Internet connections, areas to network and conducts interviews, and refreshments. Press inquiries should be directed to Melissa Hurley, AIHA Strategic Communications Manager.

Registration

Convention Center, Lobby » 303-228-8241

Friday	4:00 p.m.–6:00 p.m.
Saturday–Tuesday	7:00 a.m.–5:30 p.m.
Wednesday	7:30 a.m.–4:00 p.m.
Thursday	7:30 a.m.–10:30 a.m.

Registrants must have satisfied all the requirements of membership and paid dues in full by January 30, 2010 to register in a “member” category.

Registrants must wear name badges to be admitted to technical sessions and to the Expo. Courses, symposium, tours, AIHF Fun Run/Walk, the conference pin, and selected social activities require a ticket. The deadline for advance refunds was April 28. On site, once tickets are purchased, fees are not refundable. Course ticket exchanges are permitted.

In keeping with AIHce policy, upon presentation of a reservation confirmation, a hotel key, or other documentation, registrants staying in an official AIHce 2010 hotel are eligible for the registration discount. Refer to the on site registration form for fees.

Professional registrants receive the Final Program, Addendum, and Lanyard. Booth personnel receive a copy of the Final Program.

There is a \$5.00 charge for lost badge and ticket replacement.

Lanyards provided by Sensidyne, Inc.



Hotel Reservations

Convention Center, Lobby » 303-228-8241

Contact staff for assistance.

Friday	4:00 p.m.–6:00 p.m.
Saturday–Tuesday	7:00 a.m.–5:30 p.m.

Speaker Ready Room

Convention Center, 302 » 303-228-8242

Saturday–Tuesday	7:30 a.m.–5:30 p.m.
Wednesday	7:30 a.m.–6:30 p.m.
Thursday	7:00 a.m.–4:30 p.m.

Staff will be available to distribute ribbons, session recording coupons and expo hall passes for poster sessions, as well as answer general inquiries. Computer workstations, LCD projectors and microphone training is available.

Speaker Ready Room check-in:

- Mandatory for all Technical Session (Podium, Roundtable and Crossover) presenters, moderators and monitors, 30 to 60 minutes prior to the start of their session. Technical Session Presenters are also required to check in with an audiovisual technician to ensure presentations are compatible with session equipment and to confirm recording permissions. Only AIHce-supplied computers may be used in technical sessions.
- Not required for PDC instructors. AIHA® does not provide computers for PDCs.

Volunteer Collaboration Café

Convention Center, Grand Concourse

Stop by the all new Volunteer Collaboration Café — an interactive spot designed for you to network with colleagues and to learn about AIHA® volunteer opportunities.

Sunday	7:30 a.m.–5:00 p.m.
Monday	7:30 a.m.–6:00 p.m.
Tuesday	7:30 a.m.–4:00 p.m.
Wednesday	7:30 a.m.–5:00 p.m.

» General Information

International Reception

Each year, AIHce welcomes international registrants. All AIHA®/ACGIH® member professional, non-U.S. registrants are cordially invited to join other international colleagues on Monday night for this annual event. Admission by invitation. Badge required.

Certification

Attendance and participation in assigned activities and projects is required to earn CEUs, COCs, and CM points. Partial credits will not be awarded. For specific CM, COC, and CEU point information, please review individual course descriptions. Questions may also be directed to eduassistant@aiha.org.

Although AIHA® maintains attendance records, it is the responsibility of the registrant to maintain all documentation including certificates and registration receipts for future reference and/or certification audits. AIHA® charges a \$50 replacement fee to issue lost documentation, including course certificates and letters verifying attendance at AIHce. For complete information, visit www.aiha.org/CMReplacement.



AIHce 2010 is approved for certification maintenance (CM) points by the American Board of Industrial Hygiene (ABIH) as follows:

- May 21–May 23, 2010 — Symposium and PDCs; see individual descriptions for point values
- May 24–May 27, 2010 — Technical Sessions and Tours, 0.5 CM point per half-day; Wednesday evening, 0.5 CM point; maximum of 4.5 CM points

Instructors, speakers, authors, and presenters:

- PDC instructors receive 0.33 CM point per hour
- Presenters and speakers for technical or poster sessions receive 1 CM point for presentations of at least 20 minutes but less than 60 minutes
- Co-authors listed in the AIHce Final Program receive 0.5 CM point

Proof of attendance:

For PDC attendance, ABIH will accept an AIHce 2010 PDC certificate of completion

For general, technical session, and tour attendance, ABIH requires the following:

- AIHce 2010 registration receipt
- Evidence of physical presence (e.g., approved expense report, hotel bill, meal bills, parking receipts)

Questions regarding certification maintenance should be directed to ABIH at (517) 321-2638.



The Registration Maintenance (RM) Committee of the Canadian Registration Board of Occupational Hygienists (CRBOH) has awarded

- 1.0 RM point per conference day
- 1.0 RM point for each full day PDC
- 0.5 RM point per half day PDC

Registrants claiming any registration maintenance points must provide proof of attendance.

CEUs and COCs



AIHA® is approved by the International Association for Continuing Education and Training (IACET) to award CEUs to participants who successfully complete courses. In obtaining this approval, the AIHA® has demonstrated that it complies with the ANSI/IACET 1-2007 Standard, an internationally recognized set of standards for good practice. As a result of its Authorized Provider membership status, AIHA® is authorized to offer IACET CEUs for its programs that qualify under the ANSI/IACET 1-2007 Standard. See individual PDC and Symposium descriptions for point values.



AIHA® is authorized by the Board of Certified Safety Professionals (BCSP) to issue continuance of certification (COC) points in conjunction with the CSP certification.

The Board of Canadian Registered Safety Professionals has awarded 2.0 Certification Maintenance Program (CMP) points for attendance of the full conference (May 24–27, 2010).

Where to Eat?

In the Center —

The Expo, Halls A and F

Concessions are open Monday–Wednesday serving gourmet sandwiches and salads in a variety of price ranges. The Blue Bear Café, located in the lobby, is open daily.

Outside the Center —

Dining options, including pubs, restaurants, cafes and fast food outlets are plentiful on 16th Street, just 2 blocks from the Center. Check at the Visit Denver Kiosk for information.

**Have a question
about Denver?
The LCC's
Ask Me Ambassadors
are here to help.**



Connect ...with AIHce!

Customize and Maximize Your AIHce Experience.

Use these tools to customize your time at conference and maximize your networking opportunities. Using your preferred mobile device — PDA, laptop, Kindle, iPhone or iPad — most programs are electronically and easily accessible during AIHce.

Educational Enhancements

Program Planner

www.aihce2010.org

Stay organized throughout the week; use this tool to upload your conference schedule.

E-abstract Books

www.aihce2010.org/green

Select, download and prioritize abstract presentations by OEHS professionals and students.

E-Handouts

www.aiha.org/eMats

Green PDCs offer convenient, searchable resources that can easily be transferred, stored and retained. *(Registered green PDC participants only.)*

Collaborative Learning

www.aiha.org/eMats

Start or join a discussion, share lessons learned, access references and ask follow-up questions — post-PDC. *(Registered green PDC participants only.)*

AIHce Virtual Tech Sessions

www.aiha.org/VirtualTechSessions

Colleagues not attending AIHce? Connect them virtually to select Wednesday sessions ... Live!

Multimedia Downloads and DVDs

www.aihce2010.org

Take AIHce home! Replay a specific technical session or the full conference and build your OEHS library.

Your Social Connection

Cyber/Message Centers, Expo, Halls A and F

Locate colleagues and connect face-to-face or leave/ retrieve messages. And, stay in touch with home or office with FREE web access.

Laptop Lounge , Grand Concourse

Keep family, friends, coworkers, clients and remote office access one click away on your mobile device.

Twitter, Facebook, LinkedIn

Read what attendees are Tweeting, Friend other AIHce 2010 Fans or plan a Meetup

Twitter:

www.twitter.com/AIHA_aihce
and #aihcesession

Facebook:

www.facebook.com

LinkedIn:

www.linkedin.com

Beyond the Expo Floor

Virtual Expo

www.aiha.org/expo2010

Plan your hall experience — search for exhibitors, products, and services.

New! Expo Theater Presentations, Expo, Hall F

Miss a presentation? View exhibitor sponsored product demos on the web and see what's new in 2010.

After AIHce

Check the AIHce website for the conference recap. View web clips of meeting highlights, news, interviews with prominent colleagues and a preview of AIHce 2011 in Portland, OR.

» Hotel Locator



1. **Hyatt Regency Denver at Colorado Convention Center AIHce Headquarters**
650 15th Street
2. **Comfort Inn Downtown**
401 17th Street
3. **The Courtyard by Marriott Denver**
934 16th Street
4. **Crowne Plaza Denver City Center**
1450 Glenarm Place
5. **The Curtis Hotel Denver Downtown**
1405 Curtis Street
6. **Hilton Garden Inn Denver Downtown**
1400 Welton Street
7. **Grand Hyatt Denver Downtown**
1750 Welton Street

8. **The Magnolia Hotel Denver**
818 17th Street
9. **Denver Marriott City Center**
1701 California Street
10. **Residence Inn City Center**
1725 Champa Street
11. **Sheraton Denver Downtown**
1550 Court Place
12. **Hotel Teatro Denver**
1100 14th Street
13. **Westin Tabor Center Denver Downtown**
1672 Lawrence Street

Due to the proximity of AIHce hotels to the Colorado Convention Center and the Hyatt Regency, no shuttle buses are provided.

All awards will be presented at the Opening General Session on Monday, May 24, unless otherwise noted.

AIHA®

Edward J. Baier Technical Achievement Award



Established in 1984 in honor of Edward J. Baier, this award is presented by Bureau Veritas to the individual, company, academic institution, organization, or association that has made the most significant contribution to industrial hygiene in recent years. This year's recipient is **Dennis J. Paustenbach, PhD, DABT, CIH**. As a toxicologist and industrial hygienist, Dr. Paustenbach has made significant technical contributions in toxicology and exposure assessment that have expanded the role of industrial hygienists in environmental and consumer product health. He is considered a leader in risk assessment. His work has brought transparency to the use of exposure assessment in calculating and evaluating occupational risks from chemical exposures. Dr. Paustenbach's considerable published work will have a lasting impact on exposure and risk assessment for decades to come.

Donald E. Cummings Memorial Award



Established in 1943 as a tribute to AIHA's third president, the Donald E. Cummings Memorial Award honors outstanding contributions to the profession of industrial hygiene. This year's recipient, **Neil J. Zimmerman, PhD, PE, CIH**, has been a guiding force at Purdue University for twenty years. He developed most of the undergraduate curriculum, combining academic rigor with training in practical skills. Through his leadership, Purdue became the only school in the country to receive ABET accreditation of both undergraduate and graduate programs. Dr. Zimmerman's teaching and research exemplifies the interdisciplinary nature of occupational and environmental health. His research applies industrial hygiene methods to assess exposure and health risks in both workplace and community environments.

Distinguished Service Award



This award recognizes distinguished service in the advancement of industrial hygiene and unique technical contributions to the aims and goals of AIHA®. The recipient must be an AIHA® member. **Frank Renshaw, PhD, CIH, CSP**, has been active in AIHA® since joining the Engineering Committee in 1973. He has held numerous positions with affiliated organizations, including the American Board of Industrial Hygiene, the Academy of Industrial Hygiene, and the American Industrial Hygiene Foundation. As president of AIHA®, he was instrumental in establishing a long-term

relationship with Chinese professionals. His implementation of a Fundamentals of Industrial Hygiene course in China was a great success and helped increase the technical knowledge and competencies of Chinese health and safety professionals.

Kusnetz Award



Donated by Florence Kusnetz and AIHA® Past President Howard Kusnetz, this award honors a certified hygienist under 40 years old who is employed in the private sector, provides the highest standards of health and safety protection for employees, and exhibits high ethical standards and technical abilities. At Chevron, **Sandra Barnes, CIH**, co-developed Chevron's global occupational hygiene process, a company mercury standard for protecting employees, and a protocol for sampling mercury impacted equipment. She also developed a monitoring protocol for ongoing and long term monitoring for a subsurface radiation source that was breached and abandoned in an oil production field. The plan was approved by the Division of Oil, Gas and Geothermal Resources and the California Department of Health Services.

Alice Hamilton Award



This award is presented to an outstanding woman who has made a lasting achievement in the field of occupational hygiene through public and community service, social reform, technological innovation or advancements in the scientific approach to the recognition, evaluation, and control of workplace hazards. As executive director of the American Board of Industrial Hygiene for more than 20 years, **Lynn C. O'Donnell, CIH**, has helped solidify the CIH as the world's preeminent HSE credential. The recognition and growth enjoyed by practitioners in the U.S. are directly related to the reputation of the CIH credential. An increasing number of organizations have hired CIHs to manage their industrial hygiene, occupational health and related groups. The benefits to workers have been substantial and continuous for the entire tenure of O'Donnell's association with ABIH.

William P. Yant Award



Sponsored by the Mine Safety Appliances Company, the William P. Yant Award commemorates AIHA's first president and is presented for outstanding contributions in industrial hygiene or allied fields to an individual residing outside the United States. This year's Yant Award winner is **Danilo Cottica**, president of the International Occupational Hygiene Association (IOHA) and author of about 200 publications on industrial hygiene. In the 1980s

he developed a planar diffusive sampler that was widely used in Italy to sample VOCs in the work environment. Beginning in 1990, he worked with others in the Italian Industrial Hygiene Association (AIDII) to develop a process for recognizing and certifying Italian industrial hygienists. He is currently past president of AIDII and a professor in the Master of Industrial Toxicology at the University of Pavia.

President's Award

The President's Award is given to an individual, task force, special interest group, or local section for outstanding contributions to efforts to achieve the mission of the AIHA® during the presidency year. Kept secret until the conference, the award winner will be announced and honored at the AIHA® President's Reception on Wednesday, May 26, between 6:30 and 8:00 p.m.

2010 AIHA® Fellows

The 2010 Fellow Award winners will be honored during the President's Reception on Wednesday, May 26, between 6:30 and 8:00 p.m. Members chosen to be Fellows were nominated by colleagues in the profession for their significant contributions to the practice of industrial hygiene or related disciplines. The Fellow classification is limited to no more than 5 percent of the AIHA® membership.

ACGIH®

The John J. Bloomfield Award



This award is presented to a young industrial hygienist who pursues the problem of occupational health hazards primarily by doing fieldwork, and who demonstrates significant contribution to the profession. This year's recipient is **Shannon Henshaw Gaffney, PhD, CIH**. As a Managing Health Scientist at ChemRisk, Dr. Gaffney is responsible for

conducting exposure assessments, dose reconstruction studies, and health risk assessments of workers and citizens exposed to industrial chemicals. She often leads teams of scientists investigating atypical exposure scenarios, such as contaminated products, tainted foods, and indirect exposure to persistent chemicals. Dr. Gaffney has co-authored dozens of papers, is a graduate of the AIHA® Future Leaders Institute, and participated in various professional committees, including the joint AIHA®/ACGIH® Permanent Conference Committee. She received her PhD in Environmental Health and MHS in Industrial Hygiene from the Bloomberg School of Public Health at the Johns Hopkins University, and her BS in Environmental Geosciences from the University of Notre Dame School of Engineering. She became a CIH in 2007. The award will be presented at the ACGIH® Membership Reception and Annual Meeting of the Membership on Sunday, May 23 and at the AIHce Opening Session.

Meritorious Achievement Award



This award is given to members of ACGIH® who have made an outstanding, long-term contribution to the progress of occupational and environmental health. The recipient of this year's award is **Patricia Stewart, PhD, CIH**. Dr. Stewart worked for OSHA as a compliance officer and in its national office. She later moved to the National Cancer Institute (NCI) where she remained until she retired. At NCI, Dr. Stewart supported occupational epidemiology studies by assessing past exposures. Her research includes developing methods to improve exposure assessment methods in epidemiologic studies. Though retired, she continues to work under contract with NCI to complete studies still in progress. Dr. Stewart has been a member of ACGIH® since 1974 and has served on the Board of Directors. She has also served on organizing committees of several exposure assessment conferences, on various governmental and international committees including the International Agency for Research on Cancer (IARC), and as a reviewer for numerous occupational health journals. Dr. Stewart has authored over 160 publications and has mentored PhD students and postdoctoral fellows. The award will be presented at the ACGIH® Membership Reception and Annual Meeting of the Membership on Sunday, May 23 and at the AIHce Opening Session.

William Steiger Memorial Award



This award honors individuals from the social/political sphere whose efforts have contributed to advancements in occupational safety and health. This year's recipient is **Scott Schneider, CIH**. Mr. Schneider has been involved in occupational safety and health work for the labor movement for the past 29 years. He currently serves as the Director of Occupational Safety and Health for the Laborer's Health and Safety Fund of North America (LHSFNA). Mr. Schneider is a CIH and has Masters degrees in Industrial Hygiene and Zoology from the University of Pittsburgh and the University of Michigan. He is a member of safety and health committees of the AFL-CIO, Building Trades, AIHA®, and ANSI. His main areas of interest and expertise are ergonomics in construction; preventing hearing loss among construction workers; and roadway safety. Mr. Schneider served as the Ergonomics column editor for the *Journal of Occupational and Environmental Hygiene*; a Labor Representative on the OSHA Advisory Committee for Construction Safety and Health (ACCSH); and a member of the NIOSH Board of Scientific Counselors. In 1999, he was elected as a Fellow member of AIHA®. The award will be presented at the ACGIH® Membership Reception and Annual Meeting of the Membership on Sunday, May 23 and at the AIHce Opening Session.

Herbert E. Stokinger Award



This award is given each year to an individual who has made a significant contribution to the broad field of industrial and environmental toxicology. This year's recipient is **Bruce D.**

Naumann, PhD, DABT. Dr. Naumann is a Senior Principal Scientist and Director of Occupational and Environmental Toxicology at Merck. He has over 25

years of experience as an occupational toxicologist in the pharmaceutical industry. Dr. Naumann received a BS degree in Biology from the State University of New York at Albany and an MS degree in Biology from New York University. He earned his PhD in Environmental Health Sciences from New York University. He is certified by the American Board of Toxicology and is a lecturer at the New York University School of Medicine in the Department of Environmental Medicine. Dr. Naumann is the author or co-author of numerous manuscripts and book chapters focusing on improving the use of science in risk assessment. Dr. Naumann has served on both the AIHA® WEEL Committee and the ACGIH® Threshold Limit Values for Chemical Substances (TLV®-CS) Committee. The award will be announced at the AIHce Opening Session and presented at the Stokinger Lecture on Thursday, May 27.

AIHA® Volunteer Groups

David L. Swift Memorial Award

This award honors the memory of Dr. David L. Swift, professor at The Johns Hopkins University, for his outstanding contributions to aerosol and industrial hygiene research. Aerosol research papers published during the year in the *Journal of Occupational and Environmental Hygiene* are reviewed by the Aerosol Technology Committee.

Environmental Issues Committee Rachel Carson Award

This award is the highest honor bestowed upon an EHS professional or group by the Environmental Issues Committee, on behalf of AIHA®. It is presented to EHS professionals who have attained outstanding success in their EHS business, profession or life's work. Garrett Brown and the Maquiladora Health and Safety Support Network (MHSSN) will be recognized as the 2010 winner.

H. Kenneth Dillon Memorial Award

This award is presented annually by the Biosafety and Environmental Microbiology Committee to honor the memory of Dr. Ken Dillon, a former member, an AIHA® fellow, and the principal instructor for several years of the popular PDC "Prevention, Determination, and Remediation of Biological Contamination in Indoor Environments." The award, a plaque and honorarium, is given to the best student poster presented at AIHce.

Indoor Environmental Quality Committee Best IEQ Paper Award

Since 1997, the Indoor Environmental Quality (IEQ) Committee has evaluated peer-reviewed journal articles that promote the practice of IEQ. The authors of the winning paper are honored at the committee's annual meeting. To be nominated, the paper must: (a) be peer reviewed and published during the previous calendar year in the *Journal of Occupational and Environmental Hygiene*; (b) provide practical information for industrial hygienists and expand the knowledge base of indoor environmental quality professionals; (c) address a critical issue in IEQ; and (d) present the topic in an engaging and well-written manner.

John A. Leonowich Award for Educational Excellence in Nonionizing Radiation

The Nonionizing Radiation Committee will present the John A. Leonowich award for educational excellence in nonionizing radiation. This award honors students who are actively pursuing NIR initiatives through research or education. The award recognizes the achievements made by current students in advancing understanding of nonionizing radiation.

John M. White Award

This award, established by the Respiratory Protection Committee, encourages scientific and application-oriented research in respiratory protection. It recognizes work that enhances the knowledge base in an area of understanding or provides new insight that will lead to improved employee protection.

Noise Committee Outstanding Lecture

This award was established in 1995 to encourage excellence in education, public speaking, and presentation quality on noise-related topics at AIHce. The award is determined by a vote of the Noise Committee and is based on attendee evaluations.

Occupational and Environmental Medicine Committee Award

The Occupational and Environmental Medicine Committee plans to recognize an individual for excellence in the field of occupational and environmental medicine. The judges will consider presentations, professional development courses, poster sessions and peer-reviewed published manuscripts from both the medical and industrial hygiene disciplines that contribute to the advancement of occupational and environmental medicine.

Real-Time Detection Systems Committee Outstanding Presentation Awards

The Real-Time Detection Systems Committee will present two awards: Best Poster Session and Best Student Poster. These awards acknowledge excellence for a presentation of basic or applied research in the gas and vapor detection field. All Real-Time Detection Systems Committee poster session presentations are eligible.



Rochelle Crew Memorial Award

This award is given by the Construction Committee to honor the memory of Ms. Crew, a former member of the committee and long-time instructor of construction safety PDCs. The award, a plaque and donation of training materials, is given to the best construction-related paper, presentation, or PDC presentation at the previous year's AIHce.

Sampling and Laboratory Analysis Committee Award

This award recognizes participants for outstanding contributions to the field of industrial hygiene sample analysis. The award is given for Best Presentation and Best Poster sessions sponsored by the Sampling and Laboratory Analysis Committee.

Tichauer Award

The Ergonomics Committee established the Tichauer Award in 1996 for Best Ergonomics Podium and Best Ergonomics Poster by a young researcher. The award was established to encourage ergonomics-related conference participation and to recognize excellence in research conducted by students and young researchers.

Upton Sinclair Memorial Lecture

The Upton Sinclair Memorial Lecture on outstanding occupational health, safety, and environmental investigative journalism is hosted by the Social Concerns Committee. The Upton Sinclair Memorial Lecture for 2010 features Steven Greenhouse of *The New York Times*. He will speak at 10:30 a.m. on Tuesday.

The Golden Seed Award

The Students and Early Career Professionals Committee presents this award to an individual who has demonstrated a commitment to promoting industrial hygiene and/or provided guidance and mentoring to students or early career professionals. This award will be presented at the Volunteer Recognition Reception.

AIHce Awards

Best Poster Award

The Best Poster Award is based on two criteria: (1) technical content—organization of the poster material, current importance of the topic, sophistication of scientific or technological aspects of the subject, and the importance of the conclusions for today's workers; and (2) visual communication—clarity, color, space, balance, text, graphics and effectiveness.



A Partner You Can Count On!

In tough times, you need a dependable partner...

Three accredited laboratories.

An experienced partner who has persevered...

Founded in 1828.

A partner who is always there. Whenever. Wherever...

Vast experience. Global services.

Know anybody like that?

Now you do.

800.806.5887

Move Forward with Confidence



» Social Tours

Denver offers a unique mix of activities—both indoors and out—for everyone. Enhance your stay during AIHce by joining one or more of the following tours and activities.

Tour fees include transportation, professional escort, admission fees, water and snacks. All tours leave from and return to the Colorado Convention Center at approximately the times listed.

Purchase tickets at Registration.

Monday, May 24



ST-01 Highlights of the “Mile High” City

1:00 p.m.–4:00 p.m., \$42 per person

Begin with a tour of downtown Denver and a visit to Colorado’s spectacular capitol. Modeled after our nation’s capitol, the dome is gold-leafed and the front steps feature an official altitude marker measuring exactly one “mile”

high! Stop at the historic Brown Palace Hotel, a remarkable example of Victorian architecture, and view the stunning public rooms.

Conclude the afternoon in lower downtown, or “LoDo.” This vibrant area is home to sport complexes and Larimer Square, a trendy section of Denver brimming with one-of-a-kind shops, first-rate restaurants, quaint cafes, and a hopping nightlife.



ST-02 Brew Hopping!

7:30 p.m.–10:30 p.m., \$65 per person (must be 21 or older)

Colorado has more breweries per capita than any other state in the union! Tonight, get a true “taste” of Denver’s microbrews during this customized “crawl” of two popular downtown breweries. At each stop, brew masters

will provide details on the craft, tours of the breweries and samples of in-house favorites. Hors d’oeuvres included.

Tuesday, May 25



ST-03 Strike it Rich

1:00 p.m.–5:00 p.m., \$48 per person

A visit to the Phoenix Gold Mine, an active working mine in the mountains west of Denver, is not to be missed. Take a fascinating look at the operation of the mine and spend time panning for gold yourself. Any gold you find is yours to keep!



ST-04 Denver’s Early Days

1:00 p.m.–5:00 p.m., \$50 per person

Begin at Ninth Street Historic Park with a brief walking tour of a block of charming Victorian cottages originally built between 1872 and 1906.

Visit the restored home of the “unsinkable” Molly Brown and hear the rags-to-riches-to-rags story of the famous woman who saved so many lives during the sinking of the Titanic.

Finally, tour the Byers-Evans Mansion, one of Denver’s great historic homes. Built in 1883, this residence is elegantly furnished with period furniture and collectibles and is a magnificent example of life in the Victorian era.

Wednesday, May 26



ST-05 The Sweet Life

1:00 p.m.–4:30 p.m., \$45 per person (must be 21 or older)

Hammond’s Candies still makes candy the way Carl Hammond made it 89 years ago! Tour the factory where the toffee is still dipped in rich chocolate and hand-rolled in crunchy almonds while the hard candy is still hand-pulled.

Next, visit Balistreri Vineyards for a delightful wine and cheese tasting. Colorado’s vintners enjoy a well-earned reputation for producing a wide variety of premium wines. Meet the winemakers who will explain the cultivation of grapes, the fundamentals of wine making and the production of fine wines in Colorado’s unique Front Range.



ST-06 Rocks and Ridges

1:00 p.m.–5:00 p.m., \$42 per person

Take a panoramic ride into the foothills surrounding Golden, Colorado, and see two of Colorado’s most popular attractions.

Red Rocks Amphitheater is an acoustical marvel, where 9,000 seats are set in the red sandstone rocks. Visit the Red Rocks Visitor’s Center, designed as a tribute to the many musical groups that have performed here.

Next, head to Dinosaur Ridge, one of the world’s most famous fossil localities. In 1877, some of the best-known dinosaurs were discovered. A guide from the Dinosaur Ridge Visitor’s Center will accompany the group on a walking tour.



ST-07 Colorado Baseball

6:40 p.m., \$38 per person

AIHce’s annual baseball game pits the Colorado Rockies against the Arizona Diamondbacks.

Exchange Voucher for baseball ticket at Registration by 5:00 p.m., Wednesday! Walk to Coors Field.

» Technical Tours

On All Tours

To insure admittance to the tour site, carry valid government issued photo identification, i.e., driver's license, passport, or military ID. Personal electronic items (cameras, iPods, cell phones with photographic capability, PDAs and other like items) are prohibited. Briefcases, backpacks and totes are discouraged. Appropriate attire including slacks (no shorts or skirts) and flat, closed sturdy walking shoes are a must! Additional requirements are listed.

Shuttles leave and return to/from the Colorado Convention Center at the times listed.

Purchase tickets at Registration.



Monday, May 24

SOLD OUT
TT-01 Downtown Aquarium
 9:30 a.m.–12:30 p.m.
Requirement: Stair climbing.



SOLD OUT
TT-02 National Renewable Energy Laboratory, Wind Technology Center
 1:00 p.m.–5:00 p.m.
Requirement: U.S. citizen with government issued photo identification



SOLD OUT
TT-03 National Renewable Energy Laboratory, South Table Mountain
 1:00 p.m.–5:00 p.m.
Requirement: U.S. citizen with government issued photo identification

CM Points . . .

Tours are included in the overall 1 CM point per day.



Tuesday, May 25

SOLD OUT
TT-04 National Center for Atmospheric Research
 9:00 a.m.–1:00 p.m.



SOLD OUT
TT-05 USGS Rocky Mountain Mapping Center
 9:00 a.m.–1:00 p.m.

Requirements: U.S. citizen with government issued photo identification; non-citizens present valid passport. Sweater or jacket for Ice Lab tour.



SOLD OUT
TT-06 Art Castings of Colorado
 9:00 a.m.–1:30 p.m.



Wednesday, May 26

TT-07 Rocky Mountain Metal Container
 9:00 a.m.–Noon

Participants learn the process of producing an “end” for MillerCoors beer cans. After a brief overview, move to the production floor where the end (the top) of the beer can is produced. Shells or “blanks” are made from aluminum coil stock and converted into ends when the tab and shells are joined in the conversion press. The end plant produces approximately 23 million ends per day; over 5 billion annually. This process is plagued by two safety and health issues — elevated noise levels and repetitive motion. Learn how this OSHA VVP Star site implemented a grass roots safety culture and employee empowerment program to overcome these safety and health challenges.



SOLD OUT
TT-09 The Edgar Mine, Colorado School of Mines Experimental Mine
 1:00 p.m.–5:00 p.m.
Requirement: Sweater or jacket (temperature is 54°); no wheelchair accessibility.

» Student and Young Member Activities

Future Leaders and Young Members Reception

Sponsored by 3M

Sunday, May 23, 7:30 p.m.–10:30 p.m.

Wynkoop Brewing Company
1634 18th Street



Have you been a part of the Future Leaders Institute? Are you a student attending AIHce? If so, attend the Future Leaders and Young Members Reception to socialize with your peers and meet new people. *Admission by ticket.*

Students and Early Career Professionals Track

The following sessions are sponsored by the Students and Early Career Professionals Committee and focus on topics relevant to those new to the profession. Sessions provide practical tips for certification and transitioning from college to work.

RT 209 I Graduated...Now What?

Monday, May 24, 2:00 p.m.–4:30 p.m.

Convention Center, 503

RT 230 Perspectives on Preparation for the CIH Exam

Wednesday, May 26, 1:00 p.m.–3:00 p.m.

Convention Center, 109

Volunteer Collaboration Café

Sunday, May 23–Wednesday, May 26

Convention Center, Grand Concourse

Need a place to relax for a few minutes or to meet up with peers? Visit the Collaboration Café—a multipurpose area where you can relax, network with colleagues, or attend free special events designed with you in mind.

CareerAdvantage Development Fair

Monday, May 24–Wednesday, May 26

Convention Center, Hall F

Looking to score your dream job in OEHS? The Development Fair will equip you with the tools you'll need to navigate your career path. Get helpful information on issues that matter to you—job searching in today's unstable economy, using social networking sites in your job search, writing an eye-catching resume, and more. Sign up for a personal mock interviewing session and have your résumé critiqued by a hiring manager.

Student Luncheon Discussions

Monday, May 24, 12:30 p.m.–1:30 p.m.

Convention Center, Expo, Hall A

Designed specifically for students and early career professionals, AIHA® members lead informal discussions on a variety of topics including career goals, certification, volunteering, and more! Seating is first-come, first-served.

AIHF Fun Run/Walk

Sponsored by



The miracles of science™



Tuesday, May 25, 6:30 a.m.

Cherry Creek

Lace up your tennis shoes and support the work of the American Industrial Hygiene Foundation. This event is open to everyone from serious runners to recreational walkers. Students are admitted at no charge (student registration badge required). All participants must check in at Registration in the Convention Center in advance of the race. Sign up at the race site is not permitted.

20th Annual Student Poster Session

Wednesday, May 26, 10:00 a.m.–Noon

Convention Center, Expo, Hall F

Students discuss their research and two posters will be selected “Best of Session.”

Student Local Sections Council Business Meeting

Tuesday, May 25, 4:30 p.m.–6:30 p.m.

Hyatt Regency Denver, Capitol 6

Meet other student local section officers and share best practices with one another. Students interested in forming a student section at their school are encouraged to attend.

Students and Early Career Professionals Committee Meeting

Wednesday, May 26, 8:00 a.m.–10:00 a.m.

Hyatt Regency Denver, Mineral A

Interact with members of the SECP Committee. Discuss current and new projects focused on developing outreach materials and providing students and early career industrial hygienists with mentoring. New volunteers, including students, are encouraged to attend.

AIHA® Volunteer Group Meetings

Monday, May 24–Wednesday, May 26

These are not closed door meetings! AIHA® has more than 45 volunteer groups that focus on a variety of technical topics and several that address student needs. Unless otherwise noted, volunteer group meetings are open to all.



CareerAdvantage Development Fair at AIHce 2010

Monday through Wednesday, May 24–26

Colorado Convention Center, Hall F

Check out all the exciting events that the Development Fair has in store for you.

Mock Interviewing

Monday, May 24, 10:00 a.m.–1:00 p.m.

See yourself through an employer's eyes when you meet with an experienced hiring manager during a personal videotaped mock interview. You will receive helpful feedback and learn how to make the most effective presentation of your skills, abilities, and professionalism.

Résumé Critiquing

Monday, May 24, 3:00 p.m.–4:00 p.m.

Tuesday, May 25, 9:00 a.m.–3:00 p.m.

Wednesday, May 26, 10:00 a.m.–1:00 p.m.

Bring your current résumé and stop by the Development Fair to sign up for your personal résumé critiquing session with an experienced hiring manager. You will get helpful feedback on your resume directly related to style, length, focus, use of accomplishments, use of keywords, and more. Contact AIHA® at (703) 849-8888 to schedule your critique in advance.

Seminar: Everyone Is a Consultant

Tuesday, May 25, 9:30 a.m.–10:30 a.m.

Gain insight on how to determine whether a consulting practice is for you, how to establish a consulting business, practical matters for beginning a consulting practice, and overcoming various obstacles.

Seminar: Job Searching in Various Industries—An Employer's Perspective

Tuesday, May 25, 11:00 a.m.–11:45 a.m.

Visit this seminar to get valuable information from representatives of different industry segments (e.g. industry, government, consulting, etc.). They will discuss the hiring perspectives and the do's and don'ts associated with their respective industries.

Speed Networking

Tuesday, May 25, 3:00 p.m.–4:00 p.m.

We've brought back the popular Speed Networking event. Bring plenty of business cards and be ready to meet with colleagues from all levels and industries—you will meet more contacts in a shorter period of time.



Employers!

It's not too late to post open positions using the Development Fair package. Stop by and quickly post your jobs online, and candidates will be able to view your position immediately. You can also search through online résumés and select from hundreds of qualified OEHS professionals. Visit the Development Fair today to find out more.

CareerAdvantage
Building Careers for Life

» Volunteer Collaboration Café

Explore our new interactive volunteer display and learn how you can benefit by being part of the dynamic AIHA® volunteer experience.

Stop by and review the many events offered through the café. The *Daily Specials* will expand your volunteering horizon and provide opportunities to interact with peers and AIHA® staff.

The Café is located off the Grand Concourse.

Sunday, May 23

See What's New

7:30 a.m.–5:00 p.m.

3:00 p.m.–3:30 p.m. | Student Exchange

Before the start of AIHce, connect with other AIHA® student members.



NEW!



Monday, May 24

Explore, Interact and Learn

7:30 a.m.–6:00 p.m.

Begin your AIHce experience by visiting the Volunteer Collaboration Café. Our *Daily Specials* will expand your volunteering horizon and provide opportunities to network with peers and AIHA® staff.

10:30 a.m.–11:00 a.m. | Student Exchange

An opportunity for students to meet new friends or catch up with old friends.

11:00 a.m.–11:30 a.m. | Meet Your Sponsors—Student Local Sections & Local Sections

A chance for student local sections to connect with their sponsoring local section.

11:30 a.m.–Noon | Bring AIHA® to Your Campus

Learn how easy it is to create a student local section on your campus.

Noon–12:30 p.m. | Volunteer Group Information Session

Interested in becoming a part of the dynamic AIHA® volunteer experience? Join volunteer group leaders and find out how you can get involved!

2:00 p.m.–2:30 p.m. | Meet Your Neighbors: Local Section Interactions

Network and collaborate with members from other AIHA® local sections.

3:00 p.m.–3:30 p.m. | AIHA® New Publication Launch

Meet the authors of the latest AIHA® publications: Math Modeling, RSO handbook, standards on ventilation systems and respiratory protection, ERPG and WEEL guidelines, and many more.

3:30 p.m.–4:00 p.m. | Turning Your Technical Expertise into Publishable Materials

Learn how to satisfy that burning desire to see your name in print by writing for AIHA® publications.

4:00 p.m.–4:30 p.m. | Share Your Thoughts

Come by and share your thoughts and ideas.

4:30 p.m.–5:00 p.m. | Virtual Volunteer

Learn how technology can enhance your volunteer experience.

5:00 p.m. | Raffle

Check out the café and sign up for the daily raffle; the drawing is at 5:00 p.m.

5:30 p.m.–6:00 p.m. | Are You a New AIHA® Member?

Meet members of the Membership Committee as well as some of the AIHA® Board of Directors in an informal setting.

* *Daily Specials* subject to change.



Tuesday, May 25

Do You ♥ Volunteering?

7:30 a.m.–4:00 p.m.

Come see for yourself why so many of your peers volunteer. By joining them, you can make the most of your AIHA® membership. Check out the following special events:

10:30 a.m.–11:00 a.m. | Ask the PCC Chair

Meet Donna Doganiero, CIH, current chair of the PCC. Find out about the AIHce Technical Program submission and peer review requirements.

11:00 a.m.–11:30 a.m. | Giving Back—Mentoring Program

Are you interested in being or finding a mentor? If so, stop by and sign up.

11:30 a.m.–Noon | Education Is Key to Maintaining an Edge

Come discuss face-to-face educational opportunities and professional development with AIHA® Continuing Education Coordinator Jessica Pagel. Find out how you and your organization can benefit from educational options such as on-site group training and road courses offered in the U.S. and abroad.

Noon–12:30 p.m. | Volunteer Group Networking—Sharing Project Ideas

Join other volunteer group members to discuss project ideas that have come up at AIHce. This is an opportunity to help shape the path forward and offer input about where our volunteer resources should be focused.

2:00 p.m.–2:30 p.m. | Meet Your Neighbors: Local Section Interactions

Network and collaborate with members from other AIHA® local sections.

2:30 p.m.–3:00 p.m. | The High Standards of AIHA®

Learn all about the AIHA® Z10 OHSMS Standard, Z88 Respiratory Protection Standards, Z9 Ventilation System Standards, the AIHA® Standards Council and Standards Development Project Team.

3:00 p.m.–3:30 p.m. | The Virtual Volunteer

Learn how technology can enhance your volunteer experience.

3:30 p.m. | Raffle

Drop by the café and sign up for the daily raffle; the drawing is at 3:30 p.m.

3:30 p.m.–4:00 p.m. | Explore Your Virtual Learning Options

AIHA® Distance Learning Program Manager Cinthia Minan will provide practical advice on how to maintain your certifications, train large groups or even present a course via any of AIHA's many virtual, Web, and self-study formats.

Wednesday May 26

Be Seen, Be Heard—Before It's Too Late

7:30 a.m.–5:00 p.m.

Take advantage of this last opportunity to network with peers and to share your ideas.

10:30 a.m.–11:00 a.m. | Volunteer Group Networking — Sharing Project Ideas

Join other volunteer group members for a discussion of project ideas that have come up at AIHce. This is an opportunity to help shape the path forward and provide input about where our volunteer resources should be focused.

Noon–12:30 p.m. | Student Exchange

Meet other student members and exchange contact information before it's too late.

12:30 p.m.–1:00 p.m. | Learning about AIHF Scholarships

Learn what it takes to apply for an American Industrial Hygiene Foundation Scholarship.

1:30 p.m.–2:00 p.m. | AIHA's Continuing Education Committee (CEC) — Delivering Quality Educational Options

Ever wonder about the role of the CEC or how you can get involved? Join members of the CEC at the café to discuss how they shape OEHS education. Learn about their goal to deliver practical skills and tools that enhance technical competence, as well as the overall profession, through traditional and nontraditional education formats.

3:00 p.m.–3:30 p.m. | Giving Back — Mentoring Program

Are you interested in being or finding a mentor? If so, stop by and sign-up.

4:00 p.m.–4:30 p.m. | Share Your Thoughts

Let us know what you'd like to see more of.

4:30 p.m.–5:00 p.m. | The Virtual Volunteer

Learn how technology can enhance your volunteer experience.

5:00 p.m. | Raffle

Stop by the café and sign up for the daily raffle; the drawing is at 5:00 p.m.



» Board and Volunteer Group Activities

AIHA®

Academic Accreditation Committee Meeting

Sunday, May 23, 6:00 p.m.–10:00 p.m., Hyatt Regency, Mineral F

Academic SIG Meeting*

Wednesday, May 26, 8:00 a.m.–10:00 a.m., Hyatt Regency, Agate B

Academy Conference Team

Monday, May 24, Noon–1:00 p.m., Convention Center, 204

Academy of Industrial Hygiene Meeting

Saturday, May 22, 9:00 a.m.–5:00 p.m., Hyatt Regency, Granite A

Aerosol Technology Committee Meeting*

Tuesday, May 25, 8:00 a.m.–10:00 a.m., Hyatt Regency, Mineral D

AIHA®–Accredited Laboratory Forum

Sunday, May 23, 6:00 p.m.–7:30 p.m., Hyatt Regency, Mineral E

AIHce Exhibitor Advisory Group Meeting

Tuesday, May 25, 3:00 p.m.–4:00 p.m., Convention Center, 208

Analytical Accreditation Board Meeting

Saturday, May 22, 9:00 a.m.–5:00 p.m., Hyatt Regency, Agate

Annual Business Meeting

Thursday, May 27, 8:30 a.m.–10:30 a.m., Convention Center, 210

ANSI/AIHA® Z88 Respiratory Protection Standards Committee Meeting

Tuesday, May 25, 4:00 p.m.–6:00 p.m., Convention Center, 206

ANSI/AIHA® Z88.12 Respiratory Protection for Infectious Aerosols Standard Subcommittee Meeting

Monday, May 24, 8:00 a.m.–10:00 a.m., Hyatt Regency, Sandstone

ANSI/AIHA® Z9 Ventilation System Standards Committee Meeting

Monday, May 24, 2:00 p.m.–4:00 p.m., Convention Center, 206

ANSI/AIHA® Z9.5 Laboratory Ventilation Standard Subcommittee Meeting

Tuesday, May 25, 10:00 a.m.–Noon, Convention Center, 208

ANSI/AIHA® Z9.12 Combustible Dust Standard Subcommittee Meeting

Monday, May 24, Noon–2:00 p.m., Convention Center, 208

Board of Directors Meeting

Sunday, May 23, 8:00 a.m.–4:30 p.m., Hyatt Regency, Granite

Board of Directors Meeting

Thursday, May 27, 11:30 a.m.–4:30 p.m., Hyatt Regency, Granite

BEEL Project Team Meeting

Monday, May 24, 7:00 a.m.–9:00 a.m., Hyatt Regency, Marble

Biological Monitoring Committee Meeting*

Wednesday, May 26, 8:00 a.m.–10:00 a.m., Hyatt Regency, Quartz A

Biosafety and Environmental Microbiology Committee Meeting*

Tuesday, May 25, 8:00 a.m.–11:00 a.m., Hyatt Regency, Capitol 2

Career and Employment Services Committee Meeting

Wednesday, May 26, 7:00 a.m.–9:00 a.m., Hyatt Regency, Marble

Clandestine Laboratory Working Group Meeting*

Tuesday, May 25, 8:00 a.m.–10:00 a.m., Hyatt Regency, Capitol 5

Communication and Training Methods Committee Meeting*

Tuesday, May 25, 8:00 a.m.–10:00 a.m., Hyatt Regency, Mineral F

Computer Applications Committee Meeting*

Tuesday, May 25, 8:00 a.m.–10:00 a.m., Hyatt Regency, Mineral G

Confined Spaces Committee Meeting*

Monday, May 24, 8:00 a.m.–10:00 a.m., Hyatt Regency, Capitol 5

Construction Committee Meeting*

Monday, May 24, 8:00 a.m.–11:00 a.m., Hyatt Regency, Capitol 2

Consultants SIG Business Meeting*

Wednesday, May 26, 8:00 a.m.–10:00 a.m., Hyatt Regency, Mineral B

Continuing Education Committee Meeting

Monday, May 24, 2:00 p.m.–5:00 p.m., Hyatt Regency, Granite B

Control Banding Working Group Meeting*

Monday, May 24, 8:00 a.m.–10:00 a.m., Hyatt Regency, Mineral E

EASC Dermal Project Team Meeting

Monday, May 24, 11:00 a.m.–Noon, Convention Center, 206

Engineering Committee Meeting*

Tuesday, May 25, 8:00 a.m.–10:00 a.m., Hyatt Regency, Agate B

Engineering Industry SIG Meeting*

Wednesday, May 26, 8:00 a.m.–10:00 a.m., Hyatt Regency, Granite C

Environmental Issues Committee Meeting*

Monday, May 24, 8:00 a.m.–10:00 a.m., Hyatt Regency, Mineral F

Environmental Issues SIG Meeting*

Tuesday, May 25, 8:00 a.m.–10:00 a.m., Hyatt Regency, Quartz A

Ergonomics Committee Meeting*

Tuesday, May 25, 8:00 a.m.–10:00 a.m., Hyatt Regency, Capitol 1

Exposure Assessment Strategies Committee Meeting*

Monday, May 24, 8:00 a.m.–11:00 a.m., Hyatt Regency, Capitol 4

Finance Committee Meeting

Monday, May 24, 2:00 p.m.–5:00 p.m., Convention Center, 204

FLI and Young Member Reception (by invitation)

Sunday, May 23, 7:30 p.m.–10:30 p.m., Wynkoop Brewery, 1634–18th St.

Green Building Working Group Meeting*

Monday, May 24, 8:00 a.m.–10:00 a.m., Hyatt Regency, Capitol 3

Healthcare Working Group Meeting*

Wednesday, May 26, 8:00 a.m.–10:00 a.m., Hyatt Regency, Capitol 3

Incident Preparedness and Response Working Group Meeting*

Tuesday, May 25, 8:00 a.m.–10:00 a.m., Hyatt Regency, Capitol 6

Indoor Environmental Quality Committee*

Monday, May 24, 8:00 a.m.–10:00 a.m., Hyatt Regency, Mineral B

Indoor Environmental Quality SIG Meeting*

Tuesday, May 25, 8:00 a.m.–10:00 a.m., Hyatt Regency, Mineral B

International Affairs Committee Meeting

Monday, May 24, 2:00 p.m.–6:00 p.m., Hyatt Regency, Capitol 4

International Reception (by invitation)

Monday, May 24, 6:30 p.m.–8:00 p.m., Hyatt Regency, Capitol 2

Ionizing Radiation Committee Meeting*

Monday, May 24, 8:00 a.m.–10:00 a.m., Hyatt Regency, Limestone

Joint ERP/WEEL/BEEL Meeting

Monday, May 24, 1:00 p.m.–4:00 p.m., Convention Center, 202

Joint Industrial Hygiene Ethics Education Committee Meeting

Monday, May 24, 6:00 a.m.–8:00 a.m., Hyatt Regency, Quartz A

Laboratory Health and Safety Committee Meeting*

Wednesday, May 26, 8:00 a.m.–10:00 a.m., Hyatt Regency, Capitol 2

Law Committee Meeting*

Wednesday, May 26, 8:00 a.m.–10:00 a.m., Hyatt Regency, Mineral D

Management Committee Meeting*

Wednesday, May 26, 8:00 a.m.–10:00 a.m., Hyatt Regency, Mineral E

Membership Committee Meeting*

Monday, May 24, 8:00 a.m.–10:00 a.m., Hyatt Regency, Mineral D

**Minority SIG Meeting***

Monday, May 24, 8:00 a.m.–10:00 a.m., Hyatt Regency, Granite A

MSA/AIHA® Reception

Tuesday, May 25, 6:30 p.m.–7:30 p.m., Hyatt Regency, Centennial

Nanotechnology Working Group Meeting*

Tuesday, May 25, 8:00 a.m.–10:00 a.m., Hyatt Regency, Capitol 4

Noise Committee Meeting*

Wednesday, May 26, 8:00 a.m.–10:00 a.m., Hyatt Regency, Mineral F

Nonionizing Radiation Committee Meeting*

Tuesday, May 25, 8:00 a.m.–10:00 a.m., Hyatt Regency, Capitol 7

Occupational and Environmental Medicine Committee Meeting*

Tuesday, May 25, 8:00 a.m.–10:00 a.m., Hyatt Regency, Granite A

Occupational Epidemiology Committee Meeting*

Wednesday, May 26, 8:00 a.m.–10:00 a.m., Hyatt Regency, Mineral C

Past Presidents' Breakfast (by invitation)

Wednesday, May 26, 9:30 a.m.–11:00 a.m., Hyatt Regency, Presidential Suite

Permanent Conference Committee Meeting

Wednesday, May 26, 4:00 p.m.–6:00 p.m., Convention Center, 206

Pharmaceutical Round Robin Committee Meeting

Wednesday, May 26, 8:00 a.m.–9:30 a.m., Convention Center, 208

Practice, Standards and Guidelines Committee Meeting*

Monday, May 24, 8:00 a.m.–10:00 a.m., Hyatt Regency, Mineral G

President's Reception (by invitation)

Wednesday, May 26, 6:30 p.m.–8:00 p.m., Hyatt Regency, Centennial D

Protective Clothing and Equipment Committee Meeting*

Tuesday, May 25, 8:00 a.m.–10:00 a.m., Hyatt Regency, Granite B

Publications Committee Meeting*

Tuesday, May 25, 8:00 a.m.–10:00 a.m., Hyatt Regency, Sandstone

Real-Time Detection Systems Committee Meeting*

Wednesday, May 26, 8:00 a.m.–10:00 a.m., Hyatt Regency, Capitol 1

Registry Programs Board Meeting

Saturday, May 22, 8:30 a.m.–5:00 p.m., Hyatt Regency, Mineral D

Respiratory Protection Committee Meeting*

Monday, May 24, 8:00 a.m.–10:00 a.m., Hyatt Regency, Mineral A

Risk Assessment Committee Meeting*

Monday, May 24, 8:00 a.m.–10:00 a.m., Hyatt Regency, Capitol 6

Safety Committee Meeting*

Tuesday, May 25, 8:00 a.m.–10:00 a.m., Hyatt Regency, Capitol 3

Sampling and Laboratory Analysis Committee Meeting*

Tuesday, May 25, 8:00 a.m.–11:00 a.m., Hyatt Regency, Mineral C

Social Concerns Committee Meeting*

Monday, May 24, 8:00 a.m.–10:00 a.m., Hyatt Regency, Capitol 7

Stewardship and Sustainability Committee Meeting*

Tuesday, May 25, 8:00 a.m.–10:00 a.m., Hyatt Regency, Mineral A

Student and Early Career Professionals Committee Meeting*

Wednesday, May 26, 8:00 a.m.–10:00 a.m., Hyatt Regency, Mineral A

Synergist Editorial Advisory Board Meeting

Tuesday, May 25, 9:30 a.m.–10:30 a.m., Convention Center, 206

Toxicology Committee Meeting*

Tuesday, May 25, 8:00 a.m.–10:00 a.m., Hyatt Regency, Mineral E

Value Strategy Project Team

Wednesday, May 26, 3:00 p.m.–5:00 p.m., Convention Center, 208

Vapor Intrusion Project Team

Wednesday, May 26, 2:00 p.m.–3:00 p.m., Convention Center, 202

Volunteer Group Chairs Meeting

Thursday, May 27, 8:00 a.m.–10:00 a.m., Hyatt Regency, Agate

Volunteer Group Recognition Reception (by invitation)

Sunday, May 23, 5:30 p.m.–7:30 p.m., Hyatt Regency, Capitol 4

Volunteer Group Secretaries Orientation Meeting

Thursday, May 27, 10:00 a.m.–Noon, Hyatt Regency, Agate

WEEL Committee Meeting

Thursday, May 27, 8:00 a.m.–5:00 p.m., Hyatt Regency, Quartz A

AIHA® Local Sections**Local Section Council Business Meeting**

Monday, May 24, 4:00 p.m.–6:00 p.m., Hyatt Regency, Centennial A

Local Section Officers Training

Thursday, May 27, 8:00 a.m.–10:00 a.m., Hyatt Regency, Granite

Student Local Sections Council Business Meeting

Tuesday, May 25, 4:30 p.m.–6:30 p.m., Hyatt Regency, Capitol 6

AIHF**AIHF Board of Trustees Meeting**

Tuesday, May 25, 1:00 p.m.–2:30 p.m., Hyatt Regency, Sandstone

JOEH**JOEH Editorial Review Board Meeting**

Sunday, May 23, 7:00 p.m.–9:00 p.m., Hyatt Regency, Granite

JOEH LLC Board Meeting

Tuesday, May 25, 4:00 p.m.–6:00 p.m., Convention Center, 202

ACGIH®**Board of Directors Meeting**

Sunday, May 23, 8:00 a.m.–3:00 p.m., Hyatt Regency, Agate A

FOHS Board of Trustees Meeting

Monday, May 24, 10:30 a.m.–Noon, Convention Center, 202

Membership Reception and Annual Meeting of the Membership

Sunday, May 23, 6:00 p.m.–7:30 p.m., Hyatt Regency, Agate

***Volunteer Groups' Joint Meetings will be held 7:00 a.m.–8:00 a.m. at the Hyatt Regency on Monday and Tuesday in Centennial D, and on Wednesday in Capitol 4. Volunteer members should attend the general meeting scheduled on the same day as their committee meeting.**

» At-a-Glance: Friday and Saturday

Friday, May 21

8:00 a.m.–4:30 p.m.

P001 Certified Safety Professional (CSP) Exam Preparation Workshop

Convention Center, 405

4:00 p.m.–6:00 p.m.

Registration and Hotel Reservations

Convention Center, Lobby

Denver City and Restaurant Information

Convention Center, Lobby Level

Saturday, May 22

7:00 a.m.–7:30 a.m.

Saturday PDC Monitors Meeting

Convention Center, 302

7:00 a.m.–5:30 p.m.

Registration and Hotel Reservations

Convention Center, Lobby

7:30 a.m.–5:30 p.m.

Speaker Ready Room

Convention Center, 302

8:00 a.m.–Noon

PDC 201 Advanced Methods for Heat Stress and Strain

Convention Center, 401

PDC 202 Scanning for Safety: How to Recognize Hazards in the Workplace

Convention Center, 402

8:00 a.m.–4:30 p.m.

P001 Certified Safety Professional (CSP) Exam Preparation Workshop

Convention Center, 405

8:00 a.m.–5:00 p.m.

P002 Management Certificate Course III: Fundamentals of Finance and Accounting for Nonfinancial OEHS Managers

Hyatt Regency, Mineral F

PDC 101 Applying and Implementing Real-World Health Hazard and Control Banding Strategies

Convention Center, 504

PDC 102 Bayesian Statistics: Overview and Applications in IH Data Interpretation and Exposure Risk Assessment

Convention Center, 205

PDC 103 Incident Safety Officer: Are You Ready to Serve?

Convention Center, 404

PDC 104 Combustible Dust Safety

Convention Center, 605

PDC 105 Community Noise

Convention Center, 503

PDC 106 EHS 101 for Health Care: Basic Principles of Health-Care Safety and Practical Applications

Convention Center, 204

PDC 107 EHS Management Systems 101

Convention Center, 407

PDC 108 Environmental Law & Regulation for IHs

Convention Center, 607

PDC 109 Ergonomics for the Changing Needs of an Aging Work Force

Convention Center, 505

PDC 110 GHS for the IH

Convention Center, 207

PDC 111 If I'm Teaching, Why Aren't They Learning? How to Provide World-Class Training That Works

Convention Center, 506

PDC 112 Introduction to CBRN Agents

Convention Center, 202

PDC 113 Investigative Photography

Convention Center, 406

PDC 114 Life Safety Engineering

Convention Center, 603

PDC 115 Practical Applications for Portable Radiation Instruments

Convention Center, 403

PDC 116 The Derivation of Occupational Exposure Levels

Convention Center, 502

Note

AIHce enlists the services of a professional photographer to provide random and candid photographs of AIHce activities for use in AIHA® publications.

PDC 117 Risk Assessment with a Plan: Reducing Uncertainty in Decision Making

Convention Center, 201

PDC 118 Seeing the Big Picture: Proper Response to Pandemics and Infection Control Situations

Convention Center, 210

PDC 120 Clandestine Drug Labs: Evaluation, Hazards and Assessments

Convention Center, 501

PDC 701 Basic Electrical Safety with Application of NFPA 70E

Convention Center, 102

PDC 702 Construction Hazard Recognition and Project Management for the IH

Convention Center, 110

PDC 703 Exposure Assessment Strategies and Statistics

Convention Center, 105

PDC 704 Practical Project Management: How to Plan and Deliver within Budget and on Schedule

Convention Center, 101

PDC 705 Professional Judgment in Exposure Assessment Decision Making

Convention Center, 109

PDC 706 The Art of Safety: Mastering Advanced Communication Techniques

Convention Center, 106

PDC 707 The Value Strategy: A Process for Promoting Health and Safety Interventions

Convention Center, 113

PDC 708 Using Mathematical Models to Estimate Exposures

Convention Center, 104

8:00 a.m.–5:30 p.m.

Denver City and Restaurant Information

1:00 p.m.–5:00 p.m.

PDC 301 Ethics: Have You Used Yours Today?

Convention Center, 203

PDC 302 Noise Exposure Assessment: Sampling Strategy and Data Acquisition

Convention Center, 402

PDC 303 Particle Size-Selective (Inhalable, Thoracic and Respirable) Aerosol Sampling

Convention Center, 401

Now available . . .

at the AIHA® booth! AIHce 2011 Call for PDCs and Call for Presentations

AIHA®

8:30 a.m.–5:00 p.m.

Registry Programs Board Meeting

Hyatt Regency, Mineral D

9:00 a.m.–5:00 p.m.

Academy of Industrial Hygiene Meeting

Hyatt Regency, Granite A

Analytical Accreditation Board Meeting

Hyatt Regency, Agate

Ancillary

8:00 a.m.–5:00 p.m.

Liberty Mutual Insurance Group Annual Meeting

Hyatt Regency, Agate

Gasmeter™ AIHce 2010 Booth #1541
Advanced Solutions for Gas Monitoring.

BRING THE LAB TO THE SITE WITH THE DX-4030 FTIR GAS ANALYZER

Applications

- Industrial hygiene
- Hospitals
- Leak detection
- First responders
- Hazmat
- Soil remediation
- Fumigants

The DX-4030 measures 25 gases simultaneously

Gasmeter Technologies inc
866-685-0050 sales@gasmeter.com
www.gasmeter.com

Sunday, May 23

7:00 a.m.–7:30 a.m.

Sunday PDC Monitors Meeting
Convention Center, 302

7:00 a.m.–5:30 p.m.

Registration and Hotel Reservations
Convention Center, Lobby

7:30 a.m.–5:00 p.m.

Volunteer Collaboration Café
Convention Center, Grand Concourse

7:30 a.m.–5:30 p.m.

Speaker Ready Room
Convention Center, 302

8:00 a.m.–Noon

PDC 501 Fundamentals of Chemical Protective Clothing
Convention Center, 403

PDC 502 Introduction to Lifecycle Assessment
Convention Center, 402

8:00 a.m.–4:30 p.m.

P001 Certified Safety Professional (CSP) Exam Preparation Workshop
Convention Center, 405

8:00 a.m.–5:00 p.m.

P002 Management Certificate Course III: Fundamentals of Finance and Accounting for Nonfinancial OEHS Managers
Hyatt Regency, Mineral F

P003 Time Management in an Age of Turbulence
Convention Center, 112

P010 Symposium: How IH Can LEED in Green Building
Hyatt Regency, Capitol 2

PDC 401 Methods and Applications for Exposure Assessment Chemical Detection in Real Time
Convention Center, 503

PDC 402 Advanced Design of Local Exhaust Ventilation Systems
Convention Center, 401

PDC 403 Anticipation, Recognition, Evaluation and Control of Welding Health Hazards
Convention Center, 203

PDC 404 ASHRAE 110 Testing and Management Practices for Safe and Energy-Efficient Laboratory Hood Systems
Convention Center, 202

PDC 406 Biological Monitoring: A How-To Guide and Case Studies
Convention Center, 206

PDC 408 CBRN Respirator Selection, Use, and Maintenance Guidelines
Convention Center, 210

PDC 409 Current Concepts in Toxicology No. 2
Convention Center, 607

PDC 410 Ergonomics Toolkit: Application of Common Ergonomic Assessment Tools
Convention Center, 502

PDC 411 Ethical Fitness: Choosing Between Right vs. Right
Convention Center, 507

PDC 412 Exceptional Functional Leadership
Convention Center, 601

PDC 413 Getting Ready for an OSHA Combustible Dust Inspection
Convention Center, 605

PDC 414 Health-Care Ergonomics: Safe Patient Handling
Convention Center, 208

PDC 415 Healthier Workplaces for Healthier Work Forces: Benefits of Implementing Health and Wellness Programs
Convention Center, 204

PDC 416 IHs as Experts and the Business of Providing Expert Testimony
Convention Center, 707

PDC 417 Microsoft® Excel and IH Data Analysis: Introducing Visual Basic—Put an Engine in Your Worksheets
Convention Center, 205

PDC 418 Mold Recognition, Effective Sampling Strategies and Results Interpretation
Convention Center, 504

PDC 419 Nanotechnology: A Convergence of Leading-Edge Science
Convention Center, 207

PDC 420 Noise Control Engineering
Convention Center, 709

PDC 421 Managing Ionizing Radiation Programs for IHs
Convention Center, 505

PDC 422 Practical Approaches to Dermal Exposure Assessment in the Workplace
Convention Center, 406

PDC 423 Ramping Up Your Hearing Protection and Jazzing Up Your Hearing Conservation
Convention Center, 703

PDC 424 REACH: A Risk Management Strategy
Convention Center, 201

PDC 425 Reconstructing Exposure and Dose: The Process and Validation
Convention Center, 711

PDC 427 Strategies for Selecting Air Sampling Methods
Convention Center, 404

PDC 428 Sustainability and Social Responsibility 101
Convention Center, 506

PDC 429 The FUN of Aerosols: Fine, Ultrafine, and Nanoparticles in Workplace Atmospheres
Convention Center, 501

PDC 430 Vapor Intrusion Investigation and Mitigation: Advances in Assessment and Practice

Convention Center, 603

PDC 701 Basic Electrical Safety with Application of NFPA 70E

Convention Center, 102

PDC 702 Construction Hazard Recognition and Project Management for the IH

Convention Center, 110

PDC 703 Exposure Assessment Strategies and Statistics

Convention Center, 105

PDC 704 Practical Project Management: How to Plan and Deliver within Budget and on Schedule

Convention Center, 101

PDC 705 Professional Judgment in Exposure Assessment Decision Making

Convention Center, 109

PDC 706 The Art of Safety: Mastering Advanced Communication Techniques

Convention Center, 106

PDC 707 The Value Strategy: A Process for Promoting Health and Safety Interventions

Convention Center, 113

PDC 708 Using Mathematical Models to Estimate Exposures

Convention Center, 104

8:00 a.m.–5:30 p.m.**Denver City and Restaurant Information**

Convention Center, Lobby

1:00 p.m.–5:00 p.m.**Social Tours Desk**

Convention Center, Lobby

PDC 601 A Risk Management and Insurance Primer for IHs

Convention Center, 402

PDC 602 Fundamentals of Nonionizing Radiation

Convention Center, 403

ACGIH®**8:00 a.m.–3:00 p.m.****Board of Directors Meeting**

Hyatt Regency, Agate A

6:00 p.m.–7:30 p.m.**Membership Reception and Annual Meeting of the Membership**

Hyatt Regency, Agate

AIHA®**8:00 a.m.–4:30 p.m.****Board of Directors Meeting**

Hyatt Regency, Granite

5:30 p.m.–7:30 p.m.**Volunteer Group Recognition Reception (by invitation)**

Hyatt Regency, Capitol 4

6:00 p.m.–7:30 p.m.**AIHA®-Accredited Laboratory Forum**

Hyatt Regency, Mineral E

6:00 p.m.–10:00 p.m.**Academic Accreditation Committee Meeting**

Hyatt Regency, Mineral F

7:00 p.m.–9:00 p.m.**JOEH Editorial Review Board Meeting**

Hyatt Regency, Granite

7:30 p.m.–10:30 p.m.**FLI and Young Member Reception (by invitation)**

Wynkoop Brewery, 1634 18th Street

Ancillary**7:30 a.m.–5:00 p.m.****ABIH Board Meeting**

Hyatt Regency, Mineral E

8:00 a.m.–5:00 p.m.**Board of Certification in Professional Ergonomics (BCPE) Certification Examination**

Hyatt Regency, Mineral G

Practice the three “Rs” — Reduce, Reuse, Recycle

AIHce is progressively implementing green meeting initiatives, annually expanding efforts to become more environmentally friendly. Here's what you can do to help:

- Recycle badges, handouts/programs, bottles and plastic. Bins are located throughout the convention center.
- Limit purchasing bottled water.
- Reuse linens, towels, toiletries in your hotel room.
- Walk to the convention center.
- Take the airport shuttle instead of a cab. It costs less, too!
- Participate in a carbon offset program.

For information on how AIHce is contributing to this effort, visit the website, www.aihce2010.org.



Find New Frontiers in Science and Practice

and Huge Savings at the ACGIH® Pavilion during AIHce 2010!

Denver, Colorado – the “Mile High City” – will host the 2010 American Industrial Hygiene Conference and Exposition (AIHce). Stop by the ACGIH® Pavilion and discover huge savings, including:

- **ACGIH®’s Signature Publications**, including these **NEW** publications: **2010 TLVs® and BEIs® Book** and **CD-ROM**; **2010 Guide to Occupational Exposure Values**; **2010 TLVs® and BEIs® with 7th Edition Documentation, CD-ROM**; and **Industrial Ventilation: A Manual of Recommended Practice for Design, 27th Edition**
- Hundreds of **ACGIH®’s Cooperative Publications** – scientific and technical publications, produced by the most renowned scientific publishers and offered for sale by ACGIH®
- Information on the **unbeatable value of membership in ACGIH®** for both individuals and organizations
- Information on **upcoming educational events**
- Information on the **Foundation for Occupational Health & Safety (FOHS)** – including the **Sustainable TLV®/BEI® Program**

Select ACGIH® Signature Publications will be available at a 20% Cash and Carry discount while supplies last.* Other publications will be offered at a special 10% Conference discount.

The ACGIH® Pavilion, in the Colorado Convention Center Exhibit Hall, Booth 1623, will be open the following hours:

Monday, May 24 – 9:00 a.m. – 5:30 p.m.
Tuesday, May 25 – 9:00 a.m. – 3:00 p.m.
Wednesday, May 26 – 9:00 a.m. – 1:30 p.m.

Find your Mile High Savings at the ACGIH® Pavilion. We look forward to seeing you in Denver!

**To receive the 20% discount, payment is required at the time of purchase. Books must be taken with you – shipping is not available. Discounts may not be combined with any other offer, and are only available during the event.*



Never fear Qfit is here

So easy a superhero in training can do it



Introducing a no stress, no mess qualitative respirator fit testing solution. Reducing work by up to 95%†, the Qfit™ Respirator Fit Tester is the *only OSHA** approved *automated pump driven nebulizer* for BITREX® and Saccharin to qualitatively fit test the integrity of respirators.



Contact TSI to request an interactive demo CD today. Visit www.tsi.com/QLFT 

Visit TSI at AIHce Booth #1003
Distributors Welcome. Inquire Today.

TSI Incorporated

Tel: 800.874.2811 Email: answers@tsi.com

† Work Reduction for Qfit Automatic Fit Test model *OSHA (29CFR1910.134)



» At-a-Glance: Monday

Monday, May 24

7:00 a.m.–5:30 p.m.

Registration and Hotel Reservations
Convention Center, Lobby

7:30 a.m.–5:00 p.m.

Press Room
Convention Center, 303

7:30 a.m.–5:30 p.m.

Speaker Ready Room
Convention Center, 302

7:30 a.m.–6:00 p.m.

Volunteer Collaboration Café
Convention Center, Grand Concourse



8:00 a.m.–9:30 a.m.

**Opening General Session
A Contract with Our Future**

Robert F. Kennedy, Jr.
Convention Center, Wells Fargo Theatre

8:00 a.m.–4:00 p.m.

AIHA® CareerAdvantage Development Fair 2010
Convention Center, Hall F

8:00 a.m.–6:00 p.m.

Denver City and Restaurant Information
Convention Center, Lobby

8:30 a.m.–11:30 a.m.

Spouse and Guest Hospitality Center
Hyatt Regency, Agate

9:00 a.m.–3:00 p.m.

Annual Blood Drive
Convention Center, Expo, Hall F

9:00 a.m.–5:30 p.m.

Visit the Expo!
Convention Center, Halls A and F

**Daily Prizes, Special Displays, Cyber/Message Centers,
Restaurants, Lounges, Expo Theater**
No sessions 9:30 a.m.–10:30 a.m. and 12:30 p.m.–2:00 p.m.

Poster Sessions

Convention Center, Expo, Hall F

Poster Session 401

Authors present 10:00 a.m.–Noon

Poster Session 402

Authors present 2:00 p.m.–4:00 p.m.

Multimedia Downloads and DVDs

Convention Center, Lobby

9:30 a.m.–12:30 p.m.

TT-01 Downtown Aquarium
Convention Center, departs South Entrance
Board bus by 9:15 a.m.

10:00 a.m.–11:30 a.m.

**CR 301 EMS Development at a Large K-12 School District:
Policy to Practice**
Convention Center, 109

CR 302 Comparison of EHS Auditing Standards
Convention Center, 201

CR 303 Manager of Safety Services
Convention Center, 203

10:00 a.m.–2:00 p.m.

Exhibitor Product Demos and Presentations
Expo Theater, Hall F

See presentation descriptions on
pages 38 and 44.

10:00 a.m.

Galson Laboratories LEED Testing Demonstration,
Galson Laboratories

10:30 a.m.

IQM 60 Portable Indoor Air Quality Monitoring System,
Kanomax USA, Inc.

11:30 a.m.

**Dual Detector Portable GC for Coal Mine Safety
Monitoring, HNU PID Analyzers, LLC**

Noon

Installing Filters in a Paramount® Ductless Fume Hood,
Labconco Corp.

12:30 p.m.

**Revolutionary Finger-Mounted Vibration Dosimeter for
Personal Exposure Monitoring and Assessing Risk of
Raynaud's Syndrome of Occupational Origin (Vibration
White-finger Disease) and Carpal Tunnel Syndrome,**
Larson Davis

1:00 p.m.

**EVM-7: Particulate and Air Quality Monitoring Designed
with Efficiency in Mind, Quest Technologies, a 3M
Company**

1:30 p.m.

3M™ E-A-Rfit™ Validation System Demonstration,
3M Occupational Health and Environmental Division

10:00 a.m.–2:00 p.m.

Social Tours Desk
Convention Center, Lobby

10:30 a.m.–12:30 p.m.

PO 101 Laboratory Health and Safety
Convention Center, 112

PO 102 International Globalization
Convention Center, 401



PO 103 Noise: Measure the Hazard, Then Implement and Evaluate Controls

Convention Center, 207

PO 104 Current Research Topics in Microbial Issues

Convention Center, 505

RT 201 Research-Based Design and Placement of Keyboards and Mice

Convention Center, 113

RT 202 Tools and Techniques for Incident Preparedness and Response

Convention Center, 501

RT 203 American Board of Industrial Hygiene Forum

Convention Center, 105

RT 204 Training/Certification Models for Global Occupational Hygiene Professionals

Convention Center, 405

RT 205 Using H1N1 Influenza to Understand Infectious Disease Epidemiology and Control

Convention Center, 605

RT 206 Surmounting the Diversities of People and Formats of Effective Training

Convention Center, 205

RT 207 Recent Developments in Vapor Intrusion

Convention Center, 503

Value Strategy Session 1: AIHA® Value Strategy Session on Methodologies

Convention Center, 210

10:30 a.m.–1:00 p.m.

RT 208 GHS Implementation: Where Are We Today?

Convention Center, 403

Noon–1:30 p.m.

Unsolved IH Mysteries Workshop

Convention Center, 407

12:30 p.m.–1:30 p.m.

Jeffrey S. Lee Lecture

Convention Center, 106

Luncheon Discussions—Students and Early Career Professionals

Convention Center, Expo, Hall A

1:00 p.m.–4:00 p.m.

ST-01 Highlights of the "Mile High" City

Convention Center, departs South Entrance Board bus by 12:45 p.m.

1:00 p.m.–5:00 p.m.

TT-02 National Renewable Energy Laboratory, Wind Technology Center

Convention Center, departs South Entrance Board bus by 12:45 p.m.

TT-03 National Renewable Energy Laboratory, South Table Mountain

Convention Center, departs South Entrance Board bus by 12:45 p.m.

2:00 p.m.–3:00 p.m.

CR 304 From Compliance to Sustainability: Leveraging Information Systems to Address Today's Environmental Responsibilities

Convention Center, 501

CR 305 Using Effective Safety Management Systems to Prevent Serious Injuries

Convention Center, 105

CR 306 Auditing Environmental Claims and Assertions

Convention Center, 113

CR 307 The HS&E Professional's Role in Property Due Diligence Assessments

Convention Center, 201

2:00 p.m.–4:00 p.m.

Emerging Issues Session 1: NIOSH-DREAM (Direct Reading Exposure Assessment Methods)

Convention Center, 203

PO 105 Health-Care Industries, Part 1: Engineering Controls, Disinfection Methods, and Other Current Issues Associated with Infection Control

Convention Center, 106

2:00 p.m.–4:20 p.m.

PO 107 Lead

Convention Center, 207

PO 108 Hazardous Occupational Exposures—Case Studies

Convention Center, 505

2:00 p.m.–4:30 p.m.

RT 209 I Graduated...Now What?

Convention Center, 503

RT 210 Environmental Justice and Occupational Health Disparities: Any Leading Pathways?

Convention Center, 401

2:00 p.m.–4:40 p.m.

PO 106 Risk Assessment (Management) Case Studies

Convention Center, 112

2:00 p.m.–5:00 p.m.

Science Symposium: Advances in Science for Understanding, Managing and Controlling Noise Exposure

Convention Center, 403

PO 109 A Potpourri of Ergonomic Case Studies and Scientific Research

Convention Center, 205

RT 211 Assessment and Control of Chinese Drywall Emissions

Convention Center, 405

2:00 p.m.–5:30 p.m.

RT 212 Green Construction Practices: Integrating Occupational Safety and Health

Convention Center, 605

2:00 p.m.–6:00 p.m.

PO 110 Respiratory Protection

Convention Center, 109

» At-a-Glance: Monday

2:30 p.m.–4:00 p.m.

Soap Box (Open Mic) Talks

Convention Center, Expo Theater, Hall F

4:00 p.m.–5:30 p.m.

Expo Opening Cocktail Reception

Convention Center, Halls A and F

This is the perfect opportunity to meet this year's exhibitors, browse the technical posters, visit with colleagues and learn about new products and services from AIHA® and ACGIH®.

7:30 p.m.–10:30 p.m.

ST-02 Brew Hopping!

Convention Center, departs South Entrance
Board bus by 7:15 p.m.

ACGIH®

10:30 a.m.–Noon

FOHS Board of Trustees Meeting

Convention Center, 202

AIHA®

6:00 a.m.–8:00 a.m.

Joint Industrial Hygiene Ethics Education Committee Meeting

Hyatt Regency, Quartz A

7:00 a.m.–8:00 a.m.

Volunteer Groups' Joint Meeting

Hyatt Regency, Centennial D

Members should attend the joint meeting scheduled on the day of their committee meeting. Breakfast begins at 6:30 a.m. Individual committee meetings follow.

8:00 a.m.–10:00 a.m.

ANSI/AIHA® Z88.12 Respiratory Protection for Infectious Aerosols Standard Subcommittee Meeting

Hyatt Regency, Sandstone

Confined Spaces Committee Meeting

Hyatt Regency, Capitol 5

Control Banding Working Group Meeting

Hyatt Regency, Mineral E

Environmental Issues Committee Meeting

Hyatt Regency, Mineral F

Green Building Working Group Meeting

Hyatt Regency, Capitol 3

Indoor Environmental Quality Committee

Hyatt Regency, Mineral B-C

Ionizing Radiation Committee Meeting

Hyatt Regency, Limestone

Membership Committee Meeting

Hyatt Regency, Mineral D

Minority SIG Meeting

Hyatt Regency, Granite A

Practice, Standards and Guidelines Committee Meeting

Hyatt Regency, Mineral G

Respiratory Protection Committee Meeting

Hyatt Regency, Mineral A

Risk Assessment Committee Meeting

Hyatt Regency, Capitol 6

Social Concerns Committee Meeting

Hyatt Regency, Capitol 7

8:00 a.m.–11:00 a.m.

Construction Committee Meeting

Hyatt Regency, Capitol 2

Exposure Assessment Strategies Committee Meeting

Hyatt Regency, Capitol 4

7:00 a.m.–9:00 a.m.

BEEL Project Team Meeting

Hyatt Regency, Marble

11:00 a.m.–Noon

EASC Dermal Project Team Meeting

Convention Center, 206

Noon–1:00 p.m.

Academy Conference Team Meeting

Convention Center, 204

Noon–2:00 p.m.

ANSI/AIHA® Z9.12 Combustible Dust Standard Subcommittee Meeting

Convention Center, 208

1:00 p.m.–4:00 p.m.

Joint ERP/WEEL/BEEL Meeting

Convention Center, 202

2:00 p.m.–4:00 p.m.

ANSI/AIHA® Z9 Ventilation System Standards Committee Meeting

Convention Center, 206

2:00 p.m.–5:00 p.m.

Continuing Education Committee Meeting

Hyatt Regency, Granite B

Finance Committee Meeting

Convention Center, 204

2:00 p.m.–6:00 p.m.

International Affairs Committee Meeting

Hyatt Regency, Capitol 4

4:00 p.m.–6:00 p.m.

Local Section Council Business Meeting

Hyatt Regency, Centennial A

6:30 p.m.–8:00 p.m.

International Reception (by invitation)

Hyatt Regency, Capitol 2

Ancillary

1:00 p.m.–4:00 p.m.

CRBOH Board of Directors Meeting
Hyatt Regency, Marble

2:00 p.m.–3:30 p.m.

A Frank Discussion on GHS and Its Global Impact on Your Product Lifestyle, sponsored by MSDSpro, LLC
Hyatt Regency, Centennial F

2:30 p.m.–4:00 p.m.

Cleaning the Air: Preventing Combustible Dust Hazards with Proper Cleaning Equipment, sponsored by Nilfisk CFM and *Occupational Health & Safety Magazine*
Hyatt Regency, Centennial C

5:00 p.m.–6:30 p.m.

Audit—Automate—Access! Three Key Steps to Chemical Inventory and Regulatory Compliance, sponsored by MSDSpro, LLC
Hyatt Regency, Centennial F

5:00 p.m.–9:00 p.m.

Department of Energy (DOE) and DOE Contractor Industrial Hygiene Meeting
Hyatt Regency, Mineral A

6:00 p.m.–8:00 p.m.

Harvard Alumni Reception
Hyatt Regency, Agate C



6:30 p.m.–8:00 p.m.

Johns Hopkins Reception
Hyatt Regency, Mineral B

7:00 p.m.–9:00 p.m.

University of Toledo/Medical College of Ohio Alumni Reception
Hyatt Regency, Mineral F

Due to circumstances beyond our control, AIHce cannot guarantee the appearance of all presenters listed in this program. Registration fees will not be refunded due to speaker changes; we regret any disappointment.

AIHce Gives Back!



Each year, AIHce tries to give a little back to its host community. This year, we encourage registrants to participate in the annual blood drive, donate to Samaritan House or — do both! Your donation takes very little time...and does a world of good.

Annual Blood Drive **BONFILS**  **BLOOD CENTER**
Expo, Hall F

Monday–Tuesday, 9:00 a.m.–3:00 p.m.

Make time in your conference schedule to donate blood. It only takes 45 minutes and you'll feel good about giving to a worthy cause. Donations are always in short supply, but now more than ever, with recent headline-making disasters in Haiti and China.



Samaritan House

Donations accepted all week at the Info Kiosk

Serving the needs of the underserved homeless and families with children, Samaritan House can accommodate over 320 men, women and children each night. Residents receive a bed, food, clothing and various

services, including case management, medical care, and referrals for employment, social service assistance and educational opportunities.

The House is particularly busy now with the economic recession and severely in need of donations, particularly small toiletries for men and women as well as office supplies. Donations may be dropped off at the Info Kiosk in the lobby.

See the flyers at the Info Kiosk and at Registration for more information on each of these activities.

OPENING GENERAL SESSION

8:00 a.m.–9:30 a.m.

Convention Center, Wells Fargo Theatre

A Contract with Our Future

Robert F. Kennedy, Jr.

Robert F. Kennedy's reputation as a resolute defender of the environment stems from a litany of successful legal actions. Mr. Kennedy was named one of TIME magazine's "Heroes for the Planet," for his success in helping Riverkeeper lead the fight to restore the Hudson River. The group's achievement helped spawn more than 160 Waterkeeper organizations across the globe. In 2009, Kennedy was named one of *Rolling Stone's* "100 Agents of Change."

Mr. Kennedy serves as senior attorney for the Natural Resources Defense Council, chief prosecuting attorney for the Hudson Riverkeeper, president of Waterkeeper Alliance, and the environmental advisor to Napo Pharmaceuticals. He is also a clinical professor and supervising attorney at Pace University School of Law's Environmental Litigation Clinic and is co-host of *Ring of Fire* on Air America Radio.



ROBERT F. KENNEDY, JR.

This opening session is sponsored by



United Phosphorus Limited

NEW!

Exhibitor Product Demos and Presentations

10:00 a.m.–1:00 p.m. | Expo Theater, Hall F

10:00 a.m.

LEED Testing Demonstration, Galson Laboratories

The Leadership in Energy and Environmental Design (LEED) green building rating system, developed by the U.S. Green Building Council (USGBC), provides a suite of standards for environmentally sustainable construction. There is an Indoor Environmental Quality (IEQ) component to this process. Credits are earned by conducting indoor air testing to show that contaminant levels do not exceed the levels noted. Galson has created a new LEED testing kit that includes everything needed to conduct the IEQ air testing for LEED credit.

10:30 a.m.

IQM 60 Portable Indoor Air Quality Monitoring System, Kanomax USA, Inc.

The IQM Indoor Air Quality Monitor enables simultaneous monitoring of common air quality parameters with a single instrument. Analytic Gas Sensitive Semiconductor (GSS) Technology, photo-ionization detector (PID), and non-dispersive infra-red (NDIR) optical sensors are used to achieve cost-effective and precise measurement of indoor air quality parameters, such as CO₂, CO, VOC, NO₂, O₃. Temperature, humidity and particulate matter.



Expo Theater sponsored by Colorado Safety Association

Measurements are logged to a removable SD card and can be exported to a PC for generating reports. Applications include IAQ and HVAC analysis, IAQ-compliant investigation, and Sick Building Syndrome assessment.

11:30 a.m.

Dual Detector Portable GC for Coal Mine Safety Monitoring, HNU PID Analyzers, LLC

We are currently working with the Chinese Government on a project to improve the air quality in the coal mines. We developed a method using our portable GC312 configured with FarUV (FUV) and Thermal Conductivity (TCD) detectors run in-series. The FUV is used to detect low ppm levels of contaminants such as CH₄, NO, NO₂, SO₂...and the TCD is used to detect high levels of gases (>500 ppm). The use of these detectors in-series for analysis of samples provides a dynamic range of 10 exp 6 for the two detectors.

Noon

Installing Filters in a Paramount® Ductless Fume Hood, Labconco Corp.

Filter installation requires proper alignment so that hazardous fumes are scrubbed from the air stream. This presentation will show proper carbon filter installation in a 2-foot Paramount® Ductless Fume Hood.

12:30 p.m.

Revolutionary Finger-Mounted Vibration Dosimeter for Personal Exposure Monitoring and Assessing Risk of Raynaud's Syndrome of Occupational Origin (Vibration White-Finger Disease) and Carpal Tunnel Syndrome, Larson Davis

Recent advances in tri-axial sensing technology have resulted in the world's first finger-mounted personal dosimeter for hand-arm vibration. Previously it was extremely difficult to obtain accurate field measurements of exposure to excessive vibration levels, which are known to be a cause of irreversible and compensable injury (Vibration White-Finger or Hand-Arm Vibration Syndrome) and a contributing factor to CTS. Intrinsically safe, and capable of measuring to ACGIH®, ISO (5349) and ANSI (S2.70) standards, this miniature logging instrument provides continuous data for over 12 hours of exposure under the most severe conditions. Integrating exposure data into a prevention program is discussed.

CR 301

EMS Development at a Large K-12 School District: Policy to Practice

10:30 a.m.–11:30 a.m. » Convention Center, 109

Presenter: B. Kasher, Charlotte Mecklenburg Schools, Charlotte, NC.

This session presents Charlotte Mecklenburg Schools' (CMS) EMS development beginning with BOE Environmental Stewardship Policy. Environmental aspect impact analysis coupled with legal obligations serve as the basis for measurable environmental program implementation. CMS's environmental footprint is substantial with 164,000 building occupants in 20.6 million square feet who consume 226 million kilowatts, 3.5 million therms, 256 million gallons of potable water annually, and a school bus fleet that travels 138,000 miles daily. USEPA Tools for Schools has deemed CMS a National Model of Sustained Excellence.

CR 302

Comparison of EHS Auditing Standards

10:30 a.m.–11:30 a.m. » Convention Center, 201

Presenters: T. Dunmire, ENLAR Compliance Services, Largo, FL; W. Acha, BEAC, Altamonte Springs, FL. **Moderator:** N. Rice, Intermountain Healthcare, Salt Lake City, UT.

In 2008, both ANSI and BEAC revised their standards for conducting EHS audits. The ANSI standard — ISO/ANSI/ASQ 19011S — was revised to expand the ISO standard to cover OH&S audits. The BEAC standard was revised to incorporate current "best practices" for performing EHS audits and designing auditing programs. This presentation will compare and contrast these standards to discuss the creation and implementation of effective EHS audit programs — including a discussion of the auditor competency criteria within these standards.

CR 303

Manager of Safety Services

10:30 a.m.–11:30 a.m. » Convention Center, 203

Presenter: M. Lastie, ICU Environmental Health & Safety, The Woodlands, TX.

The Occupational Health and Safety Administration (OSHA) issued an instruction (CPL-03-004: Petroleum Refinery Process Safety Management National Emphasis Program) effective June 7, 2007. The instruction requires OSHA to inspect virtually all refineries in SIC -2911 or NAICS - 324110 to verify employer's compliance with the PSM standard (29 CFR 1910.119). This presentation is intended to give an overview on the status of the refining NEP's status.

AIHA® Value Strategy Session on Methodologies

Sponsored by the Academy of Industrial Hygiene

10:30 a.m.–12:30 p.m. » Convention Center, 210

Moderator: B. Silverstein **Speakers:** S. Gutmann, Thomson-Reuters, Eagan, MN; D. Heidel, NIOSH, Cincinnati, OH; K. Murray, BP, Houston, TX; G. Popov, University of Central Missouri, Warrensburg, MO.

The AIHA® Value Strategy includes several methodologies that you can use to quantify the value industrial hygiene programs, activities, and interventions. The authors of the AIHA® Value Strategy Manual will present in-depth coverage of several of these methodologies, including examples and a case study.

PO 101

Laboratory Health and Safety

10:30 a.m.–12:30 p.m. » Convention Center, 112

Arranger and Moderator: L. Poore, University of Kentucky, Lexington, KY. **Monitors:** D. Hibbard, University of Kentucky, Lexington, KY; P. Jensen, MN.

10:30 a.m.

Development and Implementation of an In-House Laboratory Emergency Contact and Hazard Information Sign Creation and Editing Tool. (1) S. Crooks, K. Rokoske, RTI International, Research Triangle Park, NC.

10:50 a.m.

Applying Lean Six Sigma Tools to a Hazardous Material Process. (2) M. Cournoyer, C. Renner, S. Costigan, LANL, Los Alamos, NM.

11:10 a.m.

Evaluation and Control of Waste Anesthetic Gases During Rodent Surgical Procedures. (3) J. Nesbitt, D. Krageschmidt, Mayo Clinic, Rochester, MN.

11:30 a.m.

A Rational Approach to Specifying Minimum Air Change Rates in Laboratories. (4) T. Smith, Exposure Control Technologies, Inc., Cary, NC.

11:50 a.m.

Fan Energy Cost Versus Acceptable Air Quality. (5) R. Petersen, B. Cochran, CPP, Inc., Fort Collins, CO.

12:10 p.m.

Strategic Placement of Hazardous Exhaust Stacks to Avoid Fume Reentry. (6) R. Petersen, J. Reifschneider, CPP, Inc., Fort Collins, CO.

PO 102

International Globalization

10:30 a.m.–12:30 p.m. » [Convention Center, 401](#)

Arranger and Moderator: N. Yin, Warner International, Inc., Morris Plains, NJ. **Monitors:** C. Yang, C. Yen, Institute of Occupational Medicine and Industrial Hygiene, Taipei, Taiwan.

10:30 a.m.

Full Disclosure — No Disclosure. (7) K. Kowar, Actio Corporation, Naperville, IL.

10:50 a.m.

Establishing Worker Exposure Monitoring Programs in the Global Footwear Industry. (8) R. Clifford, b.clifford associates, Newton, MA; M. Sheehy, L.L. Bean, Freeport, ME.

11:10 a.m.

Un Glosario en Línea de Términos en Español-Inglés para la Salud Ambiental y Ocupacional, y Seguridad. An Online Glossary of Terms in English/Spanish for Environmental and Occupational Health and Safety. (9) L. Whitehead, N. Agra-Malo, University of Texas, Houston, TX.

11:30 a.m.

REACH: Drivers for Information System Implementation to Address Real-World Challenges. (10) M. Johnson, IHS, Englewood, CO.

11:50 a.m.

Demand and Opportunities for Occupational Safety and Health Education in Egypt. (11) M. Lum, NIOSH, Washington, DC; R. Rinehart, Consultant, Maadi, Cairo, Egypt.

12:10 p.m.

Developing a Professional Workforce in an Emerging Economy. (12) W. Carter, University of Findlay, Findlay, OH.

PO 103

Noise: Measure the Hazard, Then Implement and Evaluate Controls

10:30 a.m.–12:30 p.m. » [Convention Center, 207](#)

Arranger: Z. Machillanda-Hahn, Berkeley, CA. **Moderator:** C. Achutan, NIOSH, Cincinnati, OH. **Monitors:** L. Coe-Leavitt, BEA Alliance, Idaho Falls, ID; M. Schiering, ICI Paints NA, Strongsville, OH.

10:30 a.m.

The OSHA Noise Regulations and More Protective Alternative Noise Strategies. (13) J. Ratliff, Kanto Corporation, Beaverton, OR.

10:50 a.m.

Evaluating the Effectiveness of Fit-Testing of Hearing Protection Devices in Northern West Virginia Coal Mines. (14) A. Quinn, ICU Environmental Health and Safety, The Woodlands, TX.

11:10 a.m.

Hearing Protector Labeling and Testing: EPA Rulemaking and ANSI Standards. (15) E. Berger, 3M, Indianapolis, IN.

11:30 a.m.

Aggregated Hearing Protector Fit-Testing Data: Lessons Learned. (16) L. Hager, Sonomax Great Lakes, Portland, MI.

11:50 a.m.

Evaluation of Potential Noise Hazards to 911 Dispatchers at a Fire Department. (17) C. Achutan, University of Nebraska Medical Center, Omaha, NE; C. Kardous, NIOSH, Cincinnati, OH.

12:10 p.m.

Noise Assessment and Control for a Small Jet Engine. (18) M. Ferreri, M. Graessle, M. Horenziak, J. Stubbs, J. Slagley, Air Force Institute of Technology, WPAFB, OH.

RT 201

Research-based Design and Placement of Keyboards and Mice

10:30 a.m.–12:30 p.m. » [Convention Center, 113](#)

Arranger and Moderator: M. O'Reilly, ARLS Consultants, Inc., Manlius, NY. **Monitors:** K. Deady, Consultant, Concord, MA; M. Werrell, Ergoworks Consulting, LLC, Gaithersburg, MD.

Few human/machine interfaces are more varied, more ubiquitous or more important than the interaction with keyboards and mice. Keyboard and mice designs are increasingly more varied and may present a difficult decision to industrial hygienists who have to recommend specific devices as part of a computer workstation ergonomics evaluation. Equally critical as the selection of the keyboard and/or mouse is the placement of these devices in the work space of the user. The placement of keyboard and mouse becomes more difficult as computers are used in many different work areas and under varied work conditions. It is important to understand the way relevant characteristics of the devices match with the characteristics of the computer users. This roundtable presents insight on the various design options available in the marketplace, the placement of the devices in context with the work being performed, and software applications that are useful for people to identify and address ergonomic issues within their own workplaces.

- **Design of the Human/Computer Input Interface.** C. Sommerich, Ohio State University, Columbus, OH.
- **Research-based Keyboard Design.** R. Marklin, Marquette University, Milwaukee, WI.
- **The Practitioner's Perspective.** C. Stuart-Buttle, Stuart-Buttle Ergonomics, Philadelphia, PA.
- **Assessment Tools with Solutions.** W. Rostykus, Humantech, Inc., Corrales, NM.

RT 202**Tools and Techniques for Incident Preparedness and Response**10:30 a.m.–12:30 p.m. » [Convention Center, 501](#)

Arranger: P. Pirkle, Battelle, Atlanta, GA. **Moderator:** M. Buckalew, ENVIRON International Corporation, Atlanta, GA. **Monitors:** R. Adams, ENVIRON International Corporation, Princeton, NJ; J. Johnson, JSJ and Associates, Pleasanton, CA.

The purpose of this roundtable is to discuss tools, techniques and practices utilized by industrial hygienists to prepare for and respond to incidents. Topics include employment of field portable detection equipment and software tools, development and execution of strategies to assess health risks to incident responders and the public, and integration of industrial hygiene into the incident command system operational and safety planning cycle.

- **Applying Daily Industrial Hygiene Operations to Emergency Response Situations.** R. Campbell, Alliance Solutions Group, Inc., Newport News, VA.
- **Incident Preparation Strategies for the IH: Training and Exercises.** P. Pirkle, Battelle, Atlanta, GA.
- **ICS and the IH.** R. Schultz, Atlantic Strike Team, U.S. Coast Guard, Fort Dix, NJ.
- **Integrating Environmental Health during an Emergency Response.** C. Poulet, ATSDR Regional Representative, ATSDR, Denver, CO.

RT 203**American Board of Industrial Hygiene Forum**10:30 a.m.–12:30 p.m. » [Convention Center, 105](#)

Arranger and Moderator: L. O'Donnell, ABIH, Lansing, MI. **Monitors:** R. Drafta, B. Snow, ABIH, Lansing, MI. **Speakers:** T. Nalbone, University of Texas, Tyler, TX; K. Castillon, OSHA, Syracuse, NY; J. Throckmorton, University of Utah, Salt Lake City, UT.

How do you become a Certified Industrial Hygienist? Once certified, how do you maintain your certification? ABIH Board members and staff will present information on certification topics, address comments and questions from the audience and seek audience input on ABIH's direction and programs. ABIH is a nonprofit corporation whose purpose is to promote, elevate and sustain the practice of the IH profession through ABIH certification worldwide. ABIH certifies individuals in the practice of industrial hygiene based on education, experience and examination. This forum provides an opportunity for IHS to learn more about ABIH programs and for the Board to hear about issues and concerns from its stakeholders.

RT 204**Training/Certification Models for Global Occupational Hygiene Professionals**10:30 a.m.–12:30 p.m. » [Convention Center, 405](#)

Arranger and Moderator: C. Ficklen, SQA2, Inc., Hampton, VA. **Monitors:** J. Gifford, Enogex, Inc., Oklahoma City, OK; B. Geyer, IHA, Inc., NASA, Kennedy Space Center, FL.

The need for industrial hygiene practitioners in developing countries is immense, and the global industrial hygiene community is now at a crossroads: either seize the opportunity and grow, or maintain the status quo and wither away through attrition and competition. For growth, we must stimulate more occupational hygiene education/training efforts, especially in developing countries, in addition to developing and maintaining intermediate-level and professional-level certification programs. This session will discuss the needs, opportunities and models for the implementation of training and certification programs that can be recognized by all IOHA occupational hygiene associations and certifying bodies. The goal is to facilitate growth of occupational hygiene practice around the world, especially in developing countries that have no professional bodies or degreed occupational hygiene programs, while ensuring quality and consistency in knowledge and skills among these practitioners. Perspectives from several large corporations that have implemented programs internally will be shared.

- **20-10-10: Turning a Vision into Reality.** J. Henshaw, Henshaw and Associates, Inc., Sanibel, FL.
- **Global Activities to Promote the Development of Accredited Training in Occupational Hygiene.** R. Alesbury, BP, Sunbury on Thames, United Kingdom.
- **The Role of Certification in Meeting Global Occupational Hygiene Challenges.** S. Merkle, NIEHS, RTP, NC.
- **AIHA® Pilot Training Program for Global Occupational Hygiene Technician Development.** M. Katchen, The Phylmar Group, Inc., Los Angeles, CA.
- **Treating Workers with Dignity and Respect: Levi Strauss & Co.'s Concentrated Efforts to Develop EHS Capacity.** S. Huckuntod, Levi Strauss & Co., San Francisco, CA.
- **Ensuring Quality Occupational Hygiene Performance.** H. Harapan, 3M, St. Paul, MN.

RT 205**Using H1N1 Influenza to Understand Infectious Disease Epidemiology and Control**10:30 a.m.–12:30 p.m. » [Convention Center, 605](#)

Arranger and Moderator: J. Couch, NIOSH, Cincinnati, OH. **Monitors:** G. Dotson, J. Ramsey, NIOSH, Cincinnati, OH.

Emerging infectious diseases, such as the H1N1 influenza virus, require a multi-faceted approach in order to identify, evaluate, and control their spread. The H1N1 virus is a prime example of the importance of controlling the spread of an infectious disease in the workplace in order to ensure continuity of operations in any organization, including government agencies, military organizations, health-care facilities and small businesses. Using the H1N1 virus as an example, this roundtable will highlight proven occupational safety and health practices that can be implemented in the workplace to minimize disease transmission. Experts participating in the roundtable will discuss the background of H1N1, emerging infectious disease epidemiology (including differences from traditional epidemiology), proper engineering and personal

protective equipment control selection, surveillance methods after an outbreak, and application of lessons learned after the outbreak. While using H1N1 as an example, the tools provided can be applied to other infectious disease outbreaks.

- **H1N1 (A) 2009 as an Example of Emerging Infectious Disease Epidemiology.** M. Waters, NIOSH, Cincinnati, OH.
- **Emerging Infections of Interest in the Workplace.** C. Rennix, Navy and Marine Corps Public Health Center, Williamsburg, VA.
- **Expedient Airborne Isolation for Health-Care Facilities During Emergency Epidemic Response.** K. Mead, NIOSH, Cincinnati, OH.
- **Respirator Use Surveillance in Health-Care.** M. D'Alessandro, NIOSH, Pittsburgh, PA.

RT 206

Surmounting the Diversities of People and Formats of Effective Training

10:30 a.m.–12:30 p.m. » [Convention Center, 205](#)

Arranger: J. Jarrell, University of Cincinnati, Cincinnati, OH. **Moderator:** O. Zahn, Lancaster, CA. **Monitors:** B. Schlegel, Chatham, NJ; R. Filipowski, Silver Spring, MD.

This roundtable continues the tradition of roundtables sponsored by the Communications and Training Methods Committee on effective training techniques using case studies and professional practice updates. This year's topics differ from those in the past, so conference participants need not worry about repeated presentations. IHs are often called upon to assess the need for and the success of training for the health and safety of their companies' employees. They may be called upon to develop, present, or contract with SH&E trainers to present effective training. Whatever the case, a grasp of what constitutes effective training in diverse settings is essential. This roundtable will feature solutions/lessons learned for the following situations: training people from diverse generations and cultures; the trials and tribulations of developing and presenting an effective webinar; and the use of "mistakes" to teach.

- **Microinequities and Cultural Differences: Unforeseen Barriers to Learning?** J. Dimos, Chicago, IL.
- **Training across the Generations.** C. Lewis, Creative Safety Solutions, Santa Fe, TX.
- **Training from Hell!** J. Klane, Klane's Education Information Training Hub, LLC, Fairfield, ME.
- **The Trials and Tribulations of Developing an Effective Webinar Course.** J. Jarrell, University of Cincinnati, Cincinnati, OH.

RT 207

Recent Developments in Vapor Intrusion

10:30 a.m.–12:30 p.m. » [Convention Center, 503](#)

Arranger and Moderator: E. Erikson, Guida, Slavich, & Flores, P.C., Dallas, TX. **Monitors:** E. Medina, Alliance Consulting International, San Diego, CA; A. Fortune, Columbia Analytical, Littleton, MA.

This session will provide information on technical, insurance, and legal developments in the area of vapor intrusion beyond the investigation phase.

- **Overview of Vapor Intrusion.** P. Granholm, Apex Companies, LLC, Rockville, MD.
- **Current Legal Issues Associated with Vapor Intrusion.** L. Schnapf, Schulte, Roth, & Zabel, New York, NY.
- **Environmental Insurance for Vapor Intrusion Sites.** T. LaBandt, IRG Environmental, Littleton, CO.
- **Sustainable Vapor Intrusion Mitigation Using Aerated Floor Systems.** D. Folkes, EnviroGroup Limited, Centennial, CO.

PO 104

Current Research Topics in Microbial Issues

10:30 a.m.–12:30 p.m. » [Convention Center, 505](#)

Arrangers: J. Springston, Sandler Occupational Medicine Associates, Glen Head, NY; R. Strode, Chemistry & Industrial Hygiene, Inc., Wheatridge, CO. **Moderator:** R. Miller, Argus Environmental Consultants, San Antonio, TX. **Monitors:** B. Hutzler, Tempe, AZ; E. Cunningham, Pregis Corporation, Lake Forest, IL.

10:30 a.m.

Are You Using Presence/Absence Swabs for Quantitative Microbiological Analysis? A Comparative Study of Surface Sampling Devices. (19) W. Tang, QLAB, Cherry Hill, NJ.

10:50 a.m.

Criteria for Differentiating Bacterial Contamination on Surfaces: A Quantitative Approach. (20) M. Reeslev, Mycometer, Tampa, FL.

11:10 a.m.

Mold Spores from Outdoor Air of Valley Fever Region of California. (21) T. Dubey, MACS Lab, Inc., Hayward, CA.

11:30 a.m.

Investigation of the Influence of Growth Substrate and Age of Culture on Mycotoxin Distribution on Fungal Structures and Fragments. (22) D. Errede, P. Raynor, L. Peterson, University of Minnesota.

11:50 a.m.

Testing the Antimicrobial Properties of Copper in Army Barracks HVAC Systems. (23) C. Feigley, J. Khan, D. Salzberg, H. Hamoodi, University of South Carolina, Columbia, SC; M. Schmidt, H. Attaway, S. Teriziava, A. Marshall, University of South Carolina, Charleston, SC.

12:10 p.m.

Indoor Air Quality Associated with the Presence of Christmas Tree inside a Building. (24) T. Dubey, MACS Lab Inc., Hayward, CA.

WITHDRAWN

(25) C. Viegas, E. Carolino, ESTeSL, Lisbon, Portugal; L. Rosado, INSA, Lisbon, Portugal; C. Silva Santos, ENSP, Lisbon, Portugal.

RT 208**GHS Implementation: Where Are We Today?**

10:30 a.m.–1:00 p.m. » Convention Center, 403

Arranger: D. Deeds, Industrial Health & Safety Consultants, Inc., Woodbridge, CT. **Moderator:** R. Costello, W.L. Gore & Associates, Inc., Elkton, MD. **Monitors:** J. Brown, Eastman Chemical, Kingsport, TN; C. Gioiello, Industrial Health & Safety Consultants, Inc., Woodbridge, CT.

2010 marks an important year for implementation of the GHS. The U.S. will move toward a final rule to revise the hazard communication standard to conform to the GHS. The EU classification, labeling and packaging regulation will be phased in for substances. Asian countries such as Singapore, Korea, and Japan have important transitional deadlines this year. In a year of great change in the hazard communication arena, it is important to know where we are and where we are headed. This roundtable will explore the status of GHS implementation internationally but with an emphasis on North America. Our OSHA speaker will discuss the proposed U.S. standard, comments received and the status of the final rule. Our Canadian speaker will update us on where Canada is in the process. The final speaker will describe the status of implementation in the rest of the world.

- **Introduction and Overview of the GHS.** D. Deeds, Industrial Health & Safety Consultants, Inc., Woodbridge, CT.
- **The U.S. Proposal: Revising the Hazard Communication Standard to Conform to the GHS.** M. Ruskin, OSHA, Washington, DC.
- **The Status of GHS Implementation in Canada.** K. Headrick, Health Canada, Ottawa, ON, Canada.
- **The Status of International Implementation of the GHS.** J. Silk, United Nations Institute of Training and Research, Valencia, PA.

Workshop**SOLD OUT****Unsolved IH Mysteries Workshop**

Noon–1:30 p.m. » Convention Center, 407

Expanded and back by popular demand! This interactive program prompts you to put on your thinking cap. Actual case studies involving IH field work are presented. You have all the data. You know all the players. You understand the circumstances, but you do not know the outcome. Working in small groups, colleagues discuss the cases and potential remedies and each group reports its findings. At the end, the facilitator explains what actually occurred.

A boxed lunch is included.

Facilitator: John Siebert, Office of the Secretary of Defense, Washington, DC.

The workshop is offered Monday through Wednesday and features a different facilitator each day.

Luncheon Discussions**Students and Early Career Professionals**

12:30 p.m.–1:30 p.m. » Convention Center, Expo Hall A

Luncheon discussions are small, interactive group discussions facilitated by members of AIHA's Students and Early Career Professionals Volunteer Group. Topics address issues of interest to young industrial hygienists or to hygienists new to the profession. Purchase lunch and select a discussion—seating is first-come, first-served. *Topics subject to change.*

1. CIH Certification

Facilitator: N. Greeson, Duke University, Hillsborough, NC.

2. What You Always Wanted to Know but Were Afraid to Ask about AIHA® Committees

Facilitators: L. Vivekanand, CIH, Pleasant Valley, NY and R. Anthony, University of Iowa, Iowa City, IA.

3. What Attracted You to IH? Brainstorming to Identify Ways to Attract Young Scientists to the Profession

Facilitator: Tricia Carmody, 3M, St. Paul, MN.

4. How to Explain What It Is You Do—To Family, Friends, and Total Strangers

Facilitator: C. Boraiko, Middle Tennessee State University, Murfreesboro, TN.

5. How to Break the Ice with Workers to Accomplish IH Tasks

Facilitator: M. Sheppard, 3M, London, Ontario, Canada.

6. What Is the “Art” of Industrial Hygiene—How Do You Learn Professional Judgment?

Facilitator: C. Hovde, Caterpillar, Crystal, MN.

7. What Is It Like to Manage H&S at Multiple Locations?

Facilitator: M. Terrell, E & J Gallo Winery, Modesto, CA.

Jeffrey S. Lee Lecture**The Future of Work and the Aging Work Force**

12:30 p.m.–1:30 p.m. » Convention Center, 106



Lecturer: John Howard, MD, MPH, JD, LLM, Director, NIOSH, Washington, DC

John Howard, Director of NIOSH, will discuss how work in the 21st Century may not resemble work as we currently know it. There will be changes in workplace hazards due to new technologies, changes in employment patterns due to the rise of contingent work, and changes in the face of workers given the demographics of the aging work force. An aging work force presents those in safety and health with many challenges. How to surmount these challenges is the topic of this presentation.

Multimedia . . .

downloads and DVDs of most sessions available. Place your order before leaving Denver.

Exhibitor Product Demos and Presentations 1:00 p.m.–2:00 p.m. | Expo Theater, Hall F

1:00 p.m.

EVM-7: Particulate and Air Quality Monitoring Designed with Efficiency in Mind, Quest Technologies, a 3M Company

NEW!

Quest Technologies, a 3M Company, has made it easier to monitor a variety of air quality hazards with the new EVM-7. The EVM-7 lets you simultaneously measure particulates, volatile organic compounds, toxic gases, carbon dioxide, relative humidity, temperature, dew point, and air velocity. Offering these measurements in one instrument lets you enjoy a lower cost of ownership and the freedom of not lugging around multiple instruments from site to site. By communicating with our current QSPH Software, you can analyze exposures to a variety of occupational and environmental hazards through customized reports.

1:30 p.m.

3M™ E-A-Rfit™ Validation System Demonstration, 3M Occupational Health and Environmental Division

The 3M™ E-A-Rfit™ Validation System is an objective, quantitative hearing protector fit-test system. Like respiratory fit-testing, which indicates that maximum protection can be obtained only if the ideal fit is achieved, the E-A-Rfit system assists in achieving optimal fit through hearing protector selection and employee training. In less than 10 seconds per ear, the system generates a personal attenuation rating (PAR) that indicates a worker's noise reduction levels for a given fitting and hearing protector, and enables the user to compare ratings across hearing protectors and fittings to determine best fit.

CR 304

From Compliance to Sustainability: Leveraging Information Systems to Address Today's Environmental Responsibilities

2:00 p.m.–3:00 p.m. » [Convention Center, 501](#)

Presenter: M. Dillon, IHS, Englewood, CO.

Moderator/Monitor: M. Johnson, IHS, Englewood, CO.

If your organization faces an ever-increasing burden of environmental compliance, greenhouse gas and emissions reporting while it simultaneously increases sustainability efforts and performance, this session is for you. Global and local requirements are on the rise; multiple processes need to be managed, tracked and improved; and you need the metrics to verify your activities. Learn how other companies are addressing the continuum of environmental pressures from compliance to sustainability through use of environmental management systems.

CR 305

Using Effective Safety Management Systems to Prevent Serious Injuries

2:00 p.m.–3:00 p.m. » [Convention Center, 105](#)

Presenter: P. Ferrante, JC Safety & Environmental, Inc., Pittsburgh, PA. **Moderator:** B. Cahrssen, Cahrssen Environmental Inc., San Francisco, CA.

There's no doubt that the implementation of occupational safety and health programs has substantially improved the overall safety of the workplace. But while the frequency of incidents has declined substantially, the incidence of serious injuries has risen steadily over the past 10 years. This session is designed to help attendees take a second look at the focus of traditional occupational safety and health programs and develop a plan of action for their organizations.

CR 306

Auditing Environmental Claims and Assertions

2:00 p.m.–3:00 p.m. » [Convention Center, 113](#)

Presenter: D. Hileman, Douglas Hileman Consulting LLC, Van Nuys, CA.

Companies have "gone green" and issue reports, communications, and content on websites and other channels that include performance indicators, claims, and assertions to enhance their stature or gain a competitive advantage. These claims are used by analysts, investors, and other stakeholders. This presentation will provide examples of environmental claims or assertions and discuss the policies, procedures, controls, and systems that support them. Basic auditing principles, including examples of how they apply, will also be covered.

CR 307

The HS&E Professional's Role in Property Due Diligence Assessments

2:00 p.m.–3:00 p.m. » [Convention Center, 201](#)

Presenter: R. Rowbottom, Baker Hughes Incorporated, Houston, TX. **Moderator:** M. Watka, ENVIRON International Corporation, Chicago, IL.

HS&E property due diligence entails significant risks and liabilities for companies. This presentation is intended to provide an overview of challenges faced by environmental H&S staff through examples of process pitfalls and opportunities. By reviewing scenarios, we will discuss applications of Phase 1 and Phase 2 environmental site assessments and the process of identifying environmental building/operating permits that need to be obtained. The objective is to provide a broad layman's understanding and approach to environmental property due diligence.

Emerging Issues Session 1

NIOSH-DREAM (Direct Reading Exposure Assessment Methods)

2:00 p.m.–4:00 p.m. » [Convention Center, 203](#)

Moderator: C. Coffey, NIOSH, Morgantown, WV.

In 2008, NIOSH hosted a workshop on the use of direct reading methods (DRMs) as tools for detecting and

measuring worker exposure to inhalation hazards. This roundtable provides an update on current NIOSH activities and identifies examples of ways in which DRMs are currently used in workplaces. The session also includes a progress report on NIOSH DRM research and allows registrants to interact with NIOSH scientists.

Following progress reports, the floor will be open to Q&A.

- **Gas and Vapor DRMs.** C. Coffey, NIOSH, Morgantown, WV.
- **Aerosol DRMs.** T. Pearce, NIOSH, Morgantown, WV.
- **Ergonomic DRMs.** B. Lowe, NIOSH, Cincinnati, OH.
- **Noise DRMs.** C. Kardous, NIOSH, Cincinnati, OH.
- **Radiation DRMs.** J. Anderson, NIOSH, Cincinnati, OH.
- **DRMs for Surface Sampling and Biomonitoring.** J. Snawder, NIOSH, Cincinnati, OH.

PO 105

Health-Care Industries, Part I: Engineering Controls, Disinfection Methods, and Other Current Issues Associated with Infection Control

2:00 p.m.–4:00 p.m. » Convention Center, 106

Arranger: M. Jones, Department of Veterans Affairs, Iowa City, IA. **Moderator:** S. Derman, Medishare Environmental Health & Safety Services, Santa Clara, CA. **Monitors:** J. McGlothlin, Purdue University, Lafayette, IN; M. Jones, Department of Veterans Affairs, Iowa City, IA.

2:00 p.m.

Performance Verification of a Novel Local Exhaust Ventilation Booth for Controlling Infectious Aerosols in the Health-Care Environment. (26) S. Yu, Y. Lai, T. Chan, The Chinese University of Hong Kong, Shatin, Hong Kong; G. Sze To, J. Kwan, C. Chao, Hong Kong University of Science & Technology, Kowloon, Hong Kong.

2:20 p.m.

Disinfection of Reusable Personal Protection Equipment—Materials and Method. (27) C. Ylitalo, N. McCullough, 3M Company, St. Paul, MN.

2:40 p.m.

The Risks and Benefits of Chemical Fumigation in the Health-Care Environment. (28) G. Byrns, T. Fuller, Illinois State University, Normal, IL.

3:00 p.m.

All About How to Prevent Health-Care Providers from Tuberculosis: Screening, Surveillance and Treatment. (29) M. Zaidi, Sheikh Khalifa Medical City, Abu Dhabi, United Arab Emirates.

3:20 p.m.

Quantitative and Qualitative Validation of Infection Controls during a Twenty-Six-Month Renovation of Eighteen Operating Rooms. (30) C. Ellwood, Associates in Occupational + Environmental Health, Black Hawk, CO; B. Steininger, Exempla Saint Joseph Hospital, Denver, CO.

3:40 p.m.

Changing the Status Quo: Using PDSA Model to Prevent Occupational Blood and Body Fluid Exposures in Specialized Health-Care Facilities in BC, Canada—Lessons Learned. (31) T. Tang, Provincial Health Services Authority, Vancouver, BC, Canada.

PO 107

Lead

2:00 p.m.–4:20 p.m. » Convention Center, 207

Arranger: K. White, Consultive Services, Virginia Beach, VA.

Moderator: W. Friedman, US HUD, Washington, DC

Monitors: E. Pinzer, D. Levitt, US HUD, Washington, DC

2:00 p.m.

Side-by-Side Comparison of Surface Sampling Methods for Metals: Microvacuum vs. Wipe. (39) J. Kominsky, Environmental Quality Management, Inc., Cincinnati, OH.

2:20 p.m.

Economic Justification for the Tennessee Lead Elimination Action Program. (40) C. Boraiko, Middle Tennessee State University, Murfreesboro, TN.

2:40 p.m.

Evaluation of Potential Exposures at a Printed Circuit Board Manufacturing Plant. (41) S. Durgam, NIOSH, Cincinnati, OH; C. Achutan, University of Nebraska, Omaha, NE.

3:00 p.m.

Occupational Lead Exposures: We Know the Usual Suspects; What About the Unusual Ones? (42) T. Morris, Morris Innovative IH&S Solutions, Cincinnati, OH.

3:20 p.m.

Lead Paint Exposure Assessment in High Bays of Johnson Space Center. (43) P. Stanch, A. Plaza, S. Keprta, NASA Johnson Space Center, Houston, TX.

3:40 p.m.

A Case Study: Lead Exposure and Explosive-Actuated Tools. (44) M. Russo, D. Sahai, Construction Safety Association of Ontario, Toronto, ON, Canada.

4:00 p.m.

Indoor Pyrotechnics: Assessing and Controlling Exposures to Acrobats and Technicians. (45) T. Chen, D. Cox, Forensic Analytical Consulting Services, Hayward, CA.

PO 108

Hazardous Occupational Exposures—Case Studies

2:00 p.m.–4:20 p.m. » Convention Center, 505

Arranger: M. Vadali, University of Minnesota, Brooklyn Park, MN. **Moderator:** C. Torres, ENVIRON International Corporation, Monument, CO. **Monitors:** M. Melkonian, Medgate, Inc., Toronto, ON, Canada; C. Dingman, AK.

Medgate, Inc., Toronto, ON, Canada; C. Dingman, AK.

2:00 p.m.

Improved Estimates of Worker Exposure to Benzene during Parts-Washing Based on a New Approach Analyzing Solvent and Air Data for Other Aromatic Constituents. (46) P. Sheehan, K. Bogen, G. Brorby, E. Goswami, Exponent, Oakland, CA.

2:20 p.m.

Task-Based Analysis of Benzene Air Concentrations Associated with Refinery Operations. (47) A. Burns, J. Panko, M. Kreider, K. Unice, ChemRisk, LLC, Pittsburgh, PA; S. Gaffney, D. Paustenbach, ChemRisk, LLC, San Francisco, CA; L. Booher, ExxonMobil Corporation, Houston, TX; R. Gelatt, ExxonMobil Biomedical Sciences, Inc., Clinton, NJ.

» Technical Program: Monday

2:40 p.m.

Asbestos Crane Friction Debris Study. (48) L. Burrelli, C. Thomas, J. Spencer, Environmental Profiles, Inc., Columbia, MD.

3:00 p.m.

Updated Analysis of Taconite Fibers in the Iron Range, MN. (49) J. Hwang, G. Ramachandran, P. Raynor, University of Minnesota, Minneapolis, MN.

3:20 p.m.

Exposure Time/Activity Variability: A Case Study for the Application and Finishing of Drywall Joint Compound. (50) D. Podraza, C. Simmons, F. Boelter, ENVIRON International Corporation, Chicago, IL.

3:40 p.m.

Welding Fume Assessment during a Turnaround of Coke Drums. (52) R. Rottersman, F. Boelter, ENVIRON International Corp., Chicago, IL.

4:00 p.m.

Comparison of Welders' Exposure to Metals from Different Welding Processes. (53) R. Rogers, L. Kneten, U.S. Army Center for Health Promotion and Preventive Medicine, Bel Air, MD.

WITHDRAWN

(51) A. Ita, International Safety Systems, Inc., Santiago, Nuevo Leon, Mexico; M. Mehta, International Safety Systems, Inc., Washingtonville, NY.

RT 209

I Graduated... Now What?

2:00 p.m.–4:30 p.m. » [Convention Center, 503](#)

Arranger and Moderator: C. Hovde, Caterpillar Inc., Roseville, MN. **Monitors:** L. Cena, K. Hauck, The University of Iowa, Iowa City, IA.

Many industrial hygienists graduate from school, enter the workplace, and find themselves in the role of “the expert.” This pressure can be isolating and stressful, and may lead some to consider abandoning the profession. This roundtable will openly discuss these professional challenges and provide practical solutions to help early-career IHs cope with these stresses. Speakers will give examples from their own experiences and provide practical tips on how to work others when you are the solo IH, how to build a network within the IH community to obtain professional support, and how to build a non-EHS network to enhance effective communication skills. The session will conclude with a panel discussion led by two recent graduates now in the field. Attend to gain ideas on how to make your career more rewarding and share your success stories with students and early career professionals in attendance.

- **Hiring Process and Interviewing from the Employer's Perspective.** T. Blank, L. Robert Kimball & Associates, Coraopolis, PA.
- **How to Survive as the Only IH/EHS.** C. Jerrick, Praxair Inc., Inver Grove Heights, MN.
- **Help! Is Anybody Out There?** C. Ficklen, III, SQA2, Inc., Hampton, VA.
- **Networking with Non-EHS People: It's OK, They Won't Bite You.** J. Gifford, Enogex, LLC, Oklahoma City, OK.

- **Effective Communications: Put Down Your Calculator and Talk to Me.** T. Mitchell, GoGoSystems, LLC, Nokesville, VA.
- **"Will I Ever Really Need to Use a Pitot Tube?" and Other Pressing Questions.** D. Campos, Raytheon Company, Tucson, AZ.; K. Krause, Lawrence Livermore National Laboratory, Livermore, CA.

RT 210

Environmental Justice and Occupational Health Disparities: Any Leading Pathways?

2:00 p.m.–4:30 p.m. » [Convention Center, 401](#)

Arranger and Moderator: M. Vela Acosta, The Kresge Foundation, Troy, MI. **Monitors:** M. Michelle Kutz, Golder Associates Ltd, Red Deer, AB, Canada; S. Schneider, Laborers' Health and Safety Fund of North America, Washington, DC

During the last decades, widely recognized environmental injustices have increased awareness that may influence the focus on underserved communities in environmental health. Health disparities outcomes of environmental injustices are defined as differences in injury and disease incidence, morbidity and mortality that exist among specific populations. The National Institute for Occupational Safety and Health recognizes that the contemporary U.S. work force is diverse and reflects changing demographics. The variety of work exposures generates occupational health disparities across racial and ethnic populations, arising from overrepresentation of racial and ethnic minority workers in the most hazardous industries and from the absence of occupational health and safety protections to certain worker populations due to social, cultural, and economic barriers including language, literacy, and marginal economic status. An environment with equity and equality, for a work force that spends most of its waking hours at work, requires a cross-sector collaboration to effectively reduce hazards (chemical and physical) and minimize stressors (discrimination, work organization). Selected innovative approaches and ongoing challenges will be discussed.

- **Safe Green Buildings: Construction Work Force Challenges.** J. Platner, The Center for Construction Research and Training, Silver Spring, MD.
- **Do Healthy Foods Include Farmworkers' Well-Being?** E. Kissam, Aguirre International, North Bethesda, MD.
- **Do Independent Contractors Who Transport Our Goods Have a Voice?** P. Castellanos, M. Janis, Los Angeles Alliance for a New Economy, Los Angeles, CA.
- **Native Culture Embracing Journals of Safety.** C. Becnel, Community Alliance Building, Denver, CO; A. Keith, Red River College, Winnipeg, NB, Canada.

PO 106

Risk Assessment (Management) Case Studies

2:00 p.m.–4:40 p.m. » [Convention Center, 112](#)

Arranger: A. Rossner, Clarkson University, Potsdam, NY. **Moderator:** M. Krotenberg, Rimkus Consulting Group, Inc., Phoenix, AZ. **Monitor:** J. McInnis, AGAT Laboratories, Calgary, AB, Canada.

2:00 p.m.

Science and Policy in Risk Assessment: IARC and NTP Approaches to Determining Whether Formaldehyde is Known to Be a Human Carcinogen. (246) F. Mirer, Hunter College, New York, NY.

2:20 p.m.

Mercury Contamination in Gas Operations. (32) F. Estevez, Saudi Aramco, Ras Tanura, Saudi Arabia.

2:40 p.m.

Use of a Cause and Effect Matrix as a Prioritization Tool for Engineering Controls. (33) T. Oberlin, 3M, St Paul, MN.

3:00 p.m.

A Method for Assessing Asphyxiation Hazard from Cryogenic Material. (34) M. Brinton, Weill Cornell Medical College, New York, NY.

3:20 p.m.

Improving Home Indoor Air Quality Using a Material Prediction Approach. (35) M. Spartz, R. Fike, A. Delia, Prism Analytical Technologies, Inc., Mt. Pleasant, MI.

3:40 p.m.

Control Banding Tool for Managing Infectious Disease Response. (36) D. Nelson, University of Colorado at Boulder, Boulder, CO.

4:00 p.m.

A Cost-Effective Approach for Monitoring Indoor Air Quality in Schools. (37) M. Spence, M. Spartz, R. Fike, Prism Analytical Technologies, Inc., Mt. Pleasant, MI.

4:20 p.m.

Fungal Post-Remediation Verification: A Twenty-Five-Year-Old Approach. (38) D. Walsh, Walsh Certified Consultants, Inc., Las Vegas, NV.

Science Symposium: Advances in Science for Understanding, Managing and Controlling Noise Exposure

2:00 p.m.–5:00 p.m. » Convention Center, 403

Arranger and Moderator: P. Logan, 3M, St. Paul, MN.

Monitors: C. Johnson, Pace Analytical, Inc., St. Paul, MN; J. Kunz, Aerotek Scientific LLC, St. Paul, MN.

Occupational hearing loss is a major concern among industrialized countries. Hearing loss is permanent and yet it is very preventable. Although understanding noise exposure and implementation of effective control strategies was thought to be seemingly straightforward, a dramatic reduction in recordable hearing loss has not been observed among workers. In response, many countries have recently promulgated new requirements related to managing noise exposure including lower limits for inclusion into hearing conservation programs, hearing protection and training. The underlying science of properly assessing, managing and controlling noise and hearing loss risks is highly complex. This symposium highlights recent research and knowledge related to assessing, managing, and preventing noise induced hearing loss.

- **The Big Picture of Noise and Hearing Loss!** E. Berger, 3M, Indianapolis, IN.

- **Critical Aspects of Collecting Noise Data—The Impact of Criteria, Exchange Rates, Thresholds, Instruments.** L.Hager, E-A-Rfit/E-A-RCustom
- **Do my Tasks add up? Task Based Noise Versus Full Shift Assessment Approaches.** A. Virji, NIOSH, Morgantown, WV.
- **Prevention vs. Compliance. Looking for Evidence that your Hearing Conservation Program is Effective.** T. Madison, 3M, Indianapolis, IN.
- **Reducing Risk! Fundamental Approaches for Controlling Noise Exposures.** D. Driscoll, Associates in Acoustics, Inc., Evergreen, CO.

PO 109

A Potpourri of Ergonomic Case Studies and Scientific Research

2:00 p.m.–5:00 p.m. » Convention Center, 205

Arranger: C. Brigham, 1 Source Safety and Health, Inc., Exton, PA. **Moderator:** P. Seeley, Wisconsin Electric-Wisconsin Gas, Milwaukee, WI. **Monitors:** R. Boucher, Schering-Plough, Summit, NJ; B. Cawley, Air Products and Chemicals, Allentown, PA.

2:00 p.m.

Anthropometric Study of Electric Utility Workers. (54) R. Marklin, K. Saginus, Marquette University, Milwaukee, WI; P. Seeley, Ergonomics Solutions LLC, Wales, WI.

2:20 p.m.

Neck Fatigue, Comfort, and Performance Effects Due to the Extended Wear of Law Enforcement Representative Head-Borne Personal Protective Equipment. (55) D. Barker, Edgewood Chemical Biological Center, APG, MD; C. Albery, Infoscitex Corp., Wright-Patterson AFB, OH.

2:40 p.m.

Ergonomic Evaluation of Aerial Gunner Duties While Performing Training Missions. (56) M. Graessle, M. Horenziak, J. Stubbs, M. Ferreri, J. Slagley, USAF, Wright-Patterson AFB, OH.

3:00 p.m.

Navy Process Management Approach to Control Hand-Arm Vibration. (57) M. Geiger, U.S. Navy, Arlington, VA; G. Burdge, BMT Designers and Planners, Inc., Arlington, VA.

3:20 p.m.

Physical Demands Analysis. (58) S. Sehdev, Medtronic of Canada Ltd., Mississauga, ON, Canada.

3:40 p.m.

Reducing Work-Related Musculoskeletal Disorders at a Paint Manufacturing Company in India. (59) G. Desai, International Safety Systems, Inc., Vadodara, India; T. Mehta, International Safety Systems, Inc., Washingtonville, NY.

4:00 p.m.

A Student Case Study with the AIHA® Ergonomic Tool Kit. (60) T. Blackwell, R. Thomas, Y. Moyo, Auburn University, Auburn, AL.

4:20 p.m.

Ergonomics Intervention Follow-up Using a Symptom Survey. (61) M. O'Reilly, ARLS Consultants, Inc., Manlius, NY.

4:40 p.m.

Developing Effective Ergonomics through Employee Engagement. (62) B. Bethel, Sikorsky Aircraft Corp., Stratford, CT.

» Technical Program: Monday

RT 211

Assessment and Control of Chinese Drywall Emissions

2:00 p.m.–5:00 p.m. » Convention Center, 405

Arranger: E. Light, Building Dynamics, LLC, Ashton, MD.

Moderator: S. Fess, Xerox, Webster, NY. **Monitors:** S. Rosen, Chartis Insurance, New York, NY; A. Pouliot, U.S. Army Corps of Engineers, Washington, DC.

Some drywall imported into the U.S. from China between 2003 and 2007 emits, under certain conditions, a corrosive mixture of pollutants into homes after installation. An overview of issues will be presented by the State of Florida and an affected homeowner. The results of research to define the basic chemistry, assess impacts on occupants and materials, and identify effective control strategies will be presented by representatives of federal agencies, the manufacturer and others. The development of assessment and control protocols for field practitioners will also be discussed.

- **Overview.** D. Krause, Florida Department of Health, Tallahassee, FL.
- **Federal Research on Chemistry and Corrosion.** R. Bailey, Bailey Engineering Corp., Jupiter, FL.
- **Preliminary Risk Assessment.** B. Mannis, Building Health Science, Inc., Rockville, MD.
- **Corrosive Drywall Chemistry and Material Identification.** J. Kominsky, EQM, Inc., Cincinnati, OH.
- **Manufacturer's Research on Building Science and Control Strategies.** R. Morse, MZA Consulting, Troy, NY.
- **Practical Risk Assessment Methodologies.** M. Barclay, Barclay Assessment Services, Mandeville, LA.

RT 212

Green Construction Practices: Integrating Occupational Safety and Health

2:00 p.m.–5:30 p.m. » Convention Center, 605

Arranger and Moderator: M. Gillen, NIOSH, Washington, DC.

Monitor: C. Brehm, Baker Corp., Moon Township, PA; N. Sanders, Air Quality Sciences - Building Consulting, Marietta, GA.

Green and sustainable construction practices and projects are increasing across the industry, from residential renovations to large commercial projects to industrial retrofits. The U.S. Green Building Council (USGBC), which promotes the LEED (Leadership in Energy and Environmental Design) certification system, has more than 20,000 member organizations, including AIHA®. Buildings represent about 40 percent of U.S. energy use, and reducing building-related energy and environmental impacts is recognized as a clear national need. Less clear is the relationship between emerging green and sustainable practices and occupational safety and health. Do green practices offer benefits for safety and health? What steps should we take to better integrate safety and health into these practices? Roundtable speakers will address various facets of this issue, including a report on NIOSH's "Making Green Jobs Safe" workshop, an evaluation of injury experience on green jobs, and perspectives on a way forward. The roundtable will also include discussion of spray polyurethane foam (SPF) as a green construction case study where steps are being taken to integrate safety and health considerations into practice.

- **Making Green Jobs Safe: Integrating Worker Health and Safety into Sustainability.** D. Heidel, NIOSH, Cincinnati, OH.
- **If a Construction Worker Dies during Green Building Construction, Does Anyone Hear It?** M. Behm, East Carolina University, Greenville, NC.
- **Spray Polyurethane Foam (SPF) Insulation Case Study: Green Benefits, Rationale for Concern and Partnership Activities.** M. Cushmac, EPA, OPPT, Washington, DC
- **Spray Polyurethane Foam (SPF) Insulation Case Study: Potential for Construction Worker Exposures and Concerns.** D. Almaguer, NIOSH, Cincinnati, OH.
- **Spray Polyurethane Foam (SPF) Insulation Case Study: Partnerships, Exposure Studies and Product Stewardship Activities.** B. Karlovich, Bayer Material Science LLC, Pittsburgh, PA.
- **Green Construction Practices: Safety and Health Professionals Need to Get Involved.** W. Jones, Laborers' Health and Safety Fund of North America, Washington, DC.

Please . . .

turn off cell phones in all sessions.

Today in the Expo —

Be a Winner! — Don't forget to enter Passport to Prizes and the Daily Drawings.

New! Check out the Expo Theater. Get a first-hand look at how the newest equipment is used.

Don't forget your complimentary drink ticket for tonight's Opening Cocktail Reception.

PO 110

Respiratory Protection

2:00 p.m.–6:00 p.m. » Convention Center, 109

Arranger: W. Bishop, Detroit, MI. **Moderator:** J. Parker, NIOSH, Pittsburgh, PA. **Monitors:** W. Bishop, Detroit, MI; W. Newcomb, NIOSH, South Park, PA.

2:00 p.m.

Best Practices from the U.S. Military — Mask Integrity Testing. (63) E. Hanson, Air Techniques International, Owings Mills, MD.

2:20 p.m.

Use of Workplace Protection Factors to Model Respirator Wearer Exposures. (64) L. Janssen, Larry Janssen Consulting, LLC, Stillwater, MN.

2:40 p.m.

Performance of Air-Purifying Respirators with and without End-of-Service-Life Indicators (ESLI) against Diacetyl. (65) J. Parker, J. Snyder, NIOSH, Pittsburgh, PA.

3:00 p.m.

Determination of Exhaled Breath Aerosols. (66) C. Yen, S. Huang, J. Cho, C. Chen, National Taiwan University, Taipei, Taiwan; C. Chang, L. Lee, Institute of Occupational Safety and Health, CLA, Taipei, Taiwan.

3:20 p.m.

N95 Respirator and Surgical Mask Efficacy for Cough Aerosols. (67) J. Szalajda, W. King, NIOSH, Pittsburgh, PA; J. Reynolds, W. Lindsley, NIOSH, Morgantown, WV.

3:40 p.m.

Factors Affecting the Location and Shape of Face Seal Leaks on Half-Mask Respirators. (68) R. Oestenstad, University of Alabama at Birmingham, Birmingham, AL.

4:00 p.m.

Effect of Fit-Testing and Particle Size on the Protection Offered by N95 Filtering Facepiece Respirators Against Fine Particles in a Laboratory Setting. (69) T. Reponen, S. Grinshpun, R. McKay, University of Cincinnati, Cincinnati, OH; S. Lee, Feng Chia University, Taichung, Taiwan; E. Johnson, 3M, St. Paul, MN.

4:20 p.m.

Laboratory Study to Assess Causative Factors Affecting Temporal Changes in Filtering Facepiece Respirator Fit, Part I: Study Protocol. (70) Z. Zhuang, S. Lynch, R. Roberge, NIOSH, Pittsburgh, PA; S. Benson, EG&G Technical Services, Inc., Pittsburgh, PA.

4:40 p.m.

Evaluation of Desorption Requirements for Powered Air-Purifying Respirator Concept Standard. (71) M. Parham, Y. Ding, E. Potter, A. Staubs, Tyco / Scott Health & Safety, Monroe, NC.

5:00 p.m.

Evaluation of Reuse on Performance of Filters Against Long-Duration Intermediate Exposures of Wildland Fire Inhalation Hazards. (72) A. Staubs, M. Parham, Y. Ding, E. Potter, Scott Health & Safety, Monroe, NC.

5:20 p.m.

Characterizing Arson Investigators' Exposures to After-Fire Environments. (73) D. Bolstad-Johnson, Phoenix Fire Department, Phoenix, AZ.



Soap Box (Open Mic) Talks

2:30 p.m.–4:00 p.m.

Convention Center, Expo Theater, Hall F

Get on the IH Soapbox!

Have an idea that's novel, untested, or "far-out," (in the eyes of some)? Want to communicate a perspective that could be characterized as controversial, or even unpopular? Or, simply have a great technique or work approach you'd like to share. If so, AIHce's newest format, Soap Box Talks, may be for you!

Held in the new Expo Theater, presenters will have *5 minutes* for their presentation and *5 minutes* for Q&A or discussion with the audience. The focus of the idea presented should be related to the IH profession. Time will be strictly enforced by the moderator.

Soapbox talks were solicited in advance of AIHce, however, there are open spots during the session for on-site, spontaneous presentations.

Don't miss this first-time opportunity to share your views, or listen to the perspectives of your colleagues in this unique, fast paced and first-time-ever format!

Arrangers and Facilitators: D. Doganiero, US Army Public Health Command, Aberdeen Proving Ground, MD; S. Viet, Westat, Steamboat Springs, CO.

The findings and conclusions in the National Institute for Occupational Safety and Health abstract presentations have not been formally disseminated by the National Institute for Occupational Safety and Health and should not be construed to represent any agency determination or policy.

E-abstract Book

Review abstracts online...anywhere...any time. Visit www.aiha.org/aihce10/education.

» At-a-Glance: Tuesday

Tuesday, May 25

6:30 a.m.–8:00 a.m.

AIHF Fun Run/Walk

Cherry Creek. Meet in convention center lobby at 6:15 a.m.

7:00 a.m.–5:30 p.m.

Registration and Hotel Reservations

Convention Center, Lobby

7:30 a.m.–4:00 p.m.

Volunteer Collaboration Café

Convention Center, Grand Concourse

7:30 a.m.–5:00 p.m.

Press Room

Convention Center, 303

7:30 a.m.–5:30 p.m.

Coat and Luggage Check

Convention Center, 101

Speaker Ready Room

Convention Center, 302



8:00 a.m.–9:00 a.m.

General Session:

The Labor Movement: Building Health and Safety Protections on the Job

Cecil Edward Roberts, Jr., President, United Mine Workers of America (UMWA), Washington, DC.

Convention Center, Wells Fargo Theatre

8:00 a.m.–4:00 p.m.

AIHA® CareerAdvantage Development Fair 2010

Convention Center, Hall F

8:00 a.m.–5:30 p.m.

Denver City and Restaurant Information Booth

Convention Center, Lobby

8:30 a.m.–11:30 a.m.

Spouse and Guest Hospitality Center

Hyatt Regency, Agate A

9:00 a.m.–1:00 p.m.

TT-04 National Center for Atmospheric Research

Convention Center, departs South Entrance Board bus by 8:45 a.m.

TT-05 USGS Rocky Mountain Mapping Center

Convention Center, departs South Entrance Board bus by 8:45 a.m.

9:00 a.m.–1:30 p.m.

TT-06 Art Castings of Colorado

Convention Center, departs South Entrance Board bus by 8:45 a.m.

9:00 a.m.–3:00 p.m.

Visit the Expo!

Convention Center, Halls A and F

Daily Prizes, Special Displays, Cyber/Message Centers, Restaurants, Lounges, Expo Theater

No sessions 9:00 a.m.–10:30 a.m. and 12:30 p.m.–2:00 p.m.

Poster Sessions

Convention Center, Hall F

Poster Session 403

Authors Present 10:00 a.m.–Noon

Poster Session 404

Authors Present 1:00 p.m.–3:00 p.m.

9:00 a.m.–3:00 p.m.

Annual Blood Drive

Convention Center, Expo, Hall F

9:00 a.m.–5:30 p.m.

Multimedia Downloads and DVDs

Convention Center, Lobby

9:30 a.m.–2:30 p.m.

Exhibitor Product Demos and Presentations

Expo Theater, Hall F

See presentation descriptions on pages 54 and 61.

9:30 a.m.

Explosion Proof/Dust Ignition Proof Vacuum Cleaner System, Tiger-Vac Inc. USA

10:00 a.m.

Reducing Strains/Sprains and Overuse Injuries in the Workplace with ART (Active Release Techniques), ART Corporate Solutions, Inc.

10:30 a.m.

Writing GHS-Compliant Safety Data Sheets Using On-Demand MSDS Authoring Software, SiteHawk

Noon

PhoCheck Tiger, a Revolutionary PID That Sets New Performance Standards While Minimizing Costs, ION Science Americas LLC

12:30 p.m.

Detection of TDI/MDI in Soil—To What Extent to Excavate, Morphix Technologies

1:00 p.m.

Personal Monitoring Using Universal Passive Sampling Devices, Entech Instruments, Inc.

1:30 p.m.

Rapid, Versatile Bacteria and Fungi Testing On Site with Mycometer—There Is No Substitute for Good Science, Mycometer, Inc.

2:00 p.m.

CANWrite™ MSDS Authoring Software, CCOHS



10:00 a.m.–2:00 p.m.
Social Tours Desk
Convention Center, Lobby

10:30 a.m.–11:30 a.m.
10th Annual Upton Sinclair Memorial Lecture for Outstanding EHS Investigative Reporting
Convention Center, 106

CR 308 The Panama Canal Expansion—Safety and Health Issues and Challenges
Convention Center, 203

CR 309 Pollution Prevention (P²) in USAF Weapon Systems Acquisition
Convention Center, 109

CR 310 Combustible Dust: Quick and Dirty
Convention Center, 112

CR 311 Anything but Lecture! How to Use Other Safety Training Approaches and Methods
Convention Center, 113

10:30 a.m.–12:30 p.m.
PO 111 After the Hurricane: Chinese Drywall and Indoor Environmental Quality Issues
Convention Center, 207

PO 112 Emerging Exposure Modeling Strategies
Convention Center, 205

PO 113 Real-Time Detection
Convention Center, 405

PO 114 Stewardship/Sustainability/Green
Convention Center, 201

PO 115 Noise Exposure and Scientific Assessment Techniques
Convention Center, 403

RT 213 Ask the Expert: An Update of the NIOSH Nanotechnology Program
Convention Center, 605

RT 214 Beryllium Oxide and the Beryllium Proficiency Analytical Testing Program
Convention Center, 105

PO 116 Health-Care Industries—Part II: Antineoplastic Drugs, Chemical Exposures, and Work Shift/Stress Issues
Convention Center, 501

10:30 a.m.–1:00 p.m.
RT 215 Industrial Hygiene on the Construction Site II—Resources and Methods
Convention Center, 401

RT 216 Ergonomics Management Systems Roundtable: Applications and Lessons
Convention Center, 503

RT 217 H1N1 and Pandemic Planning: The Role of Occupational Health Professionals
Convention Center, 505

11:00 a.m.–Noon
A Role for You—Implementing the NORA Strategic Plans
Convention Center, 210

Noon–1:30 p.m.
Unsolved IH Mysteries Workshop
Convention Center, 407

12:30 p.m.–1:30 p.m.
Luncheon Discussion—Implementing NORA Strategic Plans
Convention Center, Expo, Hall A

Yant Award Lecture
Convention Center, 106

1:00 p.m.–5:00 p.m.
ST-03 Strike It Rich
Convention Center, departs South Entrance Board bus by 12:45 p.m.

ST-04 Denver's Early Days
Convention Center, departs South Entrance Board bus by 12:45 p.m.

2:00 p.m.–4:40 p.m.
PO 117 Industrial Hygiene General Practice I
Convention Center, 501

PO 118 Ionizing and Nonionizing Radiation, and Noise Case Studies
Convention Center, 207

PO 120 Emergency Preparedness/Response
Convention Center, 112

2:00 p.m.–5:00 p.m.
Science Symposium: Cumulative Lifetime Exposure and Risk—Integrating Occupational and Nonoccupational Exposures to Multiple Agents
Convention Center, 605

PO 119 Hazards in the Community and Environment: Taking Industrial Hygiene into the Home
Convention Center, 203

RT 218 Health-Care Ergonomics: Safe Patient and Resident Handling
Convention Center, 503

RT 219 Notable Confined Spaces
Convention Center, 401

2:00 p.m.–5:30 p.m.
RT 220 Integrating Sustainability into Your Organization: Business Case Studies
Convention Center, 403

RT 221 Unusual Hazards in Laboratories
Convention Center, 405

» At-a-Glance: Tuesday

2:00 p.m.–6:00 p.m.

RT 222 Welding Exposure Reduction Controls
Convention Center, 505

RT 223 Why Green Chemistry Matters
Convention Center, 106

PO 121 Aerosols
Convention Center, 205

2:30 p.m.–3:00 p.m.

AIHA® Government Affairs Update
Convention Center, 202

3:00 p.m.–4:00 p.m.

CR 312 Zombie Walkers: Safety Initiative to Awaken Your Employees
Convention Center, 105

CR 313 Mining and Smelting Implications on Environment and Health Risk in the Andes of Peru
Convention Center, 109

CR 314 Soapbox Safety
Convention Center, 201

CR 315 Environmentally Conscious Design
Convention Center, 113

AIHA®

7:00 a.m.–8:00 a.m.

Volunteer Groups' Joint Meeting
Hyatt Regency, Centennial D

Members should attend the joint meeting scheduled on the day of their committee meeting. Breakfast begins at 6:30 a.m. Individual committee meetings follow.

8:00 a.m.–10:00 a.m.

Aerosol Technology Committee Meeting
Hyatt Regency, Capitol 1

Clandestine Laboratory Working Group Meeting
Hyatt Regency, Capitol 5

Communication and Training Methods Committee Meeting
Hyatt Regency, Mineral F

Computer Applications Committee Meeting
Hyatt Regency, Mineral G

Engineering Committee Meeting
Hyatt Regency, Agate B

Environmental Issues SIG Meeting
Hyatt Regency, Quartz A

Ergonomics Committee Meeting
Hyatt Regency, Mineral D

Incident Preparedness and Response Working Group Meeting
Hyatt Regency, Capitol 6

Indoor Environmental Quality SIG Meeting
Hyatt Regency, Mineral B

Nanotechnology Working Group Meeting
Hyatt Regency, Capitol 4

Nonionizing Radiation Committee Meeting
Hyatt Regency, Capitol 7

Occupational and Environmental Medicine Committee Meeting
Hyatt Regency, Granite A

Protective Clothing and Equipment Committee Meeting
Hyatt Regency, Granite B

Publications Committee Meeting
Hyatt Regency, Sandstone

Safety Committee Meeting
Hyatt Regency, Capitol 3

Stewardship and Sustainability Committee Meeting
Hyatt Regency, Mineral A

Toxicology Committee Meeting
Hyatt Regency, Mineral E

8:00 a.m.–11:00 a.m.

Biosafety and Environmental Microbiology Committee Meeting
Hyatt Regency, Capitol 2

Sampling and Laboratory Analysis Committee Meeting
Hyatt Regency, Mineral C

9:30 a.m.–10:30 a.m.

Synergist Editorial Advisory Board Meeting
Convention Center, 206

10:00 a.m.–Noon

ANSI/AIHA® Z9.5 Laboratory Ventilation Standard Subcommittee Meeting
Convention Center, 208

3:00 p.m.–4:00 p.m.

AIHce Exhibitor Advisory Group Meeting
Convention Center, 208

4:00 p.m.–6:00 p.m.

ANSI/AIHA® Z88 Respiratory Protection Standards Committee Meeting
Convention Center, 206

4:30 p.m.–6:30 p.m.

Student Local Sections Council Business Meeting
Hyatt Regency, Capitol 6

6:30 p.m.–7:30 p.m.

MSA/AIHA® Reception
Hyatt Regency, Centennial

AIHF

1:00 p.m.–2:30 p.m.

Board of Trustees Meeting
Hyatt Regency, Sandstone

JOEH

4:00 p.m.–6:00 p.m.

JOEH LLC Board Meeting
Convention Center, 202

Ancillary

10:00 a.m.–Noon

IOHA 2010 Planning Meeting
Convention Center, 202

10:30 a.m.–12:30 p.m.

CRBOH AGM
Hyatt Regency, Centennial A

OSHA Compliance Officers' Forum on Field Equipment Evaluation

Hyatt Regency, Centennial C

1:30 p.m.–5:30 p.m.

11th Annual DOD IH Forum sponsored by DOD Industrial Hygiene Working Group
Hyatt Regency, Centennial F

2:00 p.m.–6:00 p.m.

API Industrial Hygiene Workshop sponsored by American Petroleum Institute
Hyatt Regency, Capitol 2

4:00 p.m.–6:00 p.m.

New York Metropolitan AIHA® and Hunter College Reception
Hyatt Regency, Granite A

University of Texas and University of Houston-Clear Lake Alumni Reception sponsored by J.K. Inc., and HIH Laboratories

Hyatt Regency, Granite C

4:30 p.m.–6:00 p.m.

Academy of Kettering Fellows sponsored by University of Cincinnati

Hyatt Regency, Agate A

Center for Occupational and Environmental Health Continuing Education sponsored by University of California, Berkeley

Hyatt Regency, Agate C

University of Central Missouri Alumni and Friends

Hyatt Regency, Mineral D

4:30 p.m.–6:30 p.m.

University of Michigan Reception
Hyatt Regency, Mineral F

Wayne State University Alumni Reception

Hyatt Regency, Mineral C

5:00 p.m.–6:00 p.m.

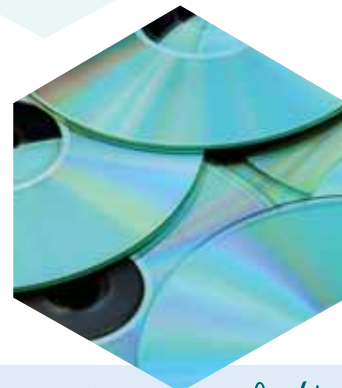
West Virginia University Alumni Meeting
Hyatt Regency, Mineral A

5:30 p.m.–7:30 p.m.

University of Minnesota School of Public Health Industrial Hygiene Alumni Reunion
Limelight Supper Club and Lounge, 1355 Curtis St., Denver Performing Arts Complex

6:45 p.m.–8:00 p.m.

Purdue University Alumni Reception
Hyatt Regency, Quartz A



Take AIHce Home with You!

Build your OEHS reference library with Multimedia Downloads and DVDs. Over 100 technical sessions will be captured LIVE at AIHce 2010. Each session includes PowerPoint slides with synchronized audio. Select sessions have software demonstrations, hyperlinks to resources and tools, and video clips.

See everything that happened—LIVE at AIHce—from the comfort and convenience of your home, office or mobile device!

These multimedia Downloads and DVDs provide the most complete, concise and innovative tools, on the latest standards and techniques, and can be easily shared with employees and coworkers.

It's 100% educational value for 100% of your training dollars – and –

UP TO 30% off when you place your order on site at AIHce in Denver.

- Individual downloadable sessions
\$19.95 — Post AIHce price: \$24.95
- Entire conference
 - DVD OR unlimited 2-year download subscription.*
\$229.95 — Post AIHce price: \$329.95
Mac- and PC-compatible. Includes MP3 files of both general session keynote speakers and all recorded technical sessions
 - DVD AND unlimited 2-year download subscription*
\$429.90

Visit the Multimedia sales desk in the convention center lobby for a demonstration **AND to SAVE up to 30%**

Monday–Wednesday 9:00 a.m.–5:30 p.m.
Thursday 8:00 a.m.–5:00 p.m.

Post conference orders:

Web: www.conferencemedia.net/959033

Phone: 1 (888) 222-1614

**Select sessions not available.*

GENERAL SESSION

8:00 a.m.–9:00 a.m.

Convention Center, Wells Fargo Theatre

The Labor Movement: Building Health and Safety Protections on the Job

Cecil Edward Roberts, Jr.

President

United Mine Workers (UMWA) of America



CECIL EDWARD ROBERTS, JR.

As President of the United Mine Workers of America (UMWA), Cecil Roberts, a sixth-generation coal miner, has spent a lifetime advocating for improved safety and health for the nation's mines. Currently a member of the Executive Committee of the AFL-CIO's Executive Council, Roberts is also chair of the Executive Council Committee on Safety and Health.

Growing up in a UMWA household in Kanawha County, West Virginia, Roberts heard the stories of his family, including his great-uncle, who was a legendary organizer during the West Virginia mine wars of the 1920s. Both of his grandfathers were killed in the mines.

Don't miss this presentation—an AIHce first—from one of the labor movement's most stirring and sought-after orators.

This session is sponsored by



United Phosphorus Limited

NEW!

Exhibitor Product Demos and Presentations 9:30 a.m.–1:00 p.m. | Expo Theater, Hall F

9:30 a.m.

Explosion Proof/Dust Ignition Proof Vacuum Cleaner System, Tiger-Vac Inc. USA

EXPI-35 L DT MRP HEPA - Legally certified explosion-proof/dust ignition-proof vacuum cleaner with cyclonic vacuuming. Less than 10 ohms resistivity. No cloth filters to wash like most vacuum cleaners, it contains a 40-square-foot conductive spun bond polyester filter cartridge with PTFE membrane with a 99.95 percent efficiency on .5 micron. It's unique manual reverse purge system easily dislodges particles that cling onto the filter media by simply opening the purge valve to allow ambient air to flow inside the filter media and blast off even hygroscopic particles. HEPA/ULPA filtration, 99.999 percent on .12 micron efficiency. The 9-gallon detachable recovery tank includes a conductive poly liner for the safe and easy disposal of recovered materials.

10:00 a.m.

Reducing Strains/Sprains and Overuse Injuries in the Workplace with ART (Active Release Techniques), ART Corporate Solutions, Inc.

Active Release Techniques (ART) assists corporations in reducing strains and overuse injuries, via a robust soft

tissue management system, which OSHA auditors have recognized as a best management practice. ART is a patented soft tissue care system, which has been deemed First Aid and Wellness (not medical treatment) for OSHA record-keeping purposes, by the Department of Labor. Currently over 120 U.S. corporations utilize ART's services, as a complement to their ergo and wellness initiatives, to prevent OSHA recordable injuries while reducing workers' compensation expenses in the area of MSDs. by 50 to 80 percent (on average).

10:30 a.m.

Writing GHS-Compliant Safety Data Sheets Using On-Demand MSDS Authoring Software, SiteHawk

With OSHA considering adoption of the Globally Harmonized System, nearly one million material safety data sheets will have to be re-authored or updated to meet the new criteria. But efficiently creating and maintaining GHS-compliant safety data sheets is no small task. This session will offer an in-depth demonstration of SiteHawk MSDS Engineer, a web-based MSDS authoring solution that creates globally and regionally-compliant safety data sheets on time and on budget.



Expo Theater sponsored by Colorado Safety Association

Noon**PhoCheck Tiger, a Revolutionary PID That Sets New Performance Standards While Minimizing Costs, ION Science Americas LLC**

The presentation will document PhoCheck Tiger's hardware and software features and culminate in a demo of its performance capabilities. Tiger is the first handheld PID with a plug-in miniPID sensor, which sets new standards with its anticontamination design, its performance in high humidity and its range from ppb to 20,000 ppm, all in a rugged package. The miniPID offers easily accessible low-cost lamps and a field-replaceable electrode stack. With all key features activated right out of the box, Tiger is ready to use in all modes without the need for pre-programming. The demo will include response to low and high concentrations of target gases at different humidities.

12:30 p.m.**Detection of TDI/MDI in soil—To What Extent to Excavate, Morphix Technologies**

Annual worldwide production volumes of toluene diisocyanate (TDI) and methylene bisphenyl isocyanate (MDI) are approximately 2 and 2.3 million tons, respectively. In the handling and transportation of TDI and MDI, occasional accidental spills occur, contaminating the adjacent soil. Rapid and reliable soil testing can minimize public exposure prior to the arrival of hazard management specialists. The TDI/MDI Liquid Diagnostic Test Strips provide a tool to define the area and severity of contamination after a spill, verify the effectiveness of the spill clean-up procedures and declare an area free of contamination. It responds colorimetrically to liquids containing TDI and/or MDI.

**10th Annual Upton Sinclair Memorial Lecture for Outstanding EHS Investigative Reporting
The Journalist's Role in Keeping an Eye on the American Workplace**

10:30 a.m.–11:30 a.m. » [Convention Center, 106](#)



Lecturer: Steven Greenhouse, *New York Times*, New York, NY

Safety and health on the job have been a fundamental right for American workers since the OSH Act was passed in 1970. Yet many workers face serious safety problems, and some employers still engage in shocking practices—for instance, locking workers in at night. Mr. Greenhouse will discuss several model employers as well as several who treat their workers poorly and often break the law, as detailed in his award-winning book *The Big Squeeze*. Other topics will include the terrible problems injured employees face in obtaining fair and timely workers' compensation, based on an 18-month investigative report Mr. Greenhouse coauthored for the *New York Times*; journalists' role in covering occupational safety and health; and relations between business and the news media.

CR 308**The Panama Canal Expansion — Safety and Health Issues and Challenges**

10:30 a.m.–11:30 a.m. » [Convention Center, 203](#)

Presenter: E. Shaw, Autoridad del Canal de Panama, Miami, FL. **Moderator:** S. Maberti, ExxonMobil Inc., Houston, TX.

The \$5.2 billion Panama Canal Expansion Program (PCEP) is being called the greatest engineering challenge of this century and the signature engineering feat of this generation. This presentation addresses how the project's owner, the Panama Canal Authority, is managing the safety and health (S&H) program for the PCEP. Discussion topics will include overall background, works and major risks, S&H organizational structure, roles and responsibilities, S&H organization's quality assurance role, S&H initiatives, and safety statistics.

CR 309**Pollution Prevention (P2) in USAF Weapon Systems Acquisition**

10:30 a.m.–11:30 a.m. » [Convention Center, 109](#)

Presenter: P. Lurker, U.S. Air Force, Wright-Patterson AFB, OH.

Air Force pollution prevention (P2) acquisition activities focus on the reduction or elimination of materials that impact the environment or occupational health and safety of airmen and the general public over the entire weapon system life cycle. P2 is incorporated into the systems engineering process as part of cost, schedule, performance, and risk optimization. Small P2 initiatives in the early design phase can significantly reduce life cycle costs and compliance burdens during the operational and disposal life cycle phases.

CR 310**Combustible Dust: Quick and Dirty**

10:30 a.m.–11:30 a.m. » [Convention Center, 112](#)

Presenters: K. Butler, T. Dean, Georgia Tech Research Institute, Atlanta, GA.

This brief overview will cover the process of a dust explosion, how to recognize a combustible dust hazard, some ways to manage a dust hazard, and OSHA's National Emphasis Program.

CR 311**Anything but Lecture! How to Use Other Safety Training Approaches and Methods**

10:30 a.m.–11:30 a.m. » [Convention Center, 113](#)

Presenter: J. Klane, Klane's Education Information Training Hub, LLC, Fairfield, ME. **Moderator:** C. Garner, AEP, Groveport, OH.

Too often, trainers use lecture as their sole training approach. Lecture is an ineffective method and not learner-focused. There are many other training methods to choose from that engage their students more and make the training fun and participative. This session will demonstrate as many non-lecture methods as time allows. The audience will enjoy participating in the approaches themselves to maximize learning transfer.

PO 111

After the Hurricane: Chinese Drywall and Indoor Environmental Quality Issues

10:30 a.m.–12:30 p.m. » Convention Center, 207

Arranger: J. Springston, Sandler Occupational Medicine Associates, Glen Head, NY. **Moderator:** D. Weekes, InAIR Environmental, Ltd., Ottawa, ON, Canada. **Monitors:** J. Springston, Sandler Occupational Medicine Associates, Glen Head, NY; K. Boyce-Lindgren, Boelter & Yates, Inc., Park Ridge, IL.

10:30 a.m.

Odorous Chinese Drywall: History, Assessment, Identification and Remediation. (74) V. Daliessio, S. Van Etten, EMSL Analytical, Westmont, NJ.

10:50 a.m.

Abiotic Production of Sulfide Gases from Elemental Sulfur in Gypsum Wallboard from Certain Chinese Sources. (75) R. DeMott, T. Gauthier, J. Poole, ENVIRON International Corporation, Tampa, FL; M. Alessandrini, Lakeland Laboratories, Lakeland, FL.

11:10 a.m.

Measurement of Corrosive, Odorous and Potentially Harmful Gases from Imported and Domestic Wallboard. (76) M. Taday, K. Chen, H. Cherazaie, W. Henton, M. Dangazyan, A. Fortune, Columbia Analytical Services, Simi Valley, CA.

11:30 a.m.

Nondestructive In Situ Identification of Imported (Chinese) Drywall by XRF. (77) P. Fincher, The EI Group Inc., Richmond, VA; C. Murray, The EI Group Inc., Morrisville, NC.

11:50 a.m.

Causes of Transient Sensory Irritation Reported by Occupants in Homes with Imported Corrosive Drywall. (78) J. Krause, Florida Department of Health, Tallahassee, FL; R. DeMott, ENVIRON International, Tampa, FL.

12:10 p.m.

Occupational Exposure Evaluations in Conjunction with Repair of Homes Containing Chinese Wallboard. (79) J. Poole, T. Gauthier, R. DeMott, ENVIRON International Corp., Tampa, FL.

PO 112

Emerging Exposure Modeling Strategies

10:30 a.m.–12:30 p.m. » Convention Center, 205

Arranger: M. Vadali, University of Minnesota, Minneapolis, MN. **Moderator:** S. Milz, University of Toledo, Toledo, OH. **Monitors:** J. Hwang, University of Minnesota, Minneapolis, MN; R. Tibaldi, ExxonMobil, Houston, TX.

10:30 a.m.

Successful EAS Management: From Paper to Business-Integrated EHS Software Solution. (80) P. Kaufmann, C. Bettinger, Emilcott, Chatham, NJ; M. Censurato, TechniData America LLC, Wilmington, DE.

10:50 a.m.

Exposure Assessment Models Used by the U.S. Environmental Protection Agency. (81) P. Williams, E Risk Sciences, LLP, Boulder, CO; B. Hubbell, V. Zartarian, U.S.

EPA, Research Triangle Park, NC; E. Weber, U.S. EPA, Athens, GA; C. Fehrenbacher, D. Hrdy, U.S. EPA, Washington, DC.

11:10 a.m.

Managing Occupational Exposure Limits in a Global Company. (82) S. Battista, 3M, Maplewood, MN.

11:30 a.m.

Exposure Model Evaluation and Validation: A Case Study with Airborne Dust. (83) C. Simmons, R. Jones, F. Boelter, D. Podraza, ENVIRON International Corporation, Chicago, IL.

11:50 a.m.

Exposure Model Development and Section: A Case Study with Dust Exposures. (84) R. Jones, C. Simmons, F. Boelter, D. Podraza, ENVIRON International Corporation, Chicago, IL.

12:10 p.m.

Addressing Variability in the SEG Using Monte Carlo Evaluation. (85) M. Sullivan, California State University at Northridge, Northridge, CA.

PO 113

Real-Time Detection

10:30 a.m.–12:30 p.m. » Convention Center, 405

Arrangers: W. Groves, Pennsylvania State University, University Park, PA; P. Smith, U.S. Navy, Bethesda, MD.

Moderator: P. Smith, U.S. Navy, Bethesda, MD. **Monitors:** M. Nonnenmann, University of Texas, Tyler, TX; L. Monteith, University of Washington, Seattle, WA.

10:30 a.m.

The Effects of Sorbent Selection and Sample Volume on Long-Term Sampling (One- to Thirty-day) of Six VOCs Using Diffusive Samplers. (86) L. Coyne, C. Kuhlman, J. Chada, SKC Inc., Eighty Four, PA.

10:50 a.m.

Field Comparison of a Direct Reading Intergrading Benzene Meter to Standard Activated Charcoal Tube Methodology. (87) R. Matherne, Total Safety, Gonzales, LA.

11:10 a.m.

Cost-Effective Tracer Gas Studies. (88) L. Breyer, Walsh Environmental, Boulder, CO.

11:30 a.m.

Using SIFT-MS for the Detection and Quantification of Fumigation Pesticides and Toxic Industrial Chemicals in Shipping Containers. (89) D. Milligan, Syft Technologies Ltd., Christchurch, New Zealand.

11:50 a.m.

The Evaluation of Novel Direct Reading Sensor Technologies for the Measurement of Airborne Petroleum Hydrocarbons. (90) J. Martin, ExxonMobil, Baytown, TX.

12:10 p.m.

New Data Reveals the Correlation between Bump Test Intervals and Gas Detector Failures. (91) D. Wagner, Industrial Scientific Corporation, Oakdale, PA.

PO 114**Stewardship/Sustainability/Green**10:30 a.m.–12:30 p.m. » [Convention Center, 201](#)

Arranger: R. Chan, Glendora, CA. **Moderator:** R. Goldman, 3M Company, St. Paul, MN. **Monitors:** A. Lehocky, University System of Georgia, Atlanta, GA; F. May, 3M Company, Austin, TX.

10:30 a.m.

Journey to Sustainability: One IHs Experience Navigating the Green Passage in a Global Corporation. (92) L. Schneider, The Depository Trust and Clearing Corporation, New York, NY.

10:50 a.m.

The Success of Green Teams and Sustainability Programs in Maryland's Hospitals. (93) J. Plisko, Maryland H2E, Baltimore, MD; M. Plisko, Environmental Profiles, Inc., Baltimore, MD.

11:10 a.m.

Powerful Sustainability Communications for Today's Industrial Hygienist: Using Social Norms to Engage Stakeholders (Professional Practice). (94) M. Bernhart, True Blue Communications, LLC, Atlanta, GA.

11:30 a.m.

Third-Party Assurance of Sustainability Reports: Is It Worth the Cost? (95) L. Barnes, Bureau Veritas North America, Lakewood, CO.

11:50 a.m.

Using Total Cost Assessment to Assess the Triple Bottom Line — Professional Practice with Case Study Examples. (96) L. Laurin, EarthShift, Kittery, ME.

12:10 p.m.

SafeSCOR: Integrating Safety and Occupational Health Principles with the Supply Chain Operations Reference. (97) J. Yasalonis, A. Sheaffer, LMI, Belcamp, MD; T. Wilkerson, LMI, McLean, VA.

PO 115**Noise Exposure and Scientific Assessment Techniques**10:30 a.m.–12:30 p.m. » [Convention Center, 403](#)

Arranger: Z. Machillanda-Hahn, Berkeley, CA. **Moderator:** J. Brock, Brookings, SD. **Monitors:** K. Wetzel, Eli Lilly & Company, Indianapolis, IN; T. Nalbene, University of Texas, Tyler, TX.

10:30 a.m.

Improving Noise Exposure Estimates through the Use of Hybrid Assessment Techniques. (98) R. Neitzel, W. Daniell, N. Seixas, L. Sheppard, University of Washington, Seattle, WA; H. Davies, University of British Columbia, Vancouver, BC, Canada.

10:50 a.m.

Employee Noise Exposure at Residential Construction Sites. (99) D. Ertel, P. Nagarajan, Sandler Occupational Medicine Assoc., Gaithersburg, MD; R. Matuga, National Association of Home Builders, Washington, DC.

11:10 a.m.

Impulse Duration and Sound Pressure Level Reduction in an Indoor Firing Range. (100) M. Horenziak, M. Graessle, M. Ferreri, J. Stubbs, J. Slagley, AFIT, Dayton, OH.

11:30 a.m.

Evaluating Community Noise Levels: A Case Study of Residential Impact. (101) M. Andrew, M. Rosales, D. Cox, Forensic Analytical Consulting Services, Rancho Dominguez, CA.

11:50 a.m.

Design of a Noise Delivery System for JP-8 Ototoxicity Studies. (102) J. Stubbs, J. Slagley, Air Force Institute of Technology, WPAFB, OH.

12:10 p.m.

3-dBA Exchange Rate, Valid Assessments? (103) S. Henry, U.S. Army, Bynum, AL.

RT 213**Ask the Expert: An Update of the NIOSH Nanotechnology Program**10:30 a.m.–12:30 p.m. » [Convention Center, 605](#)

Arranger and Moderator: C. Geraci, Jr., NIOSH, Cincinnati, OH. **Monitors:** L. Hodson, NIOSH, Cincinnati, OH; D. Heidel, NIOSH, Cincinnati, OH.

The unique phenomena of materials deliberately created at the nanoscale (1-100 nm) are driving the potential for a broad range of societal benefits in all economic sectors. This potential reshaping of basic material science has been exclaimed as leading to the “Third Industrial Revolution.” Currently, there are more than 1,000 nanomaterial-containing products in commerce, and it is estimated that by 2015, there will be one million U.S. workers potentially exposed to nanomaterials. Uncertainties about health and safety effects are a key concern of investors and businesses. Failure to identify and manage the hazards associated with these new materials could cause a significant health and economic burden and stifle this promising technology. NIOSH has developed a comprehensive approach to address the health issues of nanotechnology. Because nanomaterials are already in commerce, NIOSH must address hazard identification, exposure assessment, risk characterization, and risk management simultaneously. Consequently, while conducting applied research in all the areas noted, NIOSH has developed guidance materials on approaches to safe nanotechnology that have been eagerly received, widely cited, and used nationally and internationally by public and private organizations. This session will summarize key findings from the past 12 to 18 months from the NIOSH program.

- **An Update of the NIOSH Nanotechnology Research Program.** C. Geraci, Jr., NIOSH, Cincinnati, OH.
- **An Update of the NIOSH Effort in Nanomaterial Surveillance.** C. Geraci, Jr., NIOSH, Cincinnati, OH.
- **An Update on NIOSH Research Focused in Instrumental Detection of Nanomaterials.** D. Evans, NIOSH, Cincinnati, OH.
- **An Update on NIOSH Research on Respiratory Protection and Personal Protective Clothing Specific to Engineered Nanomaterials.** R. Shaffer, NIOSH, Cincinnati, OH.
- **Overview of Experiences from the Field.** M. Methner, NIOSH, Cincinnati, OH.

RT 214

Beryllium Oxide and the Beryllium Proficiency Analytical Testing Program

10:30 a.m.–12:30 p.m. » Convention Center, 105

Arranger: M. Brisson, Savannah River Nuclear Solutions, LLC, Aiken, SC. **Moderator:** K. White, Consultative Services, Virginia Beach, VA. **Monitors:** G. Braybrooke, U.S. Army, APG, MD; D. Sandusky, Forensic Analytical Laboratories, Hayward, CA.

Beryllium is unique among metals of concern in the workplace in having its own proficiency testing program, driven by exceptionally low occupational exposure limits and by the Department of Energy's Beryllium Rule. Over 40 laboratories participate in AIHA's Beryllium Proficiency Analytical Testing (BePAT) program. For several years, there has been interest in using beryllium oxide for the BePAT program, since it is more difficult to dissolve than other forms, such as beryllium metal or alloys, encountered in workplaces. However, until recently, there was no beryllium oxide reference material on which to base proficiency testing, or to determine which sample dissolution methods were effective for BeO. With the advent of NIST SRM 1877, it is now possible to test various dissolution methods and employ BeO in the BePAT. This informational roundtable discusses the development of the BeO reference material, a round robin conducted by the Beryllium Health and Safety Committee, and a BeO pilot conducted in late 2009 by AIHA® Proficiency Testing Programs LLC. A discussion of standard analytical methods completes the roundtable.

- **History of Drivers for Changing the BePAT and Development of BeO Reference Material.** M. Brisson, Savannah River Nuclear Solutions LLC, Aiken, SC.
- **Findings of the BeO Round Robin Performed by the Beryllium Health and Safety Committee.** T. Oatts, Y-12 National Security Complex, Oak Ridge, TN.
- **Findings of the AIHA® Proficiency Analytical Testing Programs LLC BeO Pilot.** L. Youmas-McDonald, Savannah River Site Analytical Laboratory, Aiken, SC.
- **Standard Analytical Methods for Beryllium Sample Preparation.** W. Hendricks, OSHA, Sandy, UT.

PO 116

Health-Care Industries, Part II: Antineoplastic Drugs, Chemical Exposures, and Work Shift/Stress Issues

10:30 a.m.–12:30 p.m. » Convention Center, 501

Arranger and Moderator: M. Jones, Department of Veterans Affairs, Iowa City, IA. **Monitors:** M. McCullough, Dana-Farber Cancer Institute, Boston, MA; N. Rice, Intermountain Healthcare, Salt Lake City, UT.

10:30 a.m.

Surface Contamination with, and Management of, Antineoplastic Drugs in a Hospital. (105) F. Akbar-Khanzadeh, R. Rillo, S. Milz, B. Fink, University of Toledo, Toledo, OH.

10:50 a.m.

Determination of Low-level Volatile Organic Compound Profiles in Health-Care Settings. (106) R. LeBouf, A. Stefaniak, M. Virji, NIOSH, Morgantown, WV.

11:10 a.m.

Development of Semi-Quantitative Measures for Pentamidine Aerosol in the Health-Care Environment. (107) D. Krageschmidt, J. Nesbitt, Mayo Clinic, Rochester, MN.

11:30 a.m.

Design Problems in Pathology Laboratories: A Prevention through Design Approach. (108) E. Stewart, Kaiser Permanente, Oakland, CA.

11:50 p.m.

The Hazards of Extended Work Hours, Overtime, and Shift Work in Health Care. (109) T. Fuller, Illinois State University, Normal, IL; E. Bain, Massachusetts Nurses Association, Canton, MA.

12:10 p.m.

Occupational Injuries and Stressful Work Environments Associated with Being a Home Care Aide. (110) L. Brown, Illinois State University, Normal, IL.

WITHDRAWN

(104) A. Hall, P. Demers, C. Peters, Carex, Canada, Vancouver, BC, Canada.

RT 215

Industrial Hygiene on the Construction Site II — Resources and Methods

10:30 a.m.–1:00 p.m. » Convention Center, 401

Arranger: E. Satrun, ExxonMobil Corp., Mokena, IL. **Moderator:** F. Anderson, Zachry Nuclear Inc. & Zachry Engineering Corporation, San Antonio, TX. **Monitors:** C. McInnis, International Brotherhood of Boilermakers, Fall River, NS, Canada; S. Fess, Xerox Corporation, Webster, NY.

This session builds upon the roundtable presented in 2009, which discussed the issues and challenges for industrial hygiene on the construction site. While many of the challenges are similar to industrial sites, construction also has many differences. The increased focus on industrial hygiene in the construction industry has created a greater need for IH-related resources and information sharing. This session will focus on resources and methods that can be used at construction sites. Specific examples will be presented. Following the presentations, a roundtable discussion will be held about the current state of industrial hygiene construction resources and what should be done in the future. Come prepared to share your information, practices, and good resources.

- **Under Construction: Resources for the Industrial Hygienist on the Construction Site.** B. Epstien, Epstien Environmental Resources, Marietta, GA.
- **Assessing Exposures in Construction: Real-World Application of Fifteen Years of Field Research.** P. Susi, The Center for Construction Research and Training, Silver Spring, MD.

- **Development and Implementation of Construction Site Audit Programs to Include Industrial Hygiene and Effective IH Metrics.** R. Adams, ENVIRON International Corporation, Princeton, NJ.
- **Identifying Hazard Control Options for Construction Hazards Organized by Task: Solutions to Cut Injury Rates, Exposures, and Ergonomic Risks.** J. Platner, The Center for Construction Research and Training, Silver Spring, MD.
- **NIOSH Research to Practice (r2p) Solutions for NORA Construction Goals.** A. Echt, NIOSH, Cincinnati, OH.

RT 216

Ergonomics Management Systems Roundtable: Applications and Lessons

10:30 a.m.–1:00 p.m. » Convention Center, 503

Arranger and Moderator: W. Rostykus, Humantech Inc., Corrales, NM. **Monitors:** M. O'Reilly, State University of New York, Manlius, NY; S. Gibson, Ergonomics Applications, Duncan, SC.

A common challenge with managing ergonomics in the workplace is finding, establishing, and sustaining a management system that best fits the organization's needs, culture, structure, and processes. An effective management system ensures the continuous improvement of workplace conditions that reduce employee exposure to risk factors that cause work-related musculoskeletal disorders (WMSDs). Several continuous improvement systems have been leveraged to manage the process of finding, fixing and verifying workplace improvements. These include Safety Management System (ex. OHSAS 18001, ANSI Z10), Shewart Cycle (plan, do, check, and act), Six Sigma, and more. Each approach has benefits and challenges, and must align with the business goals, structure, and company culture. This roundtable session will present the ergonomic management systems (or processes) applied at five different organizations (industry and union). Representatives from each organization will share the system they use, what has worked, lessons learned, and key elements for success. Participants will be able to learn from these different approaches to apply successful methods at their own organization.

- **Overview of Ergonomics Management System at Hamilton Sundstrand.** M. Stuhlman, Hamilton Sundstrand, Windsor Locks, CT.
- **Overview of Ergonomics Management System at Genie Industries.** J. Swaim, Genie Industries Inc., Redmond, WA.
- **Overview of Ergonomics Management System at Goodrich.** T. Beaudry, Goodrich Corporation, Charlotte, NC.
- **Lessons from Implementing Ergonomic Programs: A Union Perspective.** M. Siegel de Hernandez, Communication Workers of America, New York, NY.
- **Overview of Ergonomics Management System at Toyota.** M. Barrero, Toyota, Erlanger, KY.

RT 217

H1N1 and Pandemic Planning: The Role of Occupational Health Professionals

10:30 a.m.–1:00 p.m. » Convention Center, 505

Arranger and Moderator: G. Byrns, Illinois State University, Normal, IL. **Monitors:** V. Puhlovich, Kaiser Permanente, Pasadena, CA; S. Derman, MediSHARE Environmental Health and Safety, Cupertino, CA.

The recent H1N1 outbreak has served as an important wake-up call for the health-care community of the need for a comprehensive and effective plan to deal with infectious disease pandemics. An effective plan requires the active involvement of a qualified team of industrial hygienists, safety professionals, occupational health nurses, and other health professionals. In this roundtable, we will explore the roles of these professionals in addressing the current outbreak and in planning for future pandemics.

- **The Role of the Industrial Hygienist in Pandemic Operational Readiness.** L. Bucklew, Children's Healthcare of Atlanta, Atlanta, GA.
- **The Role of the Occupational Health Nurse (OHN) in Pandemic Planning.** D. Jennings Tucker, Craig Hospital, Englewood, CO.
- **Protecting Health-Care Workers during a Pandemic: Best Practices and Lessons Learned.** J. Koerner, OSHA, Washington, DC
- **Response to Pandemic Influenza Experience and Lessons Learned in California Hospitals and Health-Care Facilities.** S. Derman, MediSHARE Environmental Health and Safety, Cupertino, CA.

A Role for You — Implementing the NORA Strategic Plans

11:00 a.m.–Noon » Convention Center, 210

Presenters: G. Talaska, University of Cincinnati, Cincinnati, OH; J. Boiano, NIOSH, Cincinnati, OH; L. Iverson-Leirimo, Gundersen Lutheran, La Crosse, WI; A. Amendola, NIOSH, Cincinnati, OH; F. Renshaw, Philadelphia, PA; S. Schneider, Laborer's Health and Safety Fund of North America, Washington, DC; T.J. Slavin, Navistar, Inc., Warrenville, IL; V.P. Anderson, NIOSH, Cincinnati, OH; T. Braun, Liberty Mutual Research Institute, Hopkinton, MA; L. Hager, 3M, Portland, MI; M. Gillen, NIOSH, Washington, DC; M. Gomez, U.S. Chemical Safety and Hazard; Investigation Board, Washington, DC; E. Esswein, NIOSH, Denver, CO. **Moderator:** W. G. Lotz, NIOSH, Cincinnati, OH

The National Occupational Research Agenda (NORA), administered by NIOSH, has partnered with industry, labor, academia, and others to develop sector-specific OSH plans. NORA is looking for partners to move solutions for hazards into practice and to develop new solutions through research. This session will present overviews of the strategic plans for the identified sectors and begin discussing ways you can become involved in addressing critical OS&H research needs and solutions for each of these sectors:

» Technical Program: Tuesday

Construction, Healthcare and Social Assistance, Manufacturing, Oil and Gas Extraction, Wholesale and Retail Trade

Following this session, facilitated luncheon discussions will be held in the Expo from 12:30 p.m. to 1:30 p.m. Discussions focus on obtaining input from participants for each NORA strategic-sector area. See topic descriptions on pages 60–61. Seating is first-come, first-served.

Workshop

SOLD OUT

Unsolved IH Mysteries Workshop

Noon–1:30 p.m. » Convention Center, 407

Facilitator: Rob MacLeod, CIH, CSP, CRSP, CCEP, Celtic Exploration, Calgary, Alberta, Canada

Luncheon Discussions

Implementing NORA Strategic Plans

12:30 p.m.–1:30 p.m. » Convention Center, Expo, Hall A

Facilitated by representatives of NIOSH and partners from industry, labor, academia and others, these small, interactive groups focus on gathering input regarding NORA sector-specific strategic plans. Purchase lunch and select a discussion—seating is first-come, first-served. *Topics subject to change.*

1. Healthcare: Hazardous Drugs and Other Chemicals

Moderator: L. Iverson-Leirimo, Gundersen Lutheran, La Crosse, WI.

Discussions will focus on identifying potential partners and their roles in addressing NORA goals for hazardous drugs and other chemical agents in health care.

2. Healthcare: Occupational Safety and Health Programs

Moderator: J. Boiano, NIOSH, Cincinnati, OH.

Discussions will focus on identifying potential partners and their roles in implementing NORA goals for occupational safety and health programs in health care.

3. Manufacturing: Injuries and Fatalities Due to Contact with Objects/Equipment and Falls

Moderators: F. Renshaw, Philadelphia, PA; A. Amendola, NIOSH, Cincinnati, OH.

Discussion will focus on partnership opportunities for research, intervention and prevention to address NORA goals.

4. Manufacturing: Musculoskeletal Disorders

Moderator: T.J. Slavin, Navistar, Inc., Warrenville, IL.

Rising costs in employment health care and workers' compensation are attributed to injuries from overexertion and repetitive motion. Discussion will focus on partnership opportunities for research, intervention and prevention to address NORA goals.

5. Manufacturing: Hearing Loss

Moderator: L. Hager, 3M, Portland, MI.

Discussion will focus on partnership opportunities for research, intervention and prevention of hearing loss to address NORA goals.

6. Manufacturing: Respiratory Conditions and Diseases, and Cancer Due to Exposures

Moderators: W.G. Lotz, NIOSH, Cincinnati, OH; G. Talaska, University of Cincinnati, Cincinnati, OH.

Discussion will focus on partnership opportunities for research, intervention and prevention of illness, injuries, hazardous exposures and fatalities in manufacturing.

7. Manufacturing: Emerging Risks

Moderator: T. Braun, Liberty Mutual Research Institute, Hopkinton, MA.

Discussion will focus on partnership opportunities for the identification of emerging risks and research, intervention and prevention of illness, injuries, hazardous exposures and fatalities in manufacturing.

8. Manufacturing: Catastrophic Incidents and Explosions

Moderator: M. Gomez, U.S. Chemical Safety and Hazard Investigation Board, Washington, DC.

Discussion will focus on partnership opportunities for research, intervention and prevention of illness, injuries, hazardous exposures, fatalities and adverse environmental effects due to catastrophic incidents and explosions in the workplace.

9. Wholesale and Retail Trade

Moderator: V.P. Anderson, NIOSH, Cincinnati, OH.

The Wholesale and Retail Trade work force is diverse and aging. The actual number of reported annual injuries and fatalities approaches one million, with the vast majority attributed to overexertion and falls. Discussion will center on those high-risk subsectors where interventions are needed and where opportunities exist to partner with employers to implement known controls.

10. Construction: Implementing NORA Goals

Moderator: M. Gillen, NIOSH, Washington, DC; S. Schneider, CIH, Laborer's Health and Safety Fund of North America, Washington, DC.

NORA Construction goals considered most likely to be of interest to industrial hygienists will be described. Ideas for implementing two goals of the AIHA® Construction Committee will be discussed: 1) describe the skills and learning objectives needed by silica-competent persons and develop a draft training curricula to address these needs; and 2) develop a silica or welding fumes exposure database to support collection and sharing of construction task exposure information.

11. Oil and Gas Extraction Program

Moderator: E. Esswein, NIOSH, Denver, CO.

The NORA Oil and Gas Extraction Sector Council's draft national agenda outlines research and prevention activities. Participants will review, discuss and comment on the goals contained in this research agenda. Participants will also learn how they can participate in ongoing research that will increase our knowledge of the chemical hazards in the oil and gas extraction industry.

12. Transportation, Warehousing, and Utilities

Moderators: M. Kiefer, NIOSH; D. Mokadam, Association of Flight Attendants, Washington, DC.

The session will discuss the strategic agenda and how the program strives to fulfill its mission through the high quality research, practical solutions, partnerships, and research to practice.

Yant Award Lecture

Occupational Hygiene: State of the Art and Development

12:30 p.m.–1:30 p.m. » Convention Center, 106



Lecturer: Danilo Cottica
Centro Ricerche Ambientali—
Fondazione Salvatore
Maugeri—IRCCS—Pavia—Italia
President of the International
Occupational Hygiene Association (IOHA)

In his treatise *Il de Morbis Artificum Diatriba* (“The Workers’ Diseases”), published in 1700, Bernardino Ramazzini

made a distinction between two classes of risks for workers: the substances that they manipulate and what these substances emit; and the bodily positions that workers were required to assume for too long due to the organization of work.

To identify risks, Ramazzini adopted an investigative method that has been standardized in the risk assessments and measurements used today by occupational hygienists worldwide.

In the years since Ramazzini’s treatises, occupational hygienists have had to deal with new challenges related to new risks (nanoparticles, for example); the need to develop more specific sampling and analysis instruments with lower limits of detection (crystalline silica); the need to characterize occupational from non-occupational exposure by statistically significant data and by easy-to-use sampling instruments (diffusive samplers); and the evaluation of skin absorption as a contributor to exposure.

These challenges require environmental and occupational health and hygiene professionals to develop, implement and review programs and policies to promote environmental and occupational health and safety, and to minimize workplace and environmental pollution involving chemical, physical and biological hazards.

Exhibitor Product Demos and Presentations

1:00 p.m.–2:30 p.m. | Expo Theatre, Hall F

1:00 p.m.

Personal Monitoring Using Universal Passive Sampling Devices, Entech Instruments, Inc.

HDS Personal Monitors are worn like a badge but have the ability to recover most chemicals found in the workplace, down to lower levels than conventional methods. HDS monitors require no pumps or batteries and are not affected by changes in matrix or concentrations.

NEW!

1:30 p.m.

Rapid, Versatile Bacteria and Fungi Testing On Site with Mycometer—There Is No Substitute for Good Science, Mycometer, Inc.

Mycometer presents and demonstrates the science and technology behind rapid, accurate measurement of bacteria or fungi on surfaces, bulk materials and in air. This versatile technology can be applied to IAQ microbial contamination investigations, process quality control, remediation/cleaning effectiveness and disaster response assessments. Diagnose microbial contamination on site in 30 minutes. Robust protocols provide validated criteria for documenting and delineating contamination before and after remediation. See the newest data demonstrating statistical reliability over current methods. Method documentation is published in peer-reviewed scientific journals. Learn how you can improve your competitive edge while saving time and money with this rapid, repeatable method.

2:00 p.m.

CANWrite™ MSDS Authoring Software, CCOHS

Efficiently write accurate, OSHA- and WHMIS-compliant MSDSs with CANWrite. Designed by CCOHS toxicologists and industrial hygienists, learn about the approach to authoring MSDSs that was used to develop this software. See how CANWrite, an affordable alternative to word processing software, can help you write quality MSDS / SDSs and start to transition to the new Globally Harmonized System of Labelling and Classification of Chemicals (GHS).

PO 117

Industrial Hygiene General Practice I

2:00 p.m.–4:40 p.m. » Convention Center, 501

Arranger and Moderator: J. Vietas, United States Air Force, San Antonio, TX. **Monitors:** D. Napier, DNA Industrial Hygiene, Lawndale, CA; J. Grassman, Brooklyn College, Brooklyn, NY.

2:00 p.m.

A Biological Environmental Exposure Level (BEEL) for Polypropylene Glycol? (111) S. Que Hee, University of California at Los Angeles, Los Angeles, CA.

2:20 p.m.

Modeling of the Determinants of Prolonged Exposure to BTX and Polycyclic Aromatic Hydrocarbons. (112)

K. Czarnocki, Lublin University of Technology, Lublin, Poland.

2:40 p.m.

Environmental and Biological Assessment of Environmental Tobacco Smoke Exposure among Casino Dealers. (113) C. Achutan, University of Nebraska, Omaha, NE; C. West, C. Mueller, NIOSH, Cincinnati, OH.

3:00 p.m.

Effectiveness of Voluntary Work Practice Guidelines in Reducing Dermal Exposures. (114) T. Hogan, Theodore J. Hogan & Associates, Inc., Lemont, IL; C. Fowle, M. Mamani, Benedictine University, Lisle, IL.

» Technical Program: Tuesday

3:20 p.m.

Never Let Your Guard Down: The Significance of Trace Elements in Exposure Assessment and Implementation of Cadmium Standard and Recommendation for Engineering Controls, Naval Foundry and Propeller Center, Philadelphia, PA. (115) T. Redford, Naval Health Center, Philadelphia, PA.

3:40 p.m.

Airborne Hexavalent Chromium Concentrations Associated with Welding at Electric Utility Operations. (116) J. Hicks, S. McCarthy, Exponent, Inc., Oakland, CA.

4:00 p.m.

Evaluation of an Air Shower in the Pharmaceutical Manufacturing Facility. (117) D. Calhoun, Affygitly Solutions, LLC, Lafayette, CO.

4:20 p.m.

Microscopy as a Tool in Occupational and Environmental Health Investigations. (118) A. Havics, pH2, LLC, Indianapolis, IN.

PO 118

Ionizing and Nonionizing Radiation and Noise Case Studies

2:00 p.m.–4:40 p.m. » Convention Center, 207

Arranger: Z. Machillanda-Hahn, Newark, DE. **Moderator:** K. Merritt, Mainthia Technology, Inc., Hampton, VA.

Monitors: R. Brauch, Larson Davis, Depew, NY; C. Richards, WI.

2:00 p.m.

To Reduce Radiation Fears, It's Time to Become Radiation Myth Busters. (119) R. Johnson, Dade Moeller and Associates, Inc., Gaithersburg, MD.

2:20 p.m.

Radiation Exposure in Fabrication of Granite Countertops. (120) L. Kincaid, Industrial Hygiene Services, Saratoga, CA; D. Bernhardt, Salt Lake City, UT; A. Gerhart, The Carpenter Shop, Oklahoma City, OK.

2:40 p.m.

Radiation and Radon from Granite Countertops. (121) M. Shum, P. Barn, National Collaborating Centre for Environmental Health, Vancouver, BC, Canada; R. Ross, British Columbia Centre for Disease Control, Vancouver, BC, Canada.

3:00 p.m.

Residential Radio Frequency Exposure from an Urban Radio and Television Antenna Tower. (122) M. Suen, Exponent, Inc., Oakland, CA.

3:20 p.m.

Heat Radiation Exposure — Impact on Body Heat Exchange. (123) U. Reischl, Boise State University, Boise, ID; B. Mijovic, Z. Skenderi, University of Zagreb, Zagreb, Croatia.

3:40 p.m.

Noise Survey in Patient Rooms of a Hospital. (124) F. Akbar-Khanzadeh, M. Braskie, University of Toledo, Toledo, OH.

4:00 p.m.

Comprehensive Noise Assessment in the Coast Guard Small Boat Community. (125) S. Griffin, U.S. Coast Guard, Cleveland, OH.

4:20 p.m.

A Comparison of Whole-Body Vibration Exposures Between a Cab-over and Conventional Flat Bed Truck. (126) R. Blood, P. Johnson, University of Washington, Seattle, WA.

PO 120

Emergency Preparedness/Response

2:00 p.m.–4:40 p.m. » Convention Center, 112

Arranger and Moderator: P. Brady, BNSF Railway, Fort Worth, TX. **Monitors:** G. Millner, Center for Toxicology & Environmental Health, Little Rock, AR; G. McCaskill, BNSF Railway, Fort Worth, TX.

2:00 p.m.

Mercury in Air On-Site by NIOSH 6009 Method. (135) J. Siperstein, Ohio Lumex Co, Inc, Twinsburg, OH.

2:20 p.m.

Comparison of Air Sampling Methods for Aerosolized B. Anthracis Sterne. (137) C. Estill, P. Baron, M. Hein, G. Deye, NIOSH, Cincinnati, OH; J. Beard, L. Larsen, Dugway Proving Ground, Dugway, UT.

2:40 p.m.

Decontamination of Office Environments from Bacterial Contamination. (138) B. Fraser, Health Canada, Ottawa, ON, Canada; J. Miller, M. Smith, Carleton University, Ottawa, ON, Canada.

3:00 p.m.

Development and Implementation of a Preparedness Plan for a Medium-size Business during the Novel H1N1 Pandemic. (139) K. Martinez, A. Harney, NIOSH, Cincinnati, OH.

3:20 p.m.

Protecting Workers during a Pandemic: Best Practices and Lessons Learned. (140) J. Koerner, OSHA, Washington, DC.

3:40 p.m.

Institutional Trust, Safety Climate, and Perceived Risks of Pandemic Influenza among Essential Personnel. (141) R. Richards, OSHA, Washington, DC.

4:00 p.m.

Pandemic Preparedness and Response in the Albuquerque Area of the Indian Health Service. (142) B. Hroch, DHHS/Indian Health Service, Albuquerque, NM.

4:20 p.m.

Protecting Search and Rescue Dogs from Chemical Exposures. (143) B. Prill, Industrial Safety Professionals Inc., Temecula, CA.

WITHDRAWN

(136) S. Khajehnajafi, S. Burla, Safer Systems, Camarillo, CA.

The viewpoints, opinions and conclusions expressed in the presentations, sessions and discussions at AIHce have not necessarily been approved or endorsed by AIHA® or ACGIH® and do not necessarily reflect those of AIHA® or ACGIH®.

Science Symposium: Cumulative Exposure Assessment: Integrating Occupational and Non-Occupational Exposures to Multiple Agents

2:00 p.m.–5:00 p.m. » Convention Center, 605

Arranger: T. Mukoda, USAF, Peterson AFB, CO. **Moderator:** A. Maier, Toxicology Excellence for Risk Assessment, Cincinnati, OH.

Exposure, in the context of traditional industrial hygiene practice, has most often been evaluated within the confines of the workplace with a focus on one chemical or physical agent at a time. The ability of this traditional approach to represent accurately the effect of total stressor exposures on worker health has been increasingly called into question. The evaluation of single-agent exposures may be a poor predictor of health risk. This is because exposures to a single agent by multiple routes of exposure (also called aggregate exposures) in the workplace are often not assessed. In addition, exposures to a single agent from both occupational and non-occupational exposures are not typically measured to assess the total exposure. Moreover, assessing the impacts of chemical agent mixtures (also called cumulative exposure) is sometimes done, but the impacts of mixtures is often narrowly defined and rarely includes the assessment of combined effects of chemical and non-chemical agents. These shortcomings result in an incomplete exposure profile for an individual's working lifetime. Developing and refining methods to determine "total" versus "traditional" exposure provides for a more accurate risk assessment. New methods and approaches for addressing the concept of "total cumulative exposure" are being used by many health agencies and are impacting current risk assessments for occupational and environmental scenarios. This symposium provides background on the key terms associated with total cumulative exposure models, ongoing issues and trends of importance for industrial hygienists, and basic and advanced applications for evaluating "total exposures".

- **Welcome and Opening Remarks.** T. Mukoda, USAF, Peterson AFB, CO.
- **Defining Aggregate and Cumulative Exposures.** F. Boelter, ENVIRON International Corporation, Chicago, IL.
- **Estimating and Modeling Cumulative Exposure.** P. Williams, E RiskSciences, LLP, Boulder, CO.
- **Biological Integration of Exposures Across Routes.** L. Lowry, University of Texas, Tyler, TX.
- **The Growing View of the "Exposome".** M. Hoover, NIOSH, Morgantown, WV.
- **Cumulative Exposures—Mixtures Risk Assessment.** T. Armstrong, TWA8HR Occupational Hygiene Consulting, Branchburg, NJ.
- **Policy Impacts of Cumulative Exposure Assessment.** T. Morgan, USAF, Arlington, VA.
- **Panel Q&A.**
- **Closing Remarks.** T. Mukoda, USAF, Peterson AFB, CO.

PO 119

Hazards in the Community and Environment: Taking Industrial Hygiene into the Home

2:00 p.m.–5:00 p.m. » Convention Center, 203

Arranger and Moderator: S. Shepherd, University of Massachusetts-Lowell, Lowell, MA. **Monitors:** D. Mokadam, c/o K Longfield, PSI-Thailand, Washington, DC; W. Cameron, Seattle, WA.

2:00 p.m.

Award Presentation

2:20 p.m.

An Evaluation of the Health Outcomes of Green and Healthy Housing Rehabilitation. (127)

D. Jacobs, J. Breyse, S. Dixon, National Center for Healthy Housing, Washington, DC; W. Webber, University of Minnesota, Minneapolis, MN.

2:40 p.m.

Green Building: Finding a Better Way to Assure Indoor Air Quality. (128)

P. Sheehan, Exponent, Oakland, CA;

D. Dahlstrom, Exponent, Bellevue, WA.

3:00 p.m.

Quantitative Comparison of PM 2.5 Aerosol Measuring Devices in Residential Environments. (129)

H. Perez, M. Chin, Drexel University, Philadelphia, PA.

3:20 p.m.

Elevated Formaldehyde in GreenPoint-Rated Homes. (130)

L. Kincaid, T. Rohm, Industrial Hygiene Services, Saratoga, CA.

3:40 p.m.

Home Evaluation Study in South Florida. (131)

A. Chamorro, CIHES, Miami, FL; J. Gasana, South Florida Asthma Consortium, Fort Lauderdale, FL.

4:00 p.m.

Naturally Occurring Asbestos — Two Case Studies in California. (132)

R. Beall, Entek Consulting Group, Inc., Rocklin, CA.

4:20 p.m.

What's That Smell? Unanticipated Ammonia Emissions from Landfill Materials during Landfill Upgrades. (133)

E. Shamberger, Bureau Veritas, North America, Akron, OH.

4:40 p.m.

Surface Sanitizing: Prudent Public Health or Toxic Chemical Hazard? (134)

E. Light, Building Dynamics, LLC, Ashton, MD.

RT 118

Health-Care Ergonomics: Safe Patient and Resident Handling

2:00 p.m.–5:00 p.m. » Convention Center, 503

Arranger: C. Brigham, 1Source Safety and Health, Inc., Exton, PA. **Moderator:** P. Seeley, Ergonomic Solutions LLC, Wales, WI. **Monitors:** M. O'Reilly, New York State DOT, Binghamton, NY; R. Marklin, Marquette University, Milwaukee, WI.

Work-related musculoskeletal disorders (WMSD) associated with patient and resident handling continue to cause significant harm to health care workers, facilities, patients, and residents. They represent the largest single workers' compensation loss source with many other associated liabilities. A number of states have adopted safe patient

» Technical Program: Tuesday

handling standards, with a federal bill, H.R. 2381, known as the “Nurse and Health Care Worker Protection Act of 2009,” currently under consideration in the U.S. Congress. Speakers at this roundtable will address the recently enacted and proposed standards, unique risks associated with patient handling in home health care, the required components of a successful program, extensive initiatives underway in one state program, how to sustain success through innovation and involvement, and multi-facility implementation issues.

- **Safe Patient Handling Regulatory Update.** C. Brigham, 1Source Safety and Health, Inc., Exton, PA.
- **Unique Risks Associated with Patient Handling in Home Health Care.** A. Garg, University of Wisconsin, Milwaukee, WI.
- **Components of a Successful Safe Patient Handling Program.** K. Wilson, Hill-Rom, Batesville, IL.
- **PUSH for ... Quality Patient Care!** B. Stanley, NYS Department of Labor, Buffalo, NY.
- **The PEEPS (Patient, Environment, Equipment, Posture and Safety) Program for Safe Patient Handling.** C. Price, Christiana Care Health Services, Newark, DE.
- **WITHDRAWN.** R. Williamson, Ascension Health, Saginaw, MI.

RT 219

Notable Confined Spaces

2:00 p.m.–5:00 p.m. » Convention Center, 401

Arranger and Moderator: M. DeVany, DeVany Industrial Consultants, Vancouver, WA. **Monitors:** W. Lashbrook, DeVany Industrial Consultants, Vancouver, WA; J. Hodgson, General Industry Safety & Health Division, Saginaw, MI.

In this fifth annual confined spaces roundtable, National Confined Spaces Committee members and other seasoned confined space entry experts present various challenging confined spaces from their careers. These confined spaces contained multiple and various hazards—with some resulting in fatal accidents for the entrants. Safely entering and performing work in confined spaces requires broad knowledge and experience in occupational safety and health. These professionals will review hazards that, in some cases, turned the entry operations from safe to fatal. In other cases, they will explain how the fatal conditions were recognized and eliminated, or at least controlled to an acceptable degree, to protect the safety and health of the workers inside.

- **Fatal Fall in a Cooling Water Tank.** M. Palmer, EnSafe, Inc., Knoxville, TN.
- **Double Fatality in an Oil Holding Tank.** T. Krug, OSHA, Arlington Heights, IL.
- **Using a Single Instrument to Monitor Percent LEL for Heavy-Fuel Vapors and Hydrogen at the Same Time.** R. Henderson, GfG Instrumentation Inc., Ann Arbor, MI.
- **Unidentified Nitrogen in a Steam Vault.** P. Matuszko, Boston College, Chestnut Hill, MA.
- **Contractors Contaminate Large Engine Oil Tank.** W. Brown, Retired GM/Delphi, Fairborn, OH.
- **Cleaning Out a Contaminated Diesel Tank.** W. Brown, Retired GM/Delphi, Fairborn, OH.

RT 220

Integrating Sustainability into Your Organization: Business Case Studies

2:00 p.m.–5:30 p.m. » Convention Center, 403

Arranger: D. Martin, Genencor, Palo Alto, CA. **Moderator:** E. Quevedo, Paladin Law, Walnut Creek, CA. **Monitors:** B. Concoy, Genencor, Palo Alto, CA; M. Bernhart, True Blue Communications, Atlanta, GA.

Companies have begun to embrace the concept of sustainability and are looking to the EHS professional for leadership and guidance. Business leaders seek to understand how the implementation of a robust sustainability program will lead to innovation, profit and competitive advantage. This roundtable will feature speakers who represent diverse global organizations in manufacturing, services, and other sectors, ranging from companies just beginning the sustainability journey to those that have achieved significant integration. The discussion will address the essential steps to sustainability integration as well as strategies to engage key internal stakeholders, apply best practices, and avoid common pitfalls. Speakers will explore the path from the industrial hygiene or EHS function to sustainability—a rapidly emerging career opportunity.

- **Sustainability Leadership at Roche.** J. Wilson, Roche, Bolder, CA.
- **How Motorola Has Integrated Sustainability Practices across their Business.** B. Olson, Motorola, Libertyville, IL.
- **Setting Sustainability Strategy at Black and Decker.** L. Sedlak, Black and Decker, Lake Forest, CA.
- **The Roadmap Toward Sustainability Initiatives at IHS.** M. Johnson, IHS, Englewood, CA.
- **Implementing Corporate Sustainability at ProLogis.** S. Martinez, ProLogis, Denver, CO.
- **Integrating Sustainability at Applied Materials: Practical Strategies, Best Practices, and Lessons Learned.** A. Aigaonkar, Applied Materials, Inc., Austin, TX.

RT 221

Unusual Hazards in Laboratories

2:00 p.m.–5:30 p.m. » Convention Center, 405

Arranger and Moderator: L. Wong, University of California, Oakland, CA. **Monitor:** D. Hurley, CertainTeed Corporation, Winston-Salem, NC; P. Jensen, The Chubb Group, Minneapolis, MN.

Academic and research laboratories are diverse and unique environments which result in many unusual hazards. Recognizing, evaluating and controlling these hazards is challenging for EH&S professionals. This roundtable will address several unique occupational and environmental hazards in laboratory-type settings. Speakers will discuss the challenges presented for their unusual hazard(s) as well as methods implemented to control the hazard(s).

- **Air-Sensitive Chemicals: Safely Navigating the Challenges of These Useful Reagents.** E. Austin, Sigma-Aldrich, Milwaukee, WI.

- **Nitrous Oxide as a Tracer Gas in the ASHRAE 110-1995 Standard.** G. Knutson, Knutson Ventilation, Inc., Edina, MN.
- **Fume Hood Performance Testing with Simultaneous Use of Both Nitrous Oxide and Sulfur Hexafluoride through a Single ASHRAE Standard 110 Ejector.** M. Burke, Technical Safety Services, Inc., Berkeley, CA.
- **Airborne Carbonaceous Nanomaterials in the Workplace.** N. Jennerjohn, University of California, Los Angeles, Hayward, CA.
- **Lab Animal Allergen Exposure Assessment and Control.** M. Austin, University of Minnesota, Minneapolis, MN.
- **Managing Fugitive Mercaptan Odor in a Labs²¹ Analytical Laboratory.** P. Subramanian, University of Iowa, Iowa City, IA.

RT 222

Welding Exposure Reduction Controls

2:00 p.m.–6:00 p.m. » [Convention Center, 505](#)

Arranger: A. Siert, Xcel Energy, Denver, CO. **Moderator:** J. Spear, J.E. Spear Consulting, LP, Magnolia, TX. **Monitors:** F. Anderson, Zachry Construction, San Antonio, TX; S. Woods, Xcel Energy, Denver, CO.

Welders are one of the largest occupational exposure groups worldwide, and are by far the largest occupational group exposed to hexavalent chromium and manganese, air contaminants with potentially potent health effects. The carcinogenic potential of hexavalent chromium is regarded as particularly significant. Health effects have been studied for years with equivocal findings, due to confounding variables and the difficulty of exposure assessments. Exposure reduction controls including local exhaust ventilation, nozzle fume extraction, process change, and process and consumable modification have been studied intensively, and the new OSHA Hexavalent Chromium Standard requires, by May 2010, that engineering controls be utilized for exposure reduction control, where feasible. However, knowledge of the expected magnitude of exposures by process and alloy, the feasibility of particular controls in various applications and environments, and expected effectiveness of various exposure reduction methods are necessary for engineering control cost/benefit analysis and optimal selection.

- **Stainless Steel Gas Metal Arc Welding Short Circuit Mode Hexavalent Chromium, Manganese, and Fume Exposures.** D.L. Dechant, University of Alabama, Tuscaloosa, AL.
- **Application and Effectiveness of Local Exhaust Ventilation and Nozzle Fume Extraction for Welding Exposure Control.** M. Harris, Hamlin & Harris, Baton Rouge, LA.
- **Comparison of Welding Exposure Levels by Process with an Emphasis on Process Selection for Exposure Reduction.** A. Siert, Xcel Energy, Denver, CO.
- **The Feasibility of Reducing Welding Fume and Cr(VI) Exposure by Welding Process Changes.** J. Spear, J.E. Spear Consulting, LP, Magnolia, TX.
- **NIOSH Welding Hexavalent Chromium Fume Generation Study Results by Process.** M. Keane, NIOSH, Morgantown, WV.

- **Stainless Steel Welding in Construction: Hexavalent Chromium Exposure and Control.** J. Meeker, University of Michigan, Ann Arbor.
- **Construction Welding: Exposure Estimates Derived from Three Large Data Sources and Mathematical Modeling.** P. Susi, The Center for Construction Research and Training, Silver Spring, MD.

RT 223

Why Green Chemistry Matters

2:00 p.m.–6:00 p.m. » [Convention Center, 106](#)

Arranger: E. Stewart, Kaiser Permanente, Oakland, CA. **Moderator:** M. Wysong, IHS, Bellevue, WA. **Monitors:** E. Stewart, Kaiser Permanente, Oakland, CA; K. Trefethen, Kaiser Permanente, Pasadena, CA.

Are you seeing new, more environmentally preferable products on the shelf? It is likely that green chemistry is being deployed! Green chemistry is an approach to chemistry that, through the use of twelve guiding principles, reduces or eliminates the need for and generation of hazardous materials during the manufacture, design, and application of chemistry. This roundtable will explore what green chemistry means from the perspectives of academia, government, nongovernmental organizations, and industry and how these perspectives inform and are transforming the evaluation of the human health and environmental considerations, performance, and cost of traditional and alternative technologies, materials, and processes.

- **An Academic Perspective on Green Chemistry.** J. Warner, Beyond Benign, Woburn, MA.
- **A Governmental Perspective on Green Chemistry.** L. Sommer, EPA, Washington, DC.
- **A Nongovernmental Organization's Perspective on Green Chemistry.** L. Heine, Clean Product Action, Bellingham, WA.
- **An Industry Perspective on Green Chemistry.** A. Barnhart, Staples, Broomfield, CO.

PO 121

Aerosols

2:00 p.m.–6:00 p.m. » [Convention Center, 205](#)

Arranger and Moderator: A. Stefaniak, NIOSH, Morgantown, WV. **Monitors:** S. Paik, Lawrence Livermore National Laboratory, Livermore, CA; E. Reed, Liberty Mutual Insurance Co., Englewood, CO.

2:20 p.m.

Characterization and Evaluation of Performance of a Whole-Body Human Exposure Chamber. (144) L. Pieretti, Y. Hammad, University of South Florida, Tampa, FL.

2:40 p.m.

Output Variability of Metered Dose Inhalers (Puffers). (145) J. Kesavan, N. Mante, D. Schepers, J. Bottiger, U.S. Army, Aberdeen Proving Ground, MD.

» Technical Program: Tuesday

3:00 p.m.

Performance Evaluation of the Newly Developed Personal Bioaerosol Samplers. (146) W. Su, Y. Cheng, Lovelace Respiratory Research Institute, Albuquerque, NM.

3:20 p.m.

High Volume Air Sampling for Viral Aerosols: A Comparative Evaluation. (147) C. Cooper, J. Slagley, AFIT/ENV, WPAFB, OH; J. Lohaus, USAF School of Aerospace Medicine, Brooks City Base, TX.

3:40 p.m.

Evaluation of High Flow Rate Samplers for Respirable Particles. (148) T. Lee, S. Kim, W. Chisholm, M. Harper, NIOSH, Morgantown, WV.

4:00 p.m.

A Study of Wood Dust Exposure during Table Saw Wood Cutting Operations. (149) S. Paik, Lawrence Livermore National Laboratory, Livermore, CA.

4:20 p.m.

Field Evaluation of Different Large Particle Samplers for Wood Dust. (150) M. Harper, T. Lee, J. Slaven, NIOSH, Morgantown, WV.

4:40 p.m.

Emissions from the Exterior Surfaces of Newly Assembled Automobiles. (151) W. Heitbrink, Coralville, IA; P. Kostle, University of Iowa, Iowa City, IA.

5:00 p.m.

Real-Time Monitoring of Arsenic, Cadmium, Copper, and Lead Concentrations in Copper Smelter Particulates Using a TSI 8520 DustTrak, a Haz-Dust EPAM-5000, and a Grimm 1.109. (152) J. Freestone, J. McDonald, J. Mecham, L. Pahler, R. Larson, University of Utah, Salt Lake City, UT.

5:20 p.m.

Filtration Testing of Respirators against a Variety of Bioaerosols. (154) M. Lore, T. Brown, T. Sambol, S. Hinrichs, University of Nebraska, Omaha, NE; J. Sebastian, A. Viner, 3M Company, St. Paul, MN.

5:40 p.m.

Control of Fugitive Particles Released in the Air During the Nano Powder Bagging Process. (155) S. Lee, W. Ko, C. Liao, Feng Chia University, Taichung, Taiwan; C. Chen, Institute of Occupational Safety and Health, Taipei County, Taiwan; C. Tsai, National Chiao Tung University, Hsinchu, Taiwan.

CR 312

Zombie Walkers: Safety Initiative to Awaken Your Employees

3:00 p.m.–4:00 p.m. » [Convention Center, 105](#)

Presenter: S. Laughlin, CJ&K Training Services, Lindenhurst, IL. **Moderator:** D. Larson, Lawrence Livermore National Laboratory, Livermore, CA.

The world is full of them. You probably know or work with a few. These are the same people that cause your OSHA recordable chart to look like the ascent of Everest. Change is possible, but it requires change on your part first. This seminar will demonstrate some creative programs, activities, incentives, and concepts that have been initiated by EH&S professionals from companies in a variety of industries throughout the country.

CR 313

Mining and Smelting Implications on Environmental and Health Risk in the Andes of Peru

3:00 p.m.–4:00 p.m. » [Convention Center, 109](#)

Presenters: D. Sterling, University of North Texas, Fort Worth, TX; F. Serrano, Saint Louis University, St. Louis, MO. **Moderator:** G. Houvener, Washington, DC.

Contaminants from mining processes in the Mantaro River Basin of Peru, including the lead smelter in La Oroya, have an impact on health and environmental quality. Results from exposure studies in La Oroya and a river basin monitoring program include lead, arsenic, cadmium and other metals in air, water and soil; SO₂, NO_x and O₃ in air; biological contaminants in agricultural and drinking water; and biological measures of residents. The speakers will present results and discuss implications and policy impact.

CR 314

Soapbox Safety

3:00 p.m.–4:00 p.m. » [Convention Center, 201](#)

Presenter: P. Karol, ARAMARK, Romansville, PA.

A practical safety management system designed to establish a safety culture. Geared to companies in the initial stages of developing a safety culture. The speaker will relate to the audience with personal experiences and stories to teach a lesson about developing a practical safety management system. The title is an expression coined by the speaker to define the safety culture of a company he worked with as a frontline supervisor and safety manager.

CR 315

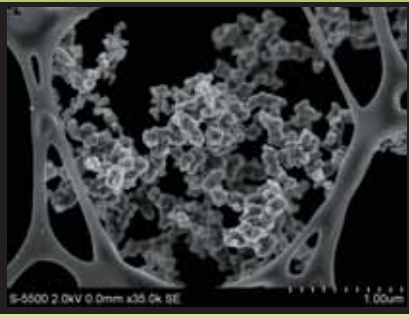
Environmentally Conscious Design

3:00 p.m.–4:00 p.m. » [Convention Center, 113](#)

Presenter: E. Madsen, Extended Producer Responsibility, Inc., Canton, MI. **Moderator:** G. McConnell, Washington, DC.

Environmentally conscious design (ECD) is the inclusion of environmental life cycle thinking into a company's overall product and process design. ECD supports product stewardship, sustainability, extended producer responsibility, design for the environment, international regulations (RoHS, WEE, REACH) and corporate social responsibility. There are two international standards on ECD: IEC 62430 and ISO 14006 (still being written), which correlates ECD with international standards such as OHSAS 18001, ISO 14001, ISO 62430 and the ISO labeling and life cycle standards.

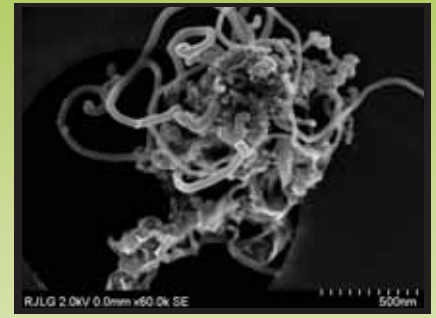
The findings and conclusions in the National Institute for Occupational Safety and Health abstract presentations have not been formally disseminated by the National Institute for Occupational Safety and Health and should not be construed to represent any agency determination or policy.



Secondary electron image of acetylene carbon black material supported on a lacy carbon substrate



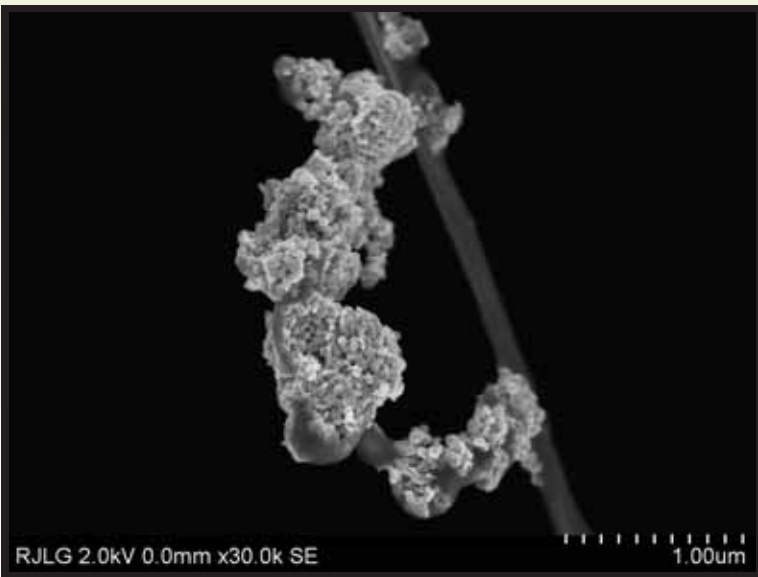
Secondary electron image illustrating engineered silver nanoparticles utilized in research focusing on battery materials



Secondary electron image of an aggregate of carbon nanotubes held on a holey carbon support

Nanotechnology

Seeing is Believing



5 nm TiO₂ nanoparticle agglomeration

- Control banding strategy support
- Nanoparticle release studies
- Background, source, and worker exposure assessment
- Multi-analytical approach for air and bulk samples
 - Verification by high-resolution electron microscopy
- Risk classification

Visit us at the AIHce 2010 Expo to sign up to win an iPod Touch!

Booth Y-618



Comprehensive, Full Service
Industrial Hygiene Laboratory

RJ LeeGroup, Inc.

www.rjlg.com • 1 - 800 - 860 - 1775

» At-a-Glance: Wednesday

Wednesday, May 26

7:30 a.m.–3:00 p.m.

Press Room

Convention Center, 303

7:30 a.m.–4:00 p.m.

Registration

Convention Center, Lobby

7:30 a.m.–5:00 p.m.

Volunteer Collaboration Café

Convention Center, Grand Concourse

7:30 a.m.–6:30 p.m.

Coat and Luggage Check

Convention Center, 101

Speaker Ready Room

Convention Center, 302



8:00 a.m.–9:00 a.m.

General Session: New Frontiers in Science and Practice

David Michaels, PhD, MPH,
Assistant Secretary of Labor,
OSHA, Washington, DC and

John M. Howard, MD, MPH, JD, Director, NIOSH,
Washington, DC

Convention Center, Wells Fargo Theatre

8:00 a.m.–4:00 p.m.

Denver City and Restaurant Information

Convention Center, Lobby

8:30 a.m.–11:30 a.m.

Spouse and Guest Hospitality Center

Hyatt Regency, Agate A

9:00 a.m.–Noon

TT-07 Rocky Mountain Metal Container

Convention Center, departs South Entrance
Board bus by 8:45 a.m.

9:00 a.m.–1:00 p.m.

Poster Sessions

Convention Center, Expo, Hall F

Poster Session 405 –Student

Authors present 10:00 a.m.–Noon

9:00 a.m.–1:30 p.m.

Visit the Expo!

Convention Center, Halls A and F

Daily Prizes, Special Displays, Cyber/Message Centers, Restaurants, Lounges, Expo Theater

No sessions 9:00 a.m.–10:00 a.m. and Noon-1:00 p.m.

Posters close at 1:00 p.m.

9:00 a.m.–2:00 p.m.

AIHA® CareerAdvantage Development Fair 2010

Convention Center, Hall F

9:00 a.m.–5:30 p.m.

Multimedia Downloads and DVDs

Convention Center, Lobby

Exhibitor Product Demos and Presentations

9:30 a.m.–1:00 p.m. | Expo Theater, Hall F

See presentation descriptions on
pages 72 and 78.

NEW!

9:30 a.m.

Using the ChemPro100i for Real-Time
Detection of Hard-to-Measure Toxic Industrial Chemicals
(TICs), Envionics USA

10:00 a.m.

The Radiation Alert Sentry Alarming Dose/Rate Meter,
S.E. International, Inc.

Noon

Safety Management Systems' Best Practices Introducing
Industrial Hygiene Modules, Safety Management
Systems, Inc.

12:30 p.m.

A Quantum Leap in Powder Weighing Safety and
Efficiency—Quantos™ Automated Powder Dosing
Solution from METTLER TOLEDO, Mettler-Toledo, Inc.

10:00 a.m.–11:00 a.m.

CR 316 Transporting Dangerous Goods: Compliance Management

Convention Center, 203

CR 317 Implementing Electrical Safety

Convention Center, 207

CR 318 Minimizing the Risk of Worker Falls in Flat-Bed Trailer Applications

Convention Center, 109

CR 319 Safety Culture and Motivation

Convention Center, 105

10:00 a.m.–11:30 a.m.

Ask the Expert: Drs. David Michaels and John M. Howard

Convention Center, 401

10:00 a.m.–Noon

PO 122 Nanotechnology

Convention Center, 106

PO 123 Current Topics in Occupational Health

Convention Center, 403

PO 124 Communication and Training

Convention Center, 201

RT 224 Biological Safety Issues in Research and Pharmacological Settings

Convention Center, 405

Value Strategy Session 2: AIHA® Value Strategy Session on Case Studies

Convention Center, 210

PO 125 Methodologies for Exposure Assessment

Convention Center, 505

PO 126 Computer Applications

Convention Center, 113

10:00 a.m.–12:30 p.m.

RT 225 Developments in Real-Time Detection Systems

Convention Center, 501

RT 226 Enhancing the Practice of Industrial Hygiene through Data Management Systems and Tools

Convention Center, 503

RT 227 Radiation Safety Program Issues and Answers

Convention Center, 205

RT 228 Unintended Consequences: Occupant Exposures in Green Buildings

Convention Center, 112

10:00 a.m.–5:00 p.m.

Social Tours Desk

Convention Center, Lobby

Noon–1:00 p.m.

Cummings Award Lecture

Convention Center, 401

Noon–1:00 p.m.

Luncheon Discussions—Volunteer Groups’ “Tech Talks”

Convention Center, Expo, Hall A

Noon–1:30 p.m.

Unsolved IH Mysteries Workshop

Convention Center, 407

1:00 p.m.–2:00 p.m.

CR 320 Preventing Slips, Trips and Falls

Convention Center, 201

1:00 p.m.–3:00 p.m.

Emerging Issues Session 2: New AIHA® Initiatives: Guideline Foundation and Strategic Standards Strategy Development

Convention Center, 203

RT 229 Environmental Lead Federal Programs Update

Convention Center, 205

RT 230 Perspectives on Preparation for the CIH Exam

Convention Center, 109

RT 231 Respirator Use During 2009 H1N1 Influenza Pandemic

Convention Center, 112

1:00 p.m.–3:30 p.m.

RT 232 New Frontiers in the Practice of Industrial Hygiene in the Oil and Gas Industry

Convention Center, 403

RT 233 Asbestos Update: Still a Hazard After All These Years

Convention Center, 105

1:00 p.m.–4:00 p.m.

Science Symposium: Current Research Efforts Addressing Skin Exposure Hazards

Convention Center, 501

PO 127 Development and Evaluation within the Realm of Industrial Hygiene Sampling and Analysis

Convention Center, 207

PO 128 Case Studies in Indoor Environmental Quality

Convention Center, 106

RT 234 Culture in Construction: What Is It? How Can It Be Measured and Improved?

Convention Center, 405

1:00 p.m.–4:30 p.m.

RT 235 Worker Fatigue Roundtable

Convention Center, 503

RT 236 Glen Williamson Forum: OSHA's Most Interesting Health Cases, 2007–2009

Convention Center, 505

ST-05 The Sweet Life

Convention Center, departs South Entrance Board bus by 12:45 p.m.

1:00 p.m.–5:00 p.m.

ST-06 Rocks and Ridges

Convention Center, departs South Entrance Board bus by 12:45 p.m.

TT-09 The Edgar Mine, Colorado School of Mines

Convention Center, departs South Entrance Board bus by 12:45 p.m.

3:00 p.m.–4:00 p.m.

CR 321 Conducting Effective Safety Inspections

Convention Center, 113

5:00 p.m.–6:00 p.m.

CR 322 Standardized Approach to the "Green" Building Decommissioning Process

Convention Center, 201

5:00 p.m.–7:00 p.m.

PO 129 Personal Protective Clothing and Equipment

Convention Center, 113

» At-a-Glance: Wednesday

5:00 p.m.–7:30 p.m.

RT 237 Health Hazard and Control Banding Strategies and Applications in the Absence of OELs
Convention Center, 106

RT 238 IH Sampling Media: Caveat Emptor

Convention Center, 109

5:00 p.m.–7:40 p.m.

PO 130 Beryllium Health and Safety Research and Case Studies

Convention Center, 105

6:40 p.m.

ST-07 Colorado Baseball

Exchange voucher/purchase ticket at Registration by 5:00 p.m. Transportation on your own.

AIHA®

7:00 a.m.–8:00 a.m.

Volunteer Groups' Joint Meeting

Hyatt Regency, Capitol 4

Members should attend the joint meeting scheduled on the day of their committee meeting. Breakfast begins at 6:30 a.m. Individual committee meetings follow.

8:00 a.m.–10:00 a.m.

Academic SIG Meeting

Hyatt Regency, Agate B

Biological Monitoring Committee Meeting

Hyatt Regency, Quartz A

Consultants SIG Business Meeting

Hyatt Regency, Mineral B

Engineering Industry SIG Meeting

Hyatt Regency, Granite C

Healthcare Working Group Meeting

Hyatt Regency, Capitol 3

Laboratory Health and Safety Committee Meeting

Hyatt Regency, Capitol 2

Law Committee Meeting

Hyatt Regency, Mineral D

Management Committee Meeting

Hyatt Regency, Mineral E

Noise Committee Meeting

Hyatt Regency, Mineral F-G

Occupational Epidemiology Committee Meeting

Hyatt Regency, Mineral C

Real-Time Detection Systems Committee Meeting

Hyatt Regency, Capitol 1

Student and Early Career Professionals Committee Meeting

Hyatt Regency, Mineral A

7:00 a.m.–9:00 a.m.

Career and Employment Services Committee Meeting

Hyatt Regency, Marble

8:00 a.m.–9:30 a.m.

Pharmaceutical Round Robin Committee Meeting

Convention Center, 208

9:30 a.m.–11:00 a.m.

AIHA® Past Presidents' Breakfast (by invitation)

Hyatt Regency, Presidential Suite

2:00 p.m.–3:00 p.m.

Vapor Intrusion Project Team

Convention Center, 202

3:00 p.m.–5:00 p.m.

Value Strategy Project Team

Convention Center, 208

4:00 p.m.–6:00 p.m.

Permanent Conference Committee Meeting

Convention Center, 206

6:30 p.m.–8:00 p.m.

AIHA® President's Reception (by invitation)

Hyatt Regency, Centennial D

Ancillary

1:00 p.m.–4:00 p.m.

Department of Homeland Security Health and Safety Seminar

Hyatt Regency, Mineral A

1:00 p.m.–5:00 p.m.

Railroad Industrial Hygiene Forum sponsored by American Association of Railroads

Hyatt Regency, Mineral F

1:30 p.m.–5:30 p.m.

Forest Products Industrial Hygiene Forum sponsored by International Paper Company and NCASI

Hyatt Regency, Mineral A

2:00 p.m.–5:00 p.m.

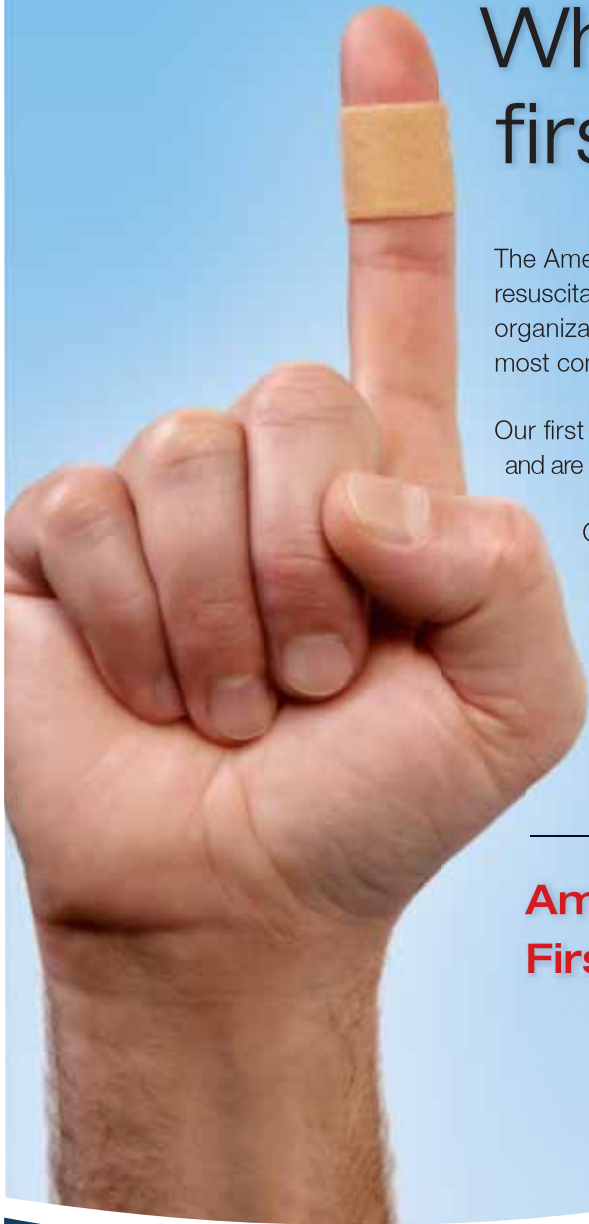
Newmont Mining

Hyatt Regency, Summit 25

5:30 p.m.–7:30 p.m.

University of South Florida Alumni & Friends Reception

Hyatt Regency, Agate A



Where we rank in first aid training.

The American Heart Association is the originator of the official resuscitation and first aid guidelines used by all other training organizations. Our **Heartsaver® First Aid Courses** offer the most comprehensive first aid training in the industry.

Our first aid courses are designed to meet **OSHA guidelines** and are available **online**, in a **classroom setting**, and in **Spanish**.

Our proven methods of hands-on instruction will give your **Occupational and Environmental Health & Safety Personnel** the confidence and skills to handle a variety of emergencies.

Unfortunately, accidents happen. When they do, your OEHS Personnel will be trained by the trusted leader in first aid training.

**American Heart Association:
First In First Aid.**

Learn more about quality First Aid, CPR, AED,
and Bloodborne Pathogens training:

877-AHA-4CPR (877-242-4277)
www.AmericanHeart.org/workplace

American Heart
Association 
Learn and Live

PLEASE VISIT US AT BOOTH # 615

GENERAL SESSION

8:00 a.m.–9:00 a.m.
Convention Center,
Wells Fargo Theatre

The AIHce Morning Show New Frontiers in Science and Practice

Host

Lisa M. Brosseau, ScD, CIH
AIHce Co-chair
ACGIH® Vice Chair

Guests

David Michaels, PhD, MPH
Assistant Secretary of Labor
OSHA
Washington, DC

John M. Howard, MD, MPH, JD
Director
NIOSH
Washington, DC



LISA M. BROSSEAU



DAVID MICHAELS



JOHN M. HOWARD

Join Dr. Lisa Brosseau and her guests, Dr. David Michaels and Dr. John Howard, for a moderated, thought-provoking discussion about current and future OEHS issues. The audience will have the opportunity to twitter questions during the session (use the hashtag #aihcesession). Don't miss this unique opportunity to hear from both OEHS leaders, in one session, about issues that impact you every day.

The "show" continues in an Ask the Expert session with Dr. Michaels and Dr. Howard at 10:00 a.m. in room 401 of the convention center.

This session is sponsored by



United Phosphorus Limited

NEW!

Exhibitor Product Demos and Presentations 9:30 a.m.–10:30 a.m. | Expo Theater, Hall F

9:30 a.m.

Using the ChemPro100i for Real-Time Detection of Hard-to-Measure Toxic Industrial Chemicals (TICs), Environics USA

The ChemPro™100i handheld gas/vapor detector protects workers from a wide variety of TICs that are difficult to detect in real time with any other handheld detector. Environics' groundbreaking aspirated IMS technology forms the heart of our multi-sensor detector, providing quick response, high sensitivity and low cost of ownership. Difficult to detect chemicals like Acetonitrile, Carbon Disulfide, Hydrogen Fluoride and TDI are just a few examples of the chemicals that the ChemPro™100i can alarm for in real time. The ChemPro™100i can be "trained" to alarm for a new chemical or mixture of chemicals.



Expo Theater sponsored by Colorado Safety Association

10:00 a.m.

The Radiation Alert Sentry Alarming Dose/Rate Meter, S.E. International, Inc.

The Radiation Alert® Sentry Personal Alarming Dosimeter and Rate Meter is designed to ensure personal safety for personnel working in occupations with potential X-ray or Gamma Exposure. The pocket-sized unit has a built-in memory for recording and tracking exposure. The unit comes preset to alarm at 500mR dose and .5R/hr dose rate. The optional Sentry Software offers the ability to change preset alarm and warning levels plus download exposure data for tracking and incident re-creation with time and date stamp. We will show how simple the Sentry is to use, how to download data, and how to change settings.

CR 316**Transporting Dangerous Goods: Compliance Management**10:00 a.m.–11:00 a.m. » [Convention Center, 203](#)**Presenter:** I. Powell, 3E Company, Carlsbad, CA.

This presentation will examine the basics of the DOT's hazardous materials regulations and provide attendees with guidance on managing compliance. Along with an overview of the regulations and the regulatory process, participants will learn the basics of successful hazmat shipping.

Topics include:

- Checklist for a successful hazmat shipping program
- Handling chemical inventory and classification
- Providing proper documentation, including material safety data sheets
- Handling emergency response and reporting
- Responding to investigations and enforcement

CR 317**Implementing Electrical Safety**10:00 a.m.–11:00 a.m. » [Convention Center, 207](#)

Presenters: H. Hoagland, D. Drobnick, e-Hazard, Louisville, KY. **Moderator:** P. Brogan, Wayne State University, Dearborn Heights, MI.

The presentation will offer suggestions on how to logically establish and implement a comprehensive electrical safety program based upon NFPA 70E 2009 Edition. The topics covered include:

- Shock and flash hazard analysis
- Current limitation
- Test instruments
- Labeling
- Employee training
- Safe work practices
- Permit to work system
- Personal protective equipment

This presentation will help attendees understand what is required to make their electrical safety program successful.

CR 318**Minimizing the Risk of Worker Falls in Flatbed Trailer Applications**10:00 a.m.–11:00 a.m. » [Convention Center, 109](#)

Presenters: D. Wilbanks, R. Kilpatrick, Gerdau Ameristeel, Tampa, FL.

The risk of serious injury from flat-bed trailer falls is a critical but often “forgotten” exposure. It is the orphan disease of fall prevention hazards; workers die, but statistically few when compared as a subset to all worker fall fatalities. Regulations have limited reach and controlling the hazard is often considered not feasible. This presentation defines the scope of the problem and its underlying challenges. It also portrays lessons learned and practical “solutions” that can be broadly considered and applied.

CR 319**Safety Culture and Motivation**10:00 a.m.–11:00 a.m. » [Convention Center, 105](#)

Presenters: M. Levitsky, O. Malik, ECOH Management, Inc., Mississauga, ON, Canada. **Moderator:** R. Filip, Golder Associates, Ltd., Burnaby, BC, Canada.

This session will explore the state of knowledge about organizational culture and approaches to motivating safety. Drawing from practical experience and innovative ideas in a range of disciplines, it will present an overview of safety culture principles and how culture is measured. It will go on to present recent concepts in social marketing and behavioral economics, and how they can be used to motivate change. It will be highly interactive, incorporating opportunities for participants to share their experience and ideas.

Ask the Expert**With Drs. David Michaels and John Howard**10:00 a.m.–11:30 a.m. » [Convention Center, 401](#)**AIHA® Value Strategy Session on Case Studies**

Sponsored by the Academy of Industrial Hygiene

10:00 a.m.–Noon » [Convention Center, 210](#)

Moderator: D. Doganiero, US Army, Aberdeen Proving Ground, MD **Speakers:** J. Allen, US Army, Aberdeen Proving Ground, MD; E. Biddle, NIOSH, Morgantown, WV; D. Eherts, Sikorsky Aircraft Corporation, Stratford, CT; C. Ulriksen, ESIS, Inc., Philadelphia, PA.

The AIHA® Value Strategy was developed to aid in the quantification and communication of the value of industrial hygiene programs and interventions can bring to business. This session provides an overview of AIHA's Value Strategy model, which serves as the basis for a workbook that will be published by AIHA®. Participants will hear about additional successful approaches to identifying and communicating the value of industrial hygiene. Come and learn how others have used strategies to garner support for programs and activities.

PO 122**Nanotechnology**10:00 a.m.–Noon » [Convention Center, 106](#)

Arranger: R. Lally, CA. **Moderator:** M. Rosenow, Argonne National Lab, Argonne, IL. **Monitors:** D. Matz-Siegel, Los Alamos National Lab, Los Alamos, NM; M. Sczepanski, Dow Chemical, Midland, MI.

10:00 a.m.

Nanotechnology Working Group: Annual Chairman's Report on State-of-the-Science. (156) D. Ewert, OSO BioPharmaceuticals Manufacturing, LLC, Albuquerque, NM.

10:20 a.m.

Evaluation of Engineering Control to Airborne Nanoparticle Emission during Production of Nanocomposite. (157) S. Tsai, D. White, C. Huang, C. Barry, M. Ellenbecker, University of Massachusetts, Lowell, MA; C. Huang, C. Tsai, National Chiao Tung University, Hsinchu, Taiwan.

10:40 a.m.

Particle Generation during Nanocomposite Recycling. (158) P. Raynor, J. Ingraham, B. Olson, University of Minnesota, Minneapolis, MN; J. Spangenberg, Argonne National Laboratory, Argonne, IL; J. D'Arcy, J. Dasch, United States Council for Automotive Research, Southfield, MI.

11:00 a.m.

Control of Nanoparticle Exhaust from Production of Multi-walled Carbon Nanotubes: Filtration System Performance Evaluation. (159) S. Tsai, M. Ellenbecker, University of Massachusetts, Lowell, MA; M. Hofmann, M. Hallock, J. Kong, Massachusetts Institute of Technology, Cambridge, MA.

11:20 a.m.

Wide Range Nanoparticle Sampler. (160) D. Rodier, S. Rowley, Particle Measuring Systems, Boulder, CO; B. Gorbunov, H. Gnewuch, R. Muir, Naneum, Canterbury, United Kingdom.

11:40 a.m.

Mathematical Modeling of Cellular Transport Phenomena in a PBPK Model for Nanoparticle Exposures. (161) D. Yamamoto, M. Shelley, Air Force Institute of Technology, Dayton, OH.

PO 123

Current Topics in Occupational Health

10:00 a.m.–Noon » Convention Center, 403

Arrangers: J. Ingram, Lawrence Berkeley National Laboratory, Berkeley, CA; M. Krotenberg, Rimkus Consulting Group, Inc., Phoenix, AZ; E. Liberda, AL. **Moderator:** L. Swenson, Veritox, Portland, OR. **Monitors:** C. Richard, Environmental Profiles, Inc., Catonsville, MD; C. Robbins, Veritox, Inc., Redmond, WA.

10:00 a.m.

Penetration Patterns of 1,6-Hexamethylene Diisocyanate Monomer in Human Skin. (162) J. Thomasen, L. Nylander-French, University of North Carolina, Chapel Hill, NC.

10:20 a.m.

Low Molecular Weight (LMW) Chemical Sensitizers: What Are the Relevant Risk Factors? (163) T. Morris, Morris Innovative IH&S Solutions, Cincinnati, OH.

10:40 a.m.

The Proposal for Calculating Occupational Exposure Limits for Volatile Organic Compounds Acting as Sensory Irritants on the Basis of Their Physicochemical Properties. (164) M. Jakubowski, Institute of Occupational Medicine, Lodz, Poland.

11:00 a.m.

A Review of Studies and a Meta-Analysis of Mesothelioma Mortality in the Petroleum Refining Industry. (165) C. Chen, M. Anderle de Saylor, D. Paustenbach, ChemRisk, Inc., San Francisco, CA.

11:20 a.m.

Domestic Asbestos Exposures: A Review of Epidemiologic and Exposure Data. (166) E. Goswami, Exponent, Oakland, CA; V. Craven, Exponent, Santa Rosa, CA; D. Dahlstrom, Exponent, Bellevue, WA; F. Mowat, Exponent, Menlo Park, CA.

11:40 a.m.

Hobby Poisons. (167) R. Wabeke, Wayne State University, Detroit, MI; L. Beers, Take Care Health Systems, Rawsonville and Milan, MI.

PO 124

Communication and Training

10:00 a.m.–Noon » Convention Center, 201

Arranger and Moderator: O. Zahn, Lancaster, CA. **Monitors:** J. Jarrell, University of Cincinnati, Cincinnati, OH; J. Dimos, Oak Park, IL.

10:00 a.m.

Communicating Public Health Messages through an Understanding of U.S. Regional Cultures. (168) M. Hall, C. Achutan, University of Nebraska, Omaha, NE.

10:20 a.m.

Using the Tools of Social Media to Engage and Provide Reliable Safety and Health Information to Public and Professional Audiences: Is Myspace Really Our Space? (169) M. Lum, NIOSH, Washington, DC.

10:40 a.m.

Best Practices for New Worker Orientation and Training. (170) J. Chappel, CCOHS, Hamilton, ON, Canada.

11:00 a.m.

Growing the Industrial Hygiene Curriculum. (171) D. Breeding, Texas A&M University, College Station, TX.

11:20 a.m.

Development of an Exposure Monitoring Plan Reduces Costs and Results in Better Workplace Assessment at a Wood Treatment Facility. (172) K. Norton, Golder Associates Inc., Irvine, CA.

11:40 a.m.

California Experience with Heat Stress Compliance. (173) S. McCarthy, J. Hicks, Exponent, Oakland, CA.

RT 224

Biological Safety Issues in Research/Pharmacological Settings

10:00 a.m.–Noon » Convention Center, 405

Arranger and Moderator: P. Hauck, Mount Sinai School of Medicine, New York, NY. **Monitors:** R. Strode, Chemistry & Industrial Hygiene, Inc., Wheat Ridge, CO; P. Dulaney, Applied Environmental, Cary, NC.

This session will present information on various issues that present challenges to health and safety professionals in biological research or pharmacological research laboratories. Many issues lend themselves to industrial hygiene approaches to recognition, assessment, evaluation and control.

- **A Multidisciplinary Approach to Address the Biosafety Training Challenges at University of Colorado, Boulder.** D. Donnell, University of Colorado, Boulder, CO.

- **Building a Comprehensive Occupational Health and Safety Program in Academia.** A. Zimmer, Colorado State University, Fort Collins, CO.
- **BSL-3 Training for Select Agent and Non-select Agent Labs.** R. Ellis, Colorado State University, Fort Collins, CO.
- **Management of Bio-Safety in a Fast-Paced R&D Environment: A Case Study, or Zen and the Art of Bio-Safety Management.** J. Lieberman, Array BioPharma Inc., Boulder, CO.
- **Under the Big Tent: Developing a Global Occupational Health and Safety Program for a Health Sciences University Research and Academic Setting.** T. Stinnett, University of Colorado, Aurora, CO.

PO 125

Methodologies for Exposure Assessment

10:00 a.m.–Noon » Convention Center, 505

Arranger: M. Vadali, University of Minnesota, Minneapolis, MN. **Moderator:** K. Murray-del Aguila, BP, Houston, TX. **Monitors:** C. Willey, Sigma-Aldrich, St. Louis, MO; R. Rogers, U.S. Army Center for Health Promotion and Preventive Medicine, Bel Air, MD.

10:00 a.m.

Retrospective Exposure and Risk Assessments: Innovative Methods for Assessing Duration and Frequency. (175) R. Strode, J. Rasmuson, E. Rasmuson, D. Hall, Chemistry & Industrial Hygiene, Inc., Wheat Ridge, CO.

10:20 a.m.

TWA or STEL? A Measurement Strategy for Determining VOC Exposure During Use of a Mixed-hydrocarbon Solvent. (176) M. Plisko, J. Spencer, Environmental Profiles, Inc., Columbia, MD.

10:40 a.m.

Welding, Manganese Exposures, and an OEL of 0.02 mg/m³. (177) D. Cox, D. Kahane, T. Chen, Forensic Analytical Consulting Services, Hayward, CA.

11:00 a.m.

The Basis for the Silica Occupational Exposure Standard in the United States: The Barre, VT Granite Worker Story. (178) M. Catlin, SEIU, Washington, D.C.

11:20 a.m.

Performance Validation of a Downflow Booth with Surrogate Monitoring at a Pharmaceutical Equipment Manufacturer in Singapore. (179) X. Lin, Esco Micro Pte Ltd, Singapore, Singapore; T. Mehta, International Safety Systems, Inc., Washingtonville, NY.

11:40 a.m.

Residential Pesticide Exposure Assessment Methodology: A Case Study. (180) M. Lloyd, U.S. EPA, Washington, D.C.

WITHDRAWN:

Occupational Exposure to Formaldehyde: Which Environmental Monitoring Methodology to Select to Perform Exposure Assessment? (174) S. Viegas, M. Gomes, ESTESL, Lisbon, Portugal; J. Prista, ENSP - Universidade Nova de Lisboa, Lisbon, Portugal.

PO 126

Computer Applications

10:00 a.m.–Noon » Convention Center, 113

Arranger: T. Carraway, U.S. Department of State, Washington, DC. **Moderator:** C. Metzler, BP America Production, Houston, TX. **Monitors:** E. Rasmuson, Chemistry & Industrial Hygiene Inc., Wheat Ridge, CO; J. Svagr, New York Blood Center, New York, NY.

10:00 a.m.

In-house Management of Control Charts Following Requirements of AIHA® Laboratory Accreditation. (181) D. Drolet, M. Barrette, G. Marchand, IRSST, Montreal, QC, Canada.

10:20 a.m.

Stop the Paper Chase: Developing a Web-Based Industrial Hygiene Monitoring Database System. (182) R. Hutton, Allergan, Irvine, CA.

10:40 a.m.

DOEHRS-IH: Civilian and Soldier Exposure Monitoring. (183) L. Kneten, K. Wisniewski, R. Rogers, USACHPPM, Aberdeen Proving Ground, MD.

11:00 a.m.

Performance Metrics: Making Them Painless, an Army Lesson. (184) K. Wisniewski, S. Parker-Monk, USACHPPM, Gunpower, MD.

11:20 a.m.

Validation of CFD Model by Linear Diffusion. (185) J. Rasmuson, D. Hall, A. Duane, T. Peveto, Chemistry & Industrial Hygiene, Inc., Wheat Ridge, CO.

11:40 a.m.

Model to Predict Airborne Exposure to Mercury from Broken Compact Fluorescent Lights. (187) J. Kominsky, F. Hall, Environmental Quality Management, Inc., Cincinnati, OH.

WITHDRAWN

(186) R. Pourdarvish, S. Khajehnajafi, H. Shah, SAFER Systems, Camarillo, CA.

RT 225

Developments in Real-Time Detection Systems

10:00 a.m.–12:30 p.m. » Convention Center, 501

Arranger and Moderator: C. Rennix, Navy and Marine Corps Public Health Center, Williamsburg, VA. **Monitors:** J. Engel, University of West Virginia, Morgantown, WV; G. Cook, Uniformed Services University of the Health Sciences, Norfolk, VA.

This roundtable will discuss emerging and standard technologies in real-time detection systems, especially instruments used in the everyday practice of industrial hygiene. The session will also update developments in the RTDS Committee efforts to create a standardized specifications sheet for the performance of RTDS equipment.

- **Proposal for a Standardized Specification Sheet for Real-Time Detection Systems, Driven by Market Demand.** M. Roe, 3M, Cottage Grove, MN.
- **Assessing and Compensating for the Impact of Humidity on the Accuracy of Real-Time Data Obtained from PIDs.** G. Hewitt, ION Science, LLC, Waterbury, VT.

» Technical Program: **Wednesday**

- **GAPS in Understanding, Knowledge and Application of Direct Read Instruments by First Responders.** D. Bolstad-Johnson, Phoenix Fire Department, Phoenix, AZ.
- **The Proper Use of Detector Tubes.** E. Ligus, Draeger Safety, Inc., Pittsburgh, PA.

RT 226

Enhancing the Practice of Industrial Hygiene through Data Management Systems and Tools

10:00 a.m.–12:30 p.m. » [Convention Center, 503](#)

Arranger: M. Melkonian, Medgate, Inc., Toronto, ON, Canada.

Moderator: M. Groh, GE Consumer Home Services, Louisville, KY. **Monitors:** K. Diep, American Airlines, Fort Worth, TX; L. Hong, Canadian Centre for Occupational Health and Safety, Hamilton, ON, Canada.

Electronic data management systems and tools play a critical role in the successful practice of industrial hygiene. They provide the foundation necessary to successfully store, manage and communicate occupational health information. This roundtable presents lessons learned and practical tips related to design and implementation of electronic data management systems in a global environment. The session will also present tools that can help prove IH value and maximize communication within the industrial hygiene community.

- **Design and Implementation of a Computer-Based Industrial Hygiene Risk Assessment Tool at a Fortune 500 Company.** K. Krueger, General Electric Company, Fairfield, CT; R. Hosein, General Electric Company, Mississauga, ON, Canada.
- **Lessons Learned from Implementation of a Computer-Based Industrial Hygiene Risk Assessment Tool at a Fortune 500 Company.** C. Jenkins, General Electric Company, Cincinnati, OH; S. Neale, General Electric Company, Oakville, ON, Canada.
- **Leveraging IT Systems to Improve IH Planning and Practice.** S. Battista, 3M, Maplewood, MN.
- **Value Strategy Process and Tools Required for Promoting Investment in Industrial Hygiene Interventions.** B. Silverstein, Bernard D. Silverstein, Inc., Yardley, PA.
- **Data Privacy Legislation and Impacts for Occupational Health Information Systems.** M. Melkonian, Medgate, Inc., Toronto, ON, Canada.
- **Social Networking Tools for the Industrial Hygienist.** B. Ringo, DMR & Associates, Inc., Louisville, KY.

Please!

Return session evaluations; bins are centrally located near meeting rooms.

RT 227

Radiation Safety Program Issues and Answers

10:00 a.m.–12:30 p.m. » [Convention Center, 205](#)

Arranger: R. Johnson, Dade Moeller and Associates, Inc., Gaithersburg, MD. **Moderator:** M. Finnamore, Baxter Health Care Corp. North America, Deerfield, IL. **Monitors:** R. Gallagher, Applied Health Physics, Dagsboro, DE; C. Lungu, University of Alabama, Birmingham, AL.

A panel of career specialists in radiation safety will address radiation issues of concern to industrial hygienists based on a poll of several hundred IHs over the past two years. The panel of CHPs and CIHs brings over 100 years of experience in radiation safety program management, regulations, licensing, worker training, surveys, instruments, inspections, and corrective actions. In particular, the panel will address issues from radiation safety program audits, findings, and corrective actions; new regulatory issues for portable and fixed nuclear gauges; radiation safety inspections of industrial, analytical (XRF/XRD), and baggage x-ray machines; and radiation detection instruments for surveys and emergency response. Each panel member will make a short presentation in the area of their technical expertise and then the panel will be open for audience questions. This panel should be able to answer any questions you may have on management of a radiation safety program for either radioactive materials or radiation producing machines.

- **Radiation Protection Program Audits, Findings, and Corrective Actions.** S. Austin, Dade Moeller and Associates, Inc., Gaithersburg, MD.
- **Nuclear Gauges: New Regulatory Issues.** B. Thomas, Integrated Environmental Management, Findlay, OH.
- **Radiation Safety Inspections of Industrial, Analytical (XRF/XRD), and Baggage X-ray Machines.** R. Johnson, Dade Moeller and Associates, Inc., Gaithersburg, MD.
- **Radiation Detection Instruments for Surveys and Emergency Response.** J. Kenoyer, Dade Moeller and Associates, Inc., Augusta, GA.

RT 228

Unintended Consequences: Occupant Exposures in Green Buildings

10:00 a.m.–12:30 p.m. » [Convention Center, 112](#)

Arranger: L. Kincaid, Industrial Hygiene Services, Saratoga, CA. **Moderator:** D. Dahlstrom, Exponent, Bellevue, WA.

Monitors: L. Kincaid, Industrial Hygiene Services, Saratoga, CA; D. Walsh, Walsh Certified Consultants, Inc., Las Vegas, NV.

Interest in conserving energy and resources has stimulated “green building” in residential construction. Unfortunately, the drive for conservation is not necessarily matched with appropriate expertise in designing healthy spaces. Engineered wood utilizes less virgin timber than traditional building materials. However, engineered wood products can emit considerable formaldehyde. Manufacturer claims of low formaldehyde emission do not necessarily match product performance. Fly ash added to concrete reduces consumption of raw materials, and the practice utilizes a waste product. However, fly ash can contain radium, the

parent of radon gas. Some concrete apartment buildings have elevated radon. Use of natural granite countertops has led to elevated radon and gamma radiation in homes. Reducing natural ventilation reduces energy needed for heating and cooling. Many new homes have less than 0.2 ACH. Moisture, formaldehyde, and radon can concentrate in living spaces.

- **Ventilation and IAQ in New Homes with and without Mechanical Outdoor Air Systems.** F. Offermann, Indoor Environmental Engineering, San Francisco, CA.
- **Green vs. Healthy: Elevated Formaldehyde in Energy-efficient Homes.** L. Kincaid, Industrial Hygiene Services, Saratoga, CA.
- **Toxicology of Formaldehyde and Microbial Ultrafine Particles.** J. Thrasher, Saratoga, CA.
- **Radon and Radiation Emissions from Building Materials.** D. Bernhardt, Saratoga, CA.
- **Green Buildings vs. Healthy Buildings: Integrating Consistencies and Collisions into an Educational Paradigm.** M. Kawamura, Institute for the Built Environment, Windsor, CO.

Workshop

Unsolved IH Mysteries Workshop

Noon–1:30 p.m. » Convention Center, 407

See description on page 43.

Facilitator: Fred Boelter, CIH, PE, BCEE, Environ International, Chicago, IL

Luncheon Discussions

Volunteer Group "Tech Talks"

Noon–1:00 p.m., Convention Center, Expo, Hall A

Luncheon Discussions are small, interactive group discussions facilitated by representatives from various AIHA® Volunteer Groups. Topics reflect current trends and high-interest, relevant issues from each Volunteer Group's technical content. Purchase lunch and select a Tech Talk—seating is first-come, first-served. Topics subject to change.

1. **ANSI/AIHA® Standards—Z10, Z88, Z9**
Moderators: J. Howe, Medford, OR, J. Johnson, JSJ and Associates, Pleasanton, CA, and J. Price, Northeastern University, Boston, MA.
2. **Biological Monitoring Committee**
Topic: Current Topics in IH and Biological Monitoring
Moderator: K. Diep, American Airlines, Fort Worth, TX.
3. **Biosafety and Environmental Microbiology Committee**
Topic: Current Topics in Biosafety and Environmental Microbiology.
4. **Communication and Training Methods Committee**
Topic: Current Topics in Communication and Training Methods
Moderator: M. Wan, Saint Petersburg, FL.
5. **Confined Space Committee**
Topic: Current Topics in Confined Spaces
Moderators: M. Palmer, EnSafe, Knoxville, TN and E. Willwerth, Marine Chemist Association, Grafton, MA.

6. Construction Committee

Topic: Current Topics in Construction

Moderator: F. Anderson, Zachry Industrial Inc., San Antonio, TX.

7. Engineering Committee

Topic: Current Topics in Engineering

8. Environmental Issues Committee

Topic: Current Topics in Environmental Issues

Moderators: E. Erikson, Guida, Slavich & Flores, P.C., Dallas, TX and J. Unmack, Unmack Corporation, San Pedro, CA.

9. Healthcare Working Group

Topic: Current Topics in Healthcare

Moderator: S. Derman, MediSHARE Environ. Health & Safety, Cupertino, CA.

10. Incident Preparedness and Response Working Group

Topic: Are All of Your Issues Addressed for Use of CBRN Respirators and PPE in an Emergency Response?

Moderator: J. Johnson, JSJ and Associates, Pleasanton, CA.

11. Indoor Environmental Quality Committee

Topic: Current Topics in Indoor Environmental Quality

Moderator: S. Hays, Gobbell Hays Partners, Inc., Nashville, TN.

12. Ionizing Radiation Committee

Topic: Current Topics in Ionizing Radiation

13. Law Committee

Topic: Current Topics in Law

Moderator: S. Celly, Celly Services, Inc., Long Beach, CA.

14. Management Committee

Topic: Current Trends in IH Management

Moderator: B. Cameron, Strategic Solutions, Seattle, WA.

15. Noise Committee

Topic: Hearing Conservation, Hearing Protection Devices, Ototoxic Chemicals, Impulse Noise and More—Bring Your Questions!

Moderator: A. Plaza, NASA Johnson Space Center, Houston, TX.

16. Real-Time Detection Systems Committee

Topic: Real-Time Instruments and Methods

Moderator: P. Smith, Uniformed Services University of the Health Sciences, Bethesda, MD.

17. Respiratory Protection Committee

Topic: Current Topics in Respiratory Protection

Moderator: J. Parker, NIOSH-NPPTL, Pittsburgh, PA.

18. Risk Assessment Committee

Topic: Giving Meaning to Risk Assessments

Moderator: B. Beadie, Paul Carlson Associates, Inc., Milwaukie, OR.

19. Safety Committee

Topic: General Topics in Safety

Moderators: S. Eversmeyer, Port of Portland, Portland, OR and D. Maser, Enviroair Consultants, Inc., Chesterfield, MI.

20. Social Concerns Committee

Topic: Hot Topics in Social Concerns
Moderator: M. Vela Acosta, Troy, MI.

21. Toxicology Committee

Topic: Current Topics in Toxicology
Moderator: R. Larson, University of Utah, Salt Lake City, UT.

22. Workplace Environmental Exposure Levels (WEEL) Committee

Topic: The Science Behind the Development and Interpretation of Occupational Exposure Limits
Moderators: A. Weinrich, U.S. EPA, Cincinnati, OH and J. Wireman, USAF, Colorado Springs, CO.

Cummings Award Lecture

“Sustainability and Industrial Hygiene”

Noon–1:00 p.m. » Convention Center, 401



Lecturer: Neil J. Zimmerman, PhD, PE, CIH
Purdue University School of Health Sciences, West Lafayette, IN

No, I am *not* going to discuss the topic of sustainability as most people think about it: making AIHce more “green,” climate change, energy resource conservation, technology innovations, LEED certification, recycling, etc.

I *am*, however, going to discuss what I think is a much more critical and important topic: the sustainability of our profession. I will focus on three needs: 1) to expand our efforts to nurture and encourage young people to consider industrial hygiene as a profession; 2) to expand our efforts to advertise our contributions to society more widely and effectively; and 3) to provide outreach services to benefit others, which will also contribute to our public relations efforts.

Ours is a noble, rewarding, challenging, exciting, worthwhile and vibrant profession. Unfortunately, in the past we have, through our own lack of action, allowed this information to be a fairly well-kept secret! That has certainly improved in recent years, but our efforts need to be redoubled.

E-abstract Book

Review abstracts online...anywhere...any time.
Visit www.aiha.org/aihce20/education.

Exhibitor Product Demos and Presentations Noon–1:00 p.m. | Expo Theater, Hall F

NEW!

Noon

Rivo Software LTD's Best Practices introducing Industrial Hygiene Modules, Safety Management Systems, Inc.

SMS Industrial Hygiene Modules are a new and innovative customized program available to organizations for industrial hygiene problems. This program takes a proactive approach in the management of industrial hygiene and demonstrates due diligence for regulatory compliance. The presentation will showcase the Indoor Air Quality IH Module. This Module is designed into Levels 1, 2 and 3. All levels have built in a training component, which allows the user to organize data and to learn or refresh basic principles in indoor air quality. The checklists, drop downs, flow diagrams and summary sheets within the levels will be demonstrated. Each level directs the user to corrective actions, and if professional consulting services are required, the program saves time and costs.

12:30 p.m.

A Quantum Leap in Powder Weighing Safety and Efficiency—Quantos™ Automated Powder Dosing Solution from METTLER TOLEDO, Mettler-Toledo, Inc.

Join METTLER TOLEDO for an informative overview of Quantos™—winner of the 2009 Lab Automation Association and R&D 100 new product awards, and the innovative new future of powder weighing in the laboratory. With the trend toward use of more highly potent and expensive powder compounds in various industries, Quantos offers a revolutionary approach to reducing hazardous aerosol formation and improving user safety. Additionally, Quantos improves speed and savings for routine work involving weighing powders for analytical sample preparation, filling vials and capsules, or where work requires weighing within less-than-ideal situations, such as within a glove box.

CR 320

Preventing Slips, Trips and Falls

1:00 p.m.–2:00 p.m. » Convention Center, 201

Presenter: C. Muncy, Montgomery County Water Services, Kettering, OH.

Come hear a veteran with over 17 years of experience in a variety of slippery industries, including the water utility and electroplating industries, give practical advice on how to prevent slips, trips and falls in the workplace. Special emphasis will be placed on aging-workforce issues. Hands-on exercises available to participants will emphasize special hazards faced by seniors and identification of slip/trip/fall hazards in industry and associated corrective action.

Emerging Issues Session 2

New AIHA® Initiatives: Guideline Foundation and Strategic Standards Strategy Development

1:00 p.m.–3:00 p.m. » Convention Center, 203

Moderator: C. Ostrowski, CAO Consulting, LLC, Rochester Hill, MI

The AIHA® Board is supporting two strategic initiatives in the areas of guide values and consensus standards development. This session provides an overview of these initiatives, insights into how they may impact the IH and allied professions, and information on how you can participate in these projects.

RT 229

Environmental Lead Federal Programs Update

1:00 p.m.–3:00 p.m. » Convention Center, 205

Arranger: W. Friedman, U.S. HUD, Washington, DC

Moderator: K. White, Consultive Services, Virginia Beach, VA. **Monitors:** E. Pinzer, U.S. HUD, Washington, DC; D. Levitt, U.S. DOL, Washington, DC.

Key federal agencies involved in the federal strategy to eliminate childhood lead poisoning as a major public health problem will present on the progress made and describe their upcoming activities to protect workers, the public—especially children—and the environment. EPA will discuss the implementation strategy for its Repair, Renovation and Painting Rule, and the expanded National Lead Laboratory Accreditation Program requirements. CPSC will discuss lead aspects of implementation of the Consumer Product Safety Improvement Act. The Army will describe new elements of its lead safety programs for bases and, particularly, for dependent schools. CDC will present results of its primary and secondary lead prevention and surveillance program, and its new healthy homes oriented surveillance program. HUD will present results for lead-based paint hazards in homes from the recently published American Healthy Homes Survey and its efforts to help local programs transition from lead to healthy homes. The agencies will cover regulatory issues, programmatic advances, educational materials and efforts, and highlight the roles, opportunities and challenges for public and private sector organizations and the public.

- **EPA Lead Program Update.** J. Mosby, U.S. EPA, Washington, DC
- **DOD Lead Program Update.** V. Belfit, U.S. Army, Aberdeen Proving Ground, MD.
- **CPSC Lead Program Update.** K. Hatlelid, CPSC, Bethesda, MD.
- **CDC Lead Program Update.** L. Franklin, CDC, Atlanta, GA.
- **HUD Lead Program Update.** W. Friedman, HUD, Washington, DC

New!

Stop by the Volunteer Collaboration Café and learn how you can get more involved in the volunteer experience.

RT 230

Perspectives on Preparation for the CIH Exam

1:00 p.m.–3:00 p.m. » Convention Center, 109

Arranger: C. Ficklen, SQA2, Inc., Hampton, VA. **Moderator:** A. Fleeger, ExxonMobil, Fairfax, VA. **Monitor:** M. Rupert, Concentra Environmental, Health, & Safety Services, Cincinnati, OH; K. McInnis-Serrano, University of Iowa, Iowa City, IA.

For IHs the most recognized professional credential is the Certified Industrial Hygienist (CIH) obtained through the American Board of Industrial Hygiene. Obtaining the CIH requires passing a comprehensive examination in relevant subject matter rubrics after meeting education and work experience requirements. This roundtable will cover requirements to sit for the exam and information on preparation strategies. The perspectives will address how to conduct a self-assessment, gather study materials, form a gameplan, and get mentally focused for the exam. Lessons learned from those who were not successful initially will be given. The session will benefit students entering the profession, current professionals working to obtain the CIH, and their employers. Please note that this session is not intended to take the place of an exam review course.

- **Just the Facts: Requirements to Sit for the Exam and the Exam Blueprint.** L. O'Donnell, ABIH, Lansing, MI.
- **Do Not Cram to Pass the Exam: Preparation Strategies for Success.** R. Bowen, Bowen EHS, Inc., Chapel Hill, NC.
- **The Rolling Stones on CIH Prep: "Get What You Need."** T. Mitchell, GoGoSystems, LLC, Nokesville, VA.
- **Conquering the CIH Exam. Are You Mentally Prepared?** C. Jerrick, Praxair, Inc., Eagan, MN.
- **Once, Twice, Three Times.** C. Ficklen, SQA2, Inc., Hampton, VA.

RT 231

Respirator Use During 2009 H1N1 Influenza Pandemic

1:00 p.m.–3:00 p.m. » Convention Center, 112

Arranger: Z. Zhuang, NIOSH, Pittsburgh, PA. **Moderator:** L. Boord, NIOSH, Pittsburgh, PA. **Monitors:** L. Janssen, Larry Janssen Consulting, LLC, Stillwater, MN; J. Parker, NIOSH, Pittsburgh, PA.

In March 2009, a novel influenza A (H1N1) virus was detected among humans in Mexico. Since then the virus has spread world-wide, and the World Health Organization declared an H1N1 pandemic on June 11, 2009. With an infectious agent such as 2009 H1N1, controlling exposures with respiratory protection is similar to respirator use with any aerosol. However, the lack of knowledge of key information makes the selection and use of respirators a challenging task. Experience with the recent H1N1 outbreak provides some information on how the risk of contracting an emerging disease can be reduced through an effective respirator and infection control program. Panelists at this roundtable will discuss an overview of 2009 H1N1 influenza virus, NIOSH health hazard evaluation in hospitals during the outbreak, the respiratory protection

» Technical Program: Wednesday

guidelines and recommendations, respiratory protection program at Veteran Administration hospitals and the use of respiratory protection for H1N1 in non-health-care occupational settings including business continuity. The overall objective is to provide practicing hygienists with an understanding of the appropriate respiratory protection during any influenza pandemic.

- **Overview of 2009 H1N1 Influenza.** L. Delaney, NIOSH, Atlanta, GA.
- **NIOSH Health Hazard Evaluation in Utah Hospitals: Challenges to Protecting Health-Care Workers from the 2009 H1N1 Influenza Virus.** S. Brueck, NIOSH, Cincinnati, OH.
- **Respiratory Protection Guidelines and Recommendations.** R. Berry Ann, NIOSH, Pittsburgh, PA.
- **Respiratory Protection Clinical Experience in the VA System.** A. Eagan, National Center for Occupational Health and Infection Control, Veterans Health Administration, Gainesville, FL.
- **Respiratory Protection for H1N1 in Non-Health-Care Settings.** C. Colton, 3M, St. Paul, MN.

RT 232

New Frontiers in the Practice of Industrial Hygiene in the Oil and Gas Industry

1:00 p.m.–3:30 p.m. » [Convention Center, 403](#)

Arranger: M. Denhoff, University of Calgary, Calgary, AB, Canada. **Moderator:** D. Strand, Canadian Registration Board of Occupational Hygienists, Port Moody, BC, Canada.

Monitors: J. Aubin, Suncor Énergie, Montréal, QC, Canada; L. Hamelin, Université du Québec à Montréal, Montréal, QC, Canada.

This session will explore current and anticipated challenges, as well as solutions, in evaluating and controlling occupational exposures in the oil and gas industry, with a focus on drilling fluids and invert mud exposures. The roundtable brings together senior representatives of industry, regulatory agencies, consultants and other experts to share their experience and knowledge.

- **New Initiatives to Characterize and Control Occupational Exposures in Oil and Gas Operations in British Columbia.** A. Johnson, WorkSafeBC, North Vancouver, BC, Canada.
- **Current and Emerging Industrial Hygiene Issues in Oil and Gas from an Industry Perspective.** L. Booher, ExxonMobil, Houston, TX.
- **Challenges and Opportunities in the Field of Industrial Hygiene Specific to the Oil and Gas Industry, Including Massive Oil Sands Operations.** P. Joseph, Industrial Safety International Inc., Calgary, AB, Canada.
- **Dermal Occupational Exposure to Hydrocarbons in Drill Workers Driven Primarily by Invert Drilling Muds—Diesel Spray a Secondary Consideration.** J. Dennis, University of Calgary Health Sciences Centre, Calgary, AB, Canada.
- **IH Challenges for Sampling, Analysis, and Exposure Characterization of Drilling Muds and Fluids for Various Tasks and Occupations.** R. Waterhouse, Encana Corporation, Calgary, AB, Canada.

RT 233

ASBESTOS UPDATE: Still a Hazard After All These Years

1:00 p.m.–3:30 p.m. » [Convention Center, 105](#)

Arranger: R. Cohen, Baltimore, MD. **Moderator:** L. Brown-Ellington, Illinois State University, Normal, IL. **Monitors:** M. Levitsky, ECHO Management, Inc., Mississauga, ON, Canada; A. Cutz, Health+Safety Matters & Associates, Markham, ON, Canada.

Many people in the U.S. (including some IHs and safety professionals) believe asbestos is no longer mined or used, that it is only a hazard/friable as insulation in very old buildings. However, asbestos continues to be a health hazard in the 21st century throughout the world, though it was proved that this "wonder" product could kill more than 100 years ago. More workers and residents are dying today of asbestos diseases than at any other time in history. Each stage of use or misuse of this occupational and environmental hazard may adversely affect both adults and children. This roundtable's panelists include internationally renowned scientists, physicians, and IHs from academia and the private and public sectors, as well as a union employee currently exposed to asbestos. The presentations begin with historic/current contradictory federal and state regulations; the experience of a union worker currently exposed; update on medical and environmental surveillance of post 9/11 WTC employees/rescue workers and Libby, MT residents; the mining/residential hazards of naturally occurring asbestos; and the status of international consensus on the carcinogenicity of Chrysotile with emphasis on the U.S., Canada, and the UK. The panel and audience will then discuss specific actions that health professionals can take to reduce/eliminate asbestos as a hazard in our lifetime.

- **Asbestos History and U.S. Regulations: Nobody Said They Had to Make Sense.** D. Walsh, Walsh Certified Consultants, Inc., Las Vegas, NV.
- **Update on Union Protections from a Worker Currently Exposed to Asbestos.** D. Holstrom, Oil, Chemical, and Atomic Workers, Arvada, CO.
- **Geologic and Toxicologic Factors That Determine the Potential Hazards of Naturally Occurring Asbestos.** M. Harper, NIOSH, Morgantown, WV.
- **Current Status of Medical Surveillance: Post 9/11 WTC Rescue Workers and Libby, MT Residents.** S. Levin, Irving J Selikoff, Mt. Sinai Hospital, New York, NY.
- **National Consensus on the Carcinogenicity of Chrysotile: Canada, UK and Holland.** T. Ogden, Annals of Occupational Hygiene, Abingdon, Oxfordshire, United Kingdom.

Science Symposium: Current Research Efforts Addressing Skin Exposure Hazards

1:00 p.m.–4:00 p.m. » [Convention Center, 501](#)

Arranger: S. Dotson, NIOSH, Cincinnati, OH. **Moderator:** G. Day, NIOSH, Morgantown, WV. **Monitors:** A. Stefaniak, NIOSH, Morgantown, WV; L. Hodson, NIOSH, Cincinnati, OH.

The skin is an important exposure pathway for many chemicals commonly found within the modern workplace. Understanding the hazards of skin exposures is a critical step in the development of risk management programs capable of successfully protecting workers and aiding in the selection of an appropriate level of controls. The primary objectives of this roundtable are to (1) provide an update of the new NIOSH skin notation project; (2) discuss the usefulness of mathematical modeling of skin exposure hazards; (3) address issues with data limitations which hamper the determination of the hazards of skin contact with chemicals; (4) illustrate the use of the DREAM exposure tool to assess dermal exposures to specific chemicals; (5) address the effectiveness of control techniques to prevent skin exposures; and (6) present new methods for cumulative permeation testing of chemical protective clothing.

- **Update of the New NIOSH Skin Notation Project: Lessons Learned and Future Plans.** S. Dotson, NIOSH, Cincinnati, OH.
- **Modeling Skin Exposure Hazards? Comparison between Occupational Exposure Limit- vs. Acute Toxicity-Based Algorithms.** C. Chen, China Medical University, Taichung, Taiwan.
- **Addressing Research Gaps in the NIOSH Skin Notation Project: The Example of 1-Bromopropane.** H. Fransch, NIOSH, Morgantown, WV.
- **Measuring and Modeling Dermal Exposure—Developments in Europe.** J. Cherrie, Institute of Occupational Medicine, Edinburgh, UK.
- **Selection of Exposure Control Techniques Based on the New NIOSH Skin Notation Strategies and Associated Documentation.** H. Ahlers, NIOSH, Pittsburgh, PA.
- **New Approaches to Permeation Testing of Personal Protective Barriers.** A. Shepherd, NIOSH, Pittsburgh, PA.

PO 127

Development and Evaluation within the Realm of Industrial Hygiene Sampling and Analysis

1:00 p.m.–4:00 p.m. » [Convention Center, 207](#)

Arranger: J. Hugo, The Dow Chemical Company, Midland, MI. **Moderator:** S. VanEtten, EMSL Analytical, Westmont, NJ. **Monitors:** B. Weaver, Lancaster Laboratories Inc., Lancaster, PA; B. Czarnecki, CzarTech Analytical, Inc., Novi, MI.

1:00 p.m.

When Do You Sample and Why Does Sampling Fail? Discussions on Microbiological Sampling, Analysis and Interpretation for Indoor Microbial Growth Investigation. (188) W. Tang, QLab, Cherry Hill, NJ.

1:20 p.m.

Validation of Two Diffusive Samplers for Collection of Styrene. (189) M. Eide, OSHA, Sandy, UT.

1:40 p.m.

Study the Effect of Heat, Concentration and Humidity on the Adsorption Capacity of a New Air Sampling Media Utilizing a New Sparing System to Generate VOCs at Different Levels. (190) A. Al-Arfaj, Saudi Aramco, Dhahran, Saudi Arabia.

2:00 p.m.

Dynamic Sampling Method for Diacetyl and Acetoin Using Tenax TA Solid Sorbent Uncoated and Coated with (2,3,4,5,6-Pentafluorobenzyl) Hydroxylamine Hydrochloride (PFBHA). (191) S. Takaku-Pugh, S. Que Hee, University of California, Los Angeles, CA.

2:20 p.m.

Analytical Method for the Detection of Diacetyl and Other Food Flavoring Compounds in Powders. (192) F. Nourian, NIOSH, Cincinnati, OH.

2:40 p.m.

New Standard Methods for Measurement of Exposure to Hydrochloric Acid and Nitric Acid in Workplace Air. (193) A. Howe, HSL, Buxton, United Kingdom.

3:00 p.m.

Interlaboratory Evaluation of a Standardized Inductively Coupled Plasma Mass Spectrometry Method for the Determination of Trace Elements in Air Filter Samples. (194) K. Ashley, NIOSH, Cincinnati, OH; M. Brisson, Savannah River Nuclear Solutions, LLC, Aiken, SC; A. Howe, Health and Safety Laboratory, Buxton, Derbyshire, United Kingdom.

3:20 p.m.

Determination of Gaseous Nonylphenol by Dynamic Air Sampling with Solid-phase Microextraction. (195) Y. Chen, M. Siao, S. Tsai, National Taiwan University, Taipei, Taiwan.

3:40 p.m.

Passive Air Sampling for Phthalates by Solid-Phase Microextraction. (196) Y. Wang, M. Siao, S. Tsai, National Taiwan University, Taipei, Taiwan.

PO 128

Case Studies in Indoor Environmental Quality

1:00 p.m.–4:00 p.m. » [Convention Center, 106](#)

Arranger: J. Springston, Sandler Occupational Medicine Associates, Glen Head, NY. **Moderator:** W. Baker, Michaels Engineering, La Crosse, MI. **Monitors:** A. Lehocky, University System of Georgia, Atlanta, GA; S. Hays, Gobbell Hays Partners, Inc., Nashville, TN.

1:00 p.m.

HUD's Transition to Healthy Homes. (197) W. Friedman, US HUD, Washington, DC.

1:20 p.m.

Case Study: Reducing Childcare Operator Overuse of Bleach & Improving Access to Asthma-Safe Registered Disinfectants and Sanitizers. (199) K. Cohn, City & County of San Francisco, San Francisco, CA.

1:40 p.m.

Effective Indoor Air Sampling and Risk Communication Strategies to Address Indoor BTEX Levels at Former UST Site. (200) R. Kalmes, Exponent, Oakland, CA.

2:00 p.m.

Who You Gonna Call, Ghostbusters or the Industrial Hygienist? (201) B. Kollmeyer, M. Andrew, Forensic Analytical, Rancho Dominguez, CA.

2:20 p.m.

Green Building Air Testing: Case Study Comparing TVOC Methods. (198) D. Walsh, Walsh Certified Consultants, Inc., Las Vegas, NV.

» Technical Program: **Wednesday**

2:40 p.m.

Case Study: An Industrial Hygienist's Encounter with Dirty Sock Syndrome. (202) D. Daggett, The Scripps Research Institute, La Jolla, CA.

3:00 p.m.

After the Flood: What to do After a Large Water Spill— A Case Study. (204) S. Shindel, Intel Corporation, Chandler, AZ.

3:20 p.m.

Guidelines for the Assessment of Smoke Damage. (205) C. Young, C Young Associates, La Jolla, CA; D. Baxter, Environmental Analysis Associates, La Jolla, CA.

3:40 p.m.

Modeling and Measurements of Indoor Air Contamination from Membrane Roofing Installation. (203) R. Hill, Bureau Veritas, Arvada, CO.

RT 234

Safety Culture in Construction: What Is It? How Can It Be Measured and Improved?

1:00 p.m.–4:00 p.m. » [Convention Center, 405](#)

Arranger and Moderator: S. Schneider, Laborers' Health and Safety Fund of North America, Washington, DC. **Monitors:** R. Suga, Bechtel Jacobs Company, Oak Ridge, TN; C. Brehm, Baker, Moon Township, PA.

The NIOSH National Occupational Research Agenda (NORA) for construction has identified safety culture as an important area for research and intervention. Many companies are now doing their own safety climate surveys and are often surprised by the results. They find that workers' perceptions of safety on the jobsite are often very different from those of supervisors and management. Once the results are in, the question is how to address that discrepancy. How can we create an atmosphere on jobsites where workers truly believe that safety is valued and where they are supported and encouraged to raise safety issues and concerns? And if we don't, how can we ever expect to improve safety in construction?

- **Etiology of Safety Culture and Climate.** P. Chen, Colorado State University, Ft. Collins, CO.
- **Putting Safety Climate Survey Data to Work: Steps Toward Continuous Improvement.** J. Gittleman, The Center for Construction Research and Training, Silver Spring, MD.
- **Climate Determines Culture.** C. Warren, Defense Logistics Agency, Fort Belvoir, VA.
- **How the Washington Group Improved Safety Culture on our Construction Sites.** J. Isham, URS, Denver, CO.
- **Creating and Sustaining a Strong Safety and Health Culture.** M. Prenni, Black & Veatch, Overland Park, KS.

RT 235

Worker Fatigue Roundtable

1:00 p.m.–4:30 p.m. » [Convention Center, 503](#)

Arranger and Moderator: W. Lashbrook, DeVany Industrial Consultants, Vancouver, WA. **Monitors:** M. DeVany, DeVany Industrial Consultants, Vancouver, WA; C. Woodruff, Sandler Occupational Medicine Associates, Inc., Gaithersburg, MD.

This roundtable, sponsored by the AIHA® Safety, Occupational and Environmental Medicine, Social Concerns and Construction Committees, focuses on worker fatigue, a major health stressor in the U.S. workforce that significantly impacts productivity and costs. Worker stress may arise from rotating or prolonged work shifts, extended overtime, and strenuous physical and environmental conditions during continuous emergency response operations. Fatigue is also induced in transportation workers due to monotonous flying and driving for extended periods. Fatigue leads to impaired alertness, which in turn reduces reaction time, concentration, perception, and decision making. These professionals will review the fatigue-induced physiological effects, mental stresses and emotional impacts, and provide attendees with concrete methods to eliminate or control these effects to an acceptable degree. Each speaker will explore a different facet of fatigue and its effect on worker health. At the end of each presentation the speaker will discuss a brief case study of a work-related incident illustrating how worker fatigue contributed to workplace injury.

- **Myths and Realities of Sleep: Luxury or Necessity for Occupational Health, Safety and Productivity.** W. Sirois, Circadian Technologies, Inc., Stoneham, MA.
- **Sleep Apnea and Transportation Workers.** B. Gerson, University Services, Philadelphia, PA.
- **Shift Work, Fatigue, and Performance of Air Traffic Controllers.** D. McCauley, FAA, Oklahoma City, OK.
- **Design Specs of the Human Machine: The Effects of Rotating Schedules, Night Shifts and Overtime on Worker Productivity and Health.** W. Sirois, Circadian Technologies, Inc., Stoneham, MA.
- **Overtime and Worker Fatigue.** A. Krowsoski, Concast Metal Products Company, Mars, PA.

RT 236

Glen Williamson Forum: OSHA's Most Interesting Health Cases, 2007–2009

1:00 p.m.–4:30 p.m. » [Convention Center, 505](#)

Arranger: C. Coe, OSHA, Atlanta, GA. **Moderator:** R. Fairfax, OSHA, Washington, DC. **Monitors:** C. Coe, OSHA, Atlanta, GA; K. Motley, OSHA, Sandy, UT.

This forum is in honor of the former OSHA Region VI Deputy Regional Administrator who died suddenly at the age of 49 in September 1997. He was a leader in the field of industrial hygiene, as well as for OSHA. The goal of the forum is to raise awareness about the role of the regulator in addressing workplace health hazards, to illustrate real-life workplace scenarios, and to show the application and effectiveness of the control methods and solutions. The cases presented will highlight exposure levels at the initiation of the OSHA visit and results that demonstrate reduction or elimination of the hazard. Attendees will gain practical information regarding exposure assessment and control, as well as learn more about OSHA's approach to workplace health issues. The forum will be interactive: attendees will have the opportunity to ask questions of the panel as the presentations are made.

- **Pigment Overexposure to Lead in Mold Plastic Production.** K. Kolesa, OSHA, St. Louis, MO.
- **Combustible Dust Hazards at a Powder Coating Manufacturer.** M. Snitzer, OSHA, Cleveland, OH.
- **Silica Overexposures in Shipbuilding Operations.** E. Taylor, OSHA, Jackson, MS.
- **Judging a Container by Its Label: Fatal Accidental Ingestion of Selenious Acid.** C. Lorenzo, OSHA, Denver, CO.
- **Hexavalent Chromium Exposures in the Installation of Stainless Steel Bus Shelters.** S. Danann, OSHA, Cleveland, OH.
- **Health and Safety Hazards Associated with Electronic Recycling.** K. Morton, OSHA, Madison, WI.
- **Post-Explosion Health Risk Assessments.** L. Daniel, OSHA, Savannah, GA.
- **Evaluation of Hexavalent Chromium Exposure in a Hard Chrome Plating Operation.** T. Fehringer, OSHA, Denver, CO.
- **Ethylene Oxide Exposures in the Production of Fiberglass-Reinforced Acrylic Plastic Products.** C. Synak, OSHA, Omaha, NE.
- **Formaldehyde and Combustible Dust Exposures in a Textile Manufacturing Operation.** N. Janack, OSHA, Tucker, GA.

CR 321

Conducting Effective Safety Inspections

3:00 p.m.–4:00 p.m. » [Convention Center, 113](#)

Presenter: C. Muncy, Montgomery County Sanitary Engineering, Kettering, OH. **Moderator:** N. Feldscher, New York City Department of Environmental Protection, Corona, NY.

A company with \$100,000 of costs related to workplace injuries will have to produce an additional \$2,000,000 in revenue just to cover the expense, assuming a 5 percent profit margin. Find out how to effectively prevent accidents before they occur through meaningful safety inspections, and how to avoid common pitfalls that can permit hazards to go unrecognized during these inspections.

CR 322

Standardized Approach to the "Green" Building Decommissioning Process

5:00 p.m.–6:00 p.m. » [Convention Center, 201](#)

Presenter: B. Fontaine, Windsor Consulting Group, Inc., South River, NJ. **Moderator:** B. Finder, University of Wisconsin, Menomonie, WI.

Building decommissioning arises from a building's end of service life, loss of economic viability, fire, or environmental disaster. A standardized "green" building decommissioning process helps reduce or eliminate hazards and liabilities. The process requires different disciplines and expertise of individuals who can deal with the various health, safety, and environmental issues. The absence of a standard raises the level of uncertainty and risk. Projects that cannot be closed elevate the risk of becoming a recurring nuisance and increase cost and liability.

PO 129

Personal Protective Clothing and Equipment

5:00 p.m.–7:00 p.m. » [Convention Center, 113](#)

Arranger and Moderator: J. Szalajda, NIOSH, Pittsburgh, PA. **Monitors:** H. Ahlers, NIOSH, Pittsburgh, PA.

5:00 p.m.

Design of a New Laboratory for Chemical Challenge Testing of Respirator Cartridges, Canisters, and Filters. (211) C. Manning, Assay Technology, Livermore, CA.

5:20 p.m.

Evaluation of Protective Gloves Used in the Collision Repair Industry. (206) D. Ceballos, M. Yost, J. Camp, University of Washington, Seattle, WA; S. Whittaker, Local Hazardous Waste Management Program Public Health—Seattle & King County, Seattle, WA; C. Reeb-Whittaker, WA State Department of Labor and Industries, Olympia, WA.

5:40 p.m.

Estimation of WBGT Clothing Adjustment Factors from Evaporative Resistance. (207) T. Bernard, C. Ashley, University of South Florida, Tampa, FL.

6:00 p.m.

The Detection of Holes in Disposable Nitrile Gloves by Electrical Resistance. (208) R. Phalen, H. Ung, California State University San Bernardino, San Bernardino, CA.

6:20 p.m.

Speech Intelligibility of Commercial Air-Purifying Respirators. (209) K. Coyne, D. Barker, U.S. Army, Aberdeen Proving Ground, MD.

6:40 p.m.

Development of a Novel High Protection Exhalation Valve for Respirators. (210) C. Yang, S. Huang, C. Chen, National Taiwan University, Taipei, Taiwan; L. Lee, C. Chen, Institute of Occupational Safety and Health, Taipei, Taiwan; Y. Kuo, Chung Hwa University of Medical Technology, Tainan, Taiwan.

RT 237

Health Hazard and Control Banding Strategies and Applications in the Absence of OELs

5:00 p.m.–7:30 p.m. » [Convention Center, 106](#)

Arranger: B. Weeks, Genzyme Corp., Waltham, MA.

Moderator: A. Bracker, University of Connecticut, Farmington, CT. **Monitors:** S. Chiusano, Department of Defense, Arlington, VA; B. Weeks, Genzyme Corp., Waltham, MA.

Control banding arose in response to the exponential growth of the number of chemicals used in the workplace without OELs. Hazard banding is the first step in the control banding process and can be used in the absence of an OEL for risk assessment. This session will examine several tools for developing both aspects of this risk assessment and hazard control process. A practical hazard banding toolbox, including the Hazard Banding Matrix, selection of appropriate data for input, and examples of the implementation of the resulting hazard band exposure control limit will be presented. The approach of the Dutch social economic council will also be explored, where an instrument for the development of OELs or the selection of

a good practice has been deployed. In addition, application of hazard banding to a chemical approval process in research and development will be presented. Finally, a summary of a recent NIOSH publication that examines strategies, applicability, and limitations of control banding practice, and needs for future research, evaluation, and validation will be discussed.

- **Hyped about Hazard Banding: New Hope for an Established Practice.** S. Ripple, The Dow Chemical Company, Midland, MI.
- **Workplace Substance Exposure: The Dutch Approach.** L. van der Biessen, Haskoning Nederland B.V, Nijmegen, Netherlands.
- **Application of Health Hazard Banding for a Chemical Approval Process.** B. Altemose, SABRE Health & Safety LLC, Easton, PA.
- **NIOSH Critical Review of Control Banding: Implications for Application in U.S. Workplaces.** T. Lentz, NIOSH, Cincinnati, OH.

RT 238

IH Sampling Media: Caveat Emptor

5:00 p.m.–7:30 p.m. » Convention Center, 109

Arranger: R. O'Mara, Eli Lilly and Company, Lafayette, IN.

Moderator: P. Kostle, University of Iowa, Walford, IA.

Monitors: M. Hsieh, Abbott Laboratories, North Chicago, IL; E. Hugel, BASF Corporation, Wyandotte, MI.

Caveat emptor ("buyer beware") is an old Latin term that has real meaning when it comes to the quality and suitability of sampling media. The quality and suitability of sampling media, in turn, directly affect the assessments of the workplace exposures by industrial hygienists. With the global economy, and the acquisition of companies by other companies, there can be changes in the sampling media offered for workplace monitoring. The companies that supply various sampling media strive to provide good quality in their products, but sometimes they are not aware that their suppliers have altered the media. Good quality control procedures, such as those found in the AIHA® accreditation program, or internal laboratory quality control programs can help find these problems. This roundtable will present a background into QC systems and best practices by vendors and users to assure the quality and suitability of various types of sampling media.

- **Finding Out the Hard Way That Your Media Has Changed.** R. O'Mara, Eli Lilly and Company, Lafayette, IN.
- **Testing Techniques Used in Quality Control of Small Particle Sampling Media.** J. Desorcie, Supelco Inc., Bellefonte, PA.
- **Laboratory Response to Unavailable Media: The Saga of PVC Filters.** M. Eide, OSHA, Sandy, UT.
- **IH Sampling Media Performance: Issues and Answers (Part 1).** C. Manning, Assay Technology, Livermore, CA.
- **IH Sampling Media Performance: Issues and Answers (Part 2).** S. Green, Assay Technology, Livermore, CA.

PO 130

Beryllium Health and Safety Research and Case Studies

5:00 p.m.–7:40 p.m. » Convention Center, 105

Arranger and Moderator: M. Brisson, Savannah River Nuclear Solutions, LLC, Aiken, SC. **Monitors:** K. White, Virginia Beach, VA; L. Youmans-McDonald, Savannah River Nuclear Solutions, LLC, Aiken, SC.

5:00 p.m.

Release of Beryllium from Poorly Soluble Particulate in Artificial Sweat. (212) A. Stefaniak, M. Virji, G. Day, NIOSH, Morgantown, WV.

5:20 p.m.

Exposure and Genetics Increase Risk of Chronic Beryllium Disease in the Nuclear Weapons Industry. (213) M. Van Dyke, J. Martyny, M. Mroz, L. Silveira, M. Strand, L. Maier, National Jewish Health, Denver, CO; T. Fingerlin, Colorado School of Public Health, Denver, CO; H. Sato, National Heart and Lung Institute, Imperial College, London, United Kingdom.

5:40 p.m.

Beryllium and Nuisance Dust Exposure among Decontamination Workers at an Abandoned Metal Casting Workshop in Quebec, Canada. (214) A. Dufresne, B. Campbell, Universite de Montreal, Montreal, QC, Canada; C. Dion, IRSST, Montreal, QC, Canada; G. Perrault, SST, Laval, QC, Canada.

6:00 p.m.

Dental Technician Exposure to Beryllium Using Dental Casting Alloys. (215) A. Bilenki, K. Grissom, J. Spencer, Environmental Profiles, Inc., Columbia, MD.

6:20 p.m.

Unexpected Beryllium Contamination: Lessons Learned from Characterization and Remediation Efforts. (216) J. Withers, T. Wessels, Ames Laboratory, Ames, IA.

6:40 p.m.

Impacts of the 2009 Threshold Limit Value for Beryllium at U.S. Department of Energy Facilities. (217) M. Brisson, Savannah River Nuclear Solutions LLC, Aiken, SC; G. Whitney, Los Alamos National Laboratory, Los Alamos, NM.

7:00 p.m.

Case Study: Experiences Using New Fluorescence Method on Real-World Beryllium Samples. (218) D. Jensen, T. Gran, National Security Technologies, Mercury, NV.

7:20 p.m.

Withdrawn. (219) K. Petherick, UT-Battelle, ORNL, Oak Ridge, TN.

The viewpoints, opinions and conclusions expressed in the presentations, sessions and discussions at AIHce have not necessarily been approved or endorsed by AIHA® or ACGIH® and do not necessarily reflect those of AIHA® or ACGIH®.



YOUR SUCCESS MEANS THE WORLD TO US.

Full-service testing laboratory including:

- Vapor Intrusion/TO-15
- Lead
- Beryllium
- Methamphetamine
- Dietary Supplements
- Pesticides
- Perchlorate
- White Phosphorus
- Amines
- TEM characterization of nanoparticles
- Vermiculite
- Diacetyl/Acetoin
- ... and much more!

ALS Laboratory Group

Environmental



ALS Salt Lake City · 960 West LeVoy Drive · Salt Lake City, UT 84123 · Toll Free: +1 800 356 9135 · Phone: +1 801 266 7700

ALS Cincinnati · 4388 Glendale Milford Rd. · Cincinnati, OH 45242 · Toll Free: +1 800 458 1493 · Phone: +1 513 733 5336

ALS Environmental Locations Across North America

United States: Cincinnati · Everett · Fort Collins · Holland · Houston · Salt Lake City Canada: Burlington · Calgary · Edmonton · Fort McMurray · Fort St. John · Grande Prairie
North American Centre of Excellence · Saskatoon · Thunder Bay · Vancouver · Waterloo · Winnipeg · Yellowknife Mexico: Monterrey

www.alsglobal.com

Formerly DataChem: www.datachem.com

» At-a-Glance: Thursday

Thursday, May 27

7:00 a.m.–4:30 p.m.

Speaker Ready Room
Convention Center, 302

7:30 a.m.–10:30 a.m.

Registration
Convention Center, Lobby

7:30 a.m.–5:00 p.m.

Coat and Luggage Check
Convention Center, 101

8:00 a.m.–9:00 a.m.

CR 323 Urban Construction: Hazards and the Protection of the Public
Convention Center, 109

CR 324 Maximize Your Efforts to Reduce Strain and Sprain Injuries
Convention Center, 203

8:00 a.m.–10:00 a.m.

PO 131 Indoor Fungal and Bacterial Methods and Interpretation
Convention Center, 106

RT 239 A Comprehensive Risk Assessment Strategy for Addressing Machine Hazards—Don't Forget
Convention Center, 105

8:00 a.m.–10:30 a.m.

RT 240 Protecting Workers from Acute and Short-term Exposures to High Airborne Concentration
Convention Center, 205

RT 241 Anatomy of a Hospital Infection Control Project
Convention Center, 113

8:00 a.m.–11:00 a.m.

PO 132 General Topics in Occupational Safety and Construction
Convention Center, 207

RT 242 REACH Risk Assessment, Control and Communication Requirements within the Supply Chain
Convention Center, 112

8:00 a.m.–11:20 a.m.

PO 133 Industrial Hygiene General Practice II
Convention Center, 201

8:00 a.m.–11:30 p.m.

RT 243 Laboratory Safety and Health: Laboratory Design Considerations
Convention Center, 401

8:00 a.m.–Noon

RT 244 Benzene Exposures in the Workplace
Convention Center, 403

8:00 a.m.–4:00 p.m.

Denver City and Restaurant Information
Convention Center, Lobby

8:00 a.m.–5:00 p.m.

Multimedia Downloads and DVDs
Convention Center, Lobby

Noon–1:00 p.m.

Stokinger Award Lecture
Convention Center, 112

1:00 p.m.–2:00 p.m.

CR 325 Electrical Safety
Convention Center, 207

CR 326 Safety Beyond Numbers
Convention Center, 201

1:00 p.m.–3:00 p.m.

PO 134 Risk Assessment (Management)
Convention Center, 203

RT 245 Cell Phone Pants and Other Hot Topics in Nonionizing Radiation
Convention Center, 205

1:00 p.m.–3:40 p.m.

PO 135 New Advances in Ventilation Technology
Convention Center, 210

1:00 p.m.–4:00 p.m.

RT 246 Implementing a "Buy Quiet" Policy in Your Workplace
Convention Center, 109

1:00 p.m.–4:30 p.m.

RT 247 Nanotechnology: A Forum on Globalization
Convention Center, 106

RT 248 Respirator Program Needs and Experience in the Health-Care Setting
Convention Center, 105

RT 249 The Myth of Contractual Immunity—Legal Risks on Multi-Employer Job Sites
Convention Center, 113

AIHA®

8:00 a.m.–10:00 a.m.

Local Section Officers Training
Hyatt Regency, Granite

Volunteer Group Chairs Meeting
Hyatt Regency, Agate

8:00 a.m.–5:00 p.m.

WEEL Committee Meeting
Hyatt Regency, Quartz A

8:30 a.m.–10:30 a.m.

Annual Business Meeting
Convention Center, 210

10:00 a.m.–Noon

Volunteer Group Secretaries Orientation Meeting
Hyatt Regency, Agate

11:30 a.m.–4:30 p.m.

Board of Directors Meeting
Hyatt Regency, Granite

Ancillary—Thursday, May 27 and Friday, May 28

8:00 a.m.–5:00 p.m.

Newmont Mining
Hyatt Regency, Summit 25

CR 323

Urban Construction: Hazards and the Protection of the Public

8:00 a.m.–9:00 a.m. » Convention Center, 109

Presenter: R. Adams, ENVIRON International Corporation, Princeton, NJ.

Construction in urban centers creates significant risks to the public. Recent crane failures have raised public awareness of the inherent dangers. Additional hazards to the public are created by materials deliveries to the work zone, heavy equipment blocking sidewalks and traffic lanes, and overhead movement of materials. Traffic congestion can impact critical EMS functions due to restricted access and changing traffic patterns. This crossover session will present an overview of the hazards and risks and methods to protect the public.

CR 324

Maximize Your Efforts to Reduce Strain and Sprain Injuries

8:00 a.m.–9:00 a.m. » Convention Center, 203

Presenter: B. Greene, Business Health Resources, LLC, Greenwood Lake, NY.

For many, strain and sprain injuries continue to occur despite industrial hygienists' best efforts. To achieve sustained reductions, you must understand the relationship between cumulative trauma, body mechanics, employee belief systems and the process of changing physical habits. Failing to do so will only lead to wasted time, money, and effort.

PO 131

Indoor Fungal and Bacterial Methods and Interpretation

8:00 a.m.–10:00 a.m. » Convention Center, 106

Arrangers: R. Strode, Chemistry & Industrial Hygiene, Inc., Wheatridge, CO; J. Springston, Sandler Occupational Medicine Associates, Glen Head, NY. **Moderator:** G. Clark, WorkSafe BC, Vancouver, BC, Canada. **Monitors:** P. Dulaney, Applied Environmental, Inc., Cary, NC; J. Dobranic, EMSL Analytical, Inc., Westmont, NJ.

8:00 a.m.

Bacteroides: A Better Alternative to Determine Sewage Contamination in Indoor Environments. (220)

D. Miskowski, EMSL Analytical Inc., Westmont, NJ.

8:20 a.m.

Interpreting Bacterial Data from Indoor Dust Samples.

(221) H. Burge, Environmental Microbiology Laboratory, Inc., San Bruno, CA.

8:40 a.m.

Microbial Contamination and the Role of Bacteria. (222)

R. Lockhart, Golder Associates Ltd., Burnaby, BC, Canada.

9:00 a.m.

Moldy Ventilation Systems: Impacts on Indoor Air Quality. (223)

P. Rey, J. Hicks, Exponent, Inc., Oakland, CA.

9:20 a.m.

Use of EPA BASE Study as an Aid to Interpretation of Bioaerosol Sampling Data. (224)

P. Morey, ENVIRON International Corporation, Gettysburg, PA; G. Crawford, ENVIRON International Corporation, Chicago, IL.

9:40 a.m.

Dynamics of Fungal Spore Aerosols and Implications for Routine Sampling. (225)

H. Burge, Environmental Microbiology Laboratory, Inc., San Bruno, CA.

RT 239

A Comprehensive Risk Assessment Strategy for Addressing Machine Hazards—Don't Forget

8:00 a.m.–10:00 a.m. » Convention Center, 105

Arranger: L. Sedlak, Black & Decker, HHI, Lake Forest, CA.

Moderator: A. Amendola, NIOSH, Morgantown, WV.

Monitors: L. Sedlak, Black & Decker, HHI, Lake Forest, CA; W. Lashbrook, DeVany Industrial Consultants, Vancouver, WA.

Many EHS professionals have responsibility for plant safety but may lack a good grasp of machine guarding standards and practices. In addition, many EHS professionals may be unaware of the American National Standard (ANSI/PMMI B155.1-2006) Safety Requirements for Packaging Machinery and Packaging-Related Converting Machinery. This roundtable will provide an overview of a comprehensive machine guarding program and a demonstration of the ANSI (B.11 TR3) risk assessment approach for evaluating and addressing machine hazards. A method for performing systematic machine risk assessments will be presented that considers severity of the potential exposure, likelihood of an injury and the frequency to which a worker may be exposed to the machine hazard. The ANSI standard for machine guarding for packaging machines will be reviewed. Several practical examples of addressing machine hazards in packaging machines will be used to illustrate this risk assessment strategy.

- **Creating a General Machine Safeguarding Program.** P. Zoubek, Succeed Safety & Health Services, Inc., San Diego, CA.
- **How to Use a Systematic Risk Assessment.** N. Orr, BD Pharmaceutical Systems, Franklin Lakes, NJ.
- **ANSI's (New) Safety Standard for Packaging Machinery—It's Big and It Probably Applies to You!** J. Ingram, Lawrence Berkeley National Lab, Berkeley, CA.
- **Practical Application of ANSI's Packaging Standard—What Does an Adequately Guarded Machine Look Like?** F. Hayes, PMMI, Arlington, VA.

Synchronized slides and audio . . .

of most technical sessions are available for purchase. Place your order for multimedia downloads and DVDs before leaving Denver.

RT 240

Protecting Workers from Acute and Short-term Exposures to High Airborne Concentration

8:00 a.m.–10:30 a.m. » Convention Center, 205

Arranger: S. Dotson, NIOSH, Cincinnati, OH. **Moderator:** T. Lentz, NIOSH, Cincinnati, OH. **Monitors:** L. Hodson, NIOSH, Cincinnati, OH; A. Shepherd, NIOSH, Pittsburgh, PA.

Acute or short-term exposures to high concentrations of some airborne chemicals have the ability to quickly overwhelm workers, resulting in a wide spectrum of undesirable health outcomes that may include irritation of the eyes and respiratory tract, severe irreversible health effects, impairment of the ability to escape from the exposure environment, and, in extreme cases, death. The primary objectives of this roundtable are to provide an overview and compare current resources related to health-based exposure guidance for acute inhalation exposures; provide an update of the NIOSH immediately dangerous to life and health (IDLH) values; discuss the use of acute limits in emergency situations and planning; and illustrate novel applications of acute limits to provide guidance to protect workers from skin exposures during emergency situations.

- **Acute Inhalation Exposure Guidance: Resources and Applications.** A. Maier, Toxicology Excellence for Risk Assessment (TERA), Cincinnati, OH.
- **Update of the NIOSH IDLH Values Using the Modern Principles of Risk Assessment.** S. Dotson, NIOSH, Cincinnati, OH.
- **The Application of Acute Limits in Emergency Situations and Planning.** G. Millner, University of Arkansas, N. Little Rock, AR.
- **Using Immediately Dangerous to Life or Health Concentrations to Determine Life-Threatening Skin Exposure Hazards.** C. Chen, China Medical University, Taichung, Taiwan.

RT 241

Anatomy of a Hospital Infection Control Project

8:00 a.m.–10:30 a.m. » Convention Center, 113

Arranger: A. Havics, pH2, LLC, Avon, IN. **Moderator:** W. Baker, Michaels Engineering, Inc., La Crosse, WI. **Monitors:** A. Schreiber, Hygeia Health & Safety Service, Inc., Lakeland, FL; J. Springston, Sandler Occupational Medicine Associates (SOMA), Inc., Melville, NY.

Infection control (IC) during a construction project at a medical facility is critical to patient safety as well as minimizing owner liability. A well designed and well executed project can be accomplished with an approach that allows for flexibility while maintaining risk reduction objectives. This roundtable will detail a project that involved the remediation of undesirable mold from an HVAC system in an operational medical facility in the Midwest. The project included two air handlers supplying over 250,000 CFM, 200+ VAV boxes and more than 30,000 linear feet of duct work. The aspects of design, remediation, oversight, and completion criteria will be addressed as well as lessons learned. A question-and-answer (Q&A) portion will follow the last presentation.

- **Design Considerations.** A. Havics, pH2, LLC, Avon, IN.
- **The Contractor's Perspective.** B. Ware, CAS, Stafford, TX.
- **Managing the Project Oversight from the Engineering Firm Perspective.** S. Bucherl, pH2, LLC, Avon, IN.
- **Testing, Acceptance, and the Limitations of the Real World.** L. Albin, 410 W2nd EHS Inc., Lafayette, IN.

PO 132

General Topics in Occupational Safety and Construction

8:00 a.m.–11:00 a.m. » Convention Center, 207

Arranger: G. Mellor, Omega Environmental Services, Inc., Hackensack, NJ. **Moderator:** C. Dellacqua, Amgen, Thousand Oaks, CA. **Monitors:** G. Mellor, Omega Environmental Services, Inc., Hackensack, NJ; T. Case, AL.

8:00 a.m.

Examining Work Practices to Explain Measured Variability in Concrete Dust Concentrations during Pipe Cutting Field Experiments. (226) S. Shepherd, S. Woskie, H. Harari, University of Massachusetts, Lowell, MA.

8:20 a.m.

Lessons Learned: Indoor Air Quality and Construction in Schools. (227) P. Haas, Morse Zehnter Associates, West Palm Beach, FL; K. James, C. Avila, P. Strauss, School District of Palm Beach County, West Palm Beach, FL.

8:40 a.m.

The New Face of an Old Foe: Ongoing Challenges of Large-Scale Asbestos Abatement in a Rural Hospital. (228) P. Campbell, AMEC Earth & Environmental, Winnipeg, MB, Canada.

9:00 a.m.

MDI (4,4'-Diphenylmethane Diisocyanate) Concentrations during Polyurethane Foam Spraying During Thermal Insulation. (229) D. Drolet, B. Roberge, IRSST, Montreal, QC, Canada.

9:20 a.m.

Bioaerosol Exposures and Respiratory Symptoms Associated with Landscaping Mulch-handling Task. (230) P. Sexton-Lewis, Specialty Risk Services, Spartansburg, SC; D. Young-Corbett, B. Kleiner, Virginia Tech, Blacksburg, VA.

9:40 a.m.

Air Quality Impacts of Renovation in Occupied Buildings. (231) E. Light, J. Bailey, R. Gay, Building Dynamics, LLC, Ashton, MD; P. Haas, Morse Zehnter Associates, West Palm Beach, FL.

10:00 a.m.

Longitudinal Exposure Assessment of Rebuilding and Maintenance Work in the Post-Katrina Environment. (232) R. Rando, S. Nikdast, J. Beach, L. Freyder, H. Glindmeyer, Tulane University, New Orleans, LA.

10:20 a.m.

Factors Associated with Workers Slipping in Fast Food Restaurants. (233) T. Courtney, S. Verma, Y. Huang, W. Chang, Liberty Mutual Research Institute for Safety, Hopkinton, MA; K. Li, Chung-hua University, Hsin-Chu, Taiwan; A. Filiaggi, Liberty Mutual Insurance Company, Warrenville, IL.

10:40 a.m.

Validating Leading and Lagging OSH Indicators. (234) S. Wurzelbacher, Y. Jin, NIOSH, Cincinnati, OH.

RT 242**REACH Risk Assessment, Control and Communication Requirements within the Supply Chain**

8:00 a.m.–11:00 a.m. » Convention Center, 112

Arranger and Moderator: K. Murphy, Honeywell, Tempe, AZ.
Monitors: M. Johnson, IHS, Bellevue, WA; K. Thompson, 3M, St. Paul, MN.

The primary purpose of the European Union's REACH (Registration, Evaluation, Authorisation of Chemicals) regulation is the protection of human health and the environment. REACH has wide-ranging impact in all stages of the product life cycle and throughout the supply chain. Measuring and controlling exposures are key aspects of industrial hygiene, but different approaches are required depending on your role within the supply chain. This session will examine the requirements for development and communication of exposure scenarios within the chemical supply chain and implementation of safe working advice by downstream users and the public.

- **REACH Requirements: An Overview by Function within the Supply Chain.** P. Harper, ENVIRON, Phoenix, AZ.
- **Chemical Producer Perspective: Overview of the Risk Assessment Process and Development of a Chemical Safety Report.** R. Skoglund, 3M, St. Paul, MN.
- **Downstream User Perspective: What Do You Do When You Receive a Safety Data Sheet with an Exposure Scenario?** D. Deeds, Industrial Health & Safety Consultants, Inc., Woodbridge, CT.
- **Article Producer Perspective: What Are the Communication Requirements within REACH and How Do You Develop Safe Handling Advice?** C. Gherman, Honeywell, Automated Control Solutions, Phoenix, AZ.

PO 133**Industrial Hygiene General Practice II**

8:00 a.m.–11:20 a.m. » Convention Center, 201

Arranger, Moderator and Monitor: D. Day, Sealed Air Corporation, Duncan, SC.

8:00 a.m.

Fossil Power Generation Ash Spill Response IH Data Summary. (235) D. Mills, Tennessee Valley Authority, Chattanooga, TN; S. Skipper, EnSafe Inc., Knoxville, TN.

8:20 a.m.

Fly Ash (Dust) Exposures in Air Pollution Control Baghouses in a Coal-Fired Power Plant. (236) H. Beaulieu, Industrial Hygiene Resources, Boise, ID; A. Siert, S. Woods, Xcel Energy, Denver, CO.

8:40 a.m.

EH&S Challenges of Decommissioning a Semiconductor Manufacturing Facility. (237) B. Britton, Intel Corporation, Elbert, CO.

Please . . .

turn off cell phones in all sessions.

9:00 a.m.

Measurement of Aerosolization of Asbestos and Metals from Soil Using the RAFS. (238) J. Kominsky, Environmental Quality Management, Inc., Cincinnati, OH; J. Thornburg, RTI International, Research Triangle Park, NC; W. Barrett, U.S. EPA, Cincinnati, OH; J. Konz, U.S. EPA, Washington, DC.

9:20 a.m.

Use of Survival Analysis Techniques to Project the Future Number of CIHs. (243) L. Whitehead, University of Texas, Houston, TX.

9:40 a.m.

Assessment of Asbestos Exposures from Jet Airplane Engine Overhaul and Service Work. (240) S. Mlynarek, University of South Florida, Tampa, FL.

10:00 a.m.

A Comparison of Cotton Dust Concentrations Measured by Three Dust Samplers. (241) S. Byeon, Korea University, Seoul, Republic of Korea; Y. Phee, Daegu Haany University, Daegu, Republic of Korea; H. Kim, Catholic University, Seoul, Republic of Korea.

10:20 a.m.

Preventing Heat Strain in a Challenging Uranium Enrichment Facility. (242) C. Satterwhite, R. Suga, Bechtel Jacobs, Oak Ridge, TN.

10:40 a.m.

State of the Art for Asbestos: An Analysis of the Knowledge within One State's Department of Health. (239) R. Adams, M. Holton, ENVIRON International Corporation, Princeton, NJ.

11:00 a.m.

Canadian Version of the AACM? Black Bear Crossing Abatement and Demolition Project. (244) D. Wytrykush, R. Smith, Golder Associates Ltd., Calgary, AB, Canada.

RT 243**Laboratory Safety and Health: Laboratory Design Considerations**

8:00 a.m.–11:30 a.m. » Convention Center, 401

Arranger and Moderator: M. Miller, FBI Laboratory, Quantico, VA. **Monitors:** M. Russell, AECOM Technical Services, Inc., Middleton, WI; P. Subramanian, University of Iowa, Iowa City, IA.

Laboratories of all types are routinely constructed throughout the world, but considerable thought must go into the functions and needs of the users. Industrial hygienists and safety professionals can make a great impact at the planning stage by providing effective decisions based on an understanding of basic engineering and practical design considerations and solutions. This roundtable will discuss revisions to the ANSI/AIHA® Z9.5 standard on laboratory ventilation; delve into the specifics of fume hood minimum ventilation rates and their impact on energy efficiencies while using a hood safely; and consider applications of the International Mechanical Code 510 (hazardous exhaust systems) to design. The presenters will then lead a discussion of laboratory design to consider the use of relative pressurization of spaces for contamination control and the importance of

commissioning steps in meeting safety objectives. Finally, we will discuss the application of the above ideas in the design of forensic and diagnostic labs to include the importance of human factor considerations and application of LEED principles in the process.

- **Update on the ANSI/AIHA® Z9.5 Standard on Laboratory Ventilation.** S. Crooks, RTI International, Research Triangle Park, NC.
- **A Change to the Lab Energy Paradigm: Revisions to the ANSI Z9.5 Fume Hood Minimum Ventilation Rate.** G. Sharp, Aircuity, Inc., Newton, MA.
- **The Decision-Making Process in Designing Lab Exhaust Systems under International Mechanical Code (IMC) 510.** J. Carpenter, Facility Performance Engineers, Inc., Cinnaminson, NJ.
- **Designing Space Pressurization for Laboratories.** J. Coogan, Siemens Building Technologies, Buffalo Grove, IL.
- **Human Factor Issues in Forensic Laboratories.** K. Mohr, Jr., Health, Education and Research Associates, St. Louis, MO.
- **Building a Green Diagnostic Testing Laboratory—A Case Study.** T. Bauckham, Quest Diagnostics, Oklahoma City, OK.

RT 244

Benzene Exposures in the Workplace

8:00 a.m.–Noon » Convention Center, 403

Arranger: C. Richard, Environmental Profiles, Inc., Columbia, MD.

Moderator: C. Robbins, Veritox, Inc., Redmond, WA.

Monitors: G. Miller, MM & A, LLC, Matthews, NC; A. Madl, ChemRisk, Inc., San Francisco, CA.

Benzene, a major commodity chemical, has known effects on bone marrow and is among the compounds for which OSHA has established a separate exposure standard, 29 CFR 1910.1028. Our understanding of both the impacts of human exposure and of exposure factors relevant to the practice of industrial hygiene continues to evolve. This roundtable discussion is designed to explore field evaluation, environmental and biological monitoring as well as the use of exposure assessment data in understanding the impacts of benzene and benzene-containing mixtures in the workplace.

- **Workplace Evaluations: A Peek into OSHA Field Operations.** D. Wingo, OSHA, Fort Worth, TX.
- **Airborne Benzene Exposure Assessment and Exposure Models.** C. Richard, Environmental Profiles, Inc., Columbia, MD.
- **Clinical Relevance of Percutaneous Penetration in Man.** H. Maibach, University of California, San Francisco, CA.
- **Metabolism and Biological Monitoring of Benzene and Benzene-Containing Mixtures.** H. Cheung, OEM Advisor, LLC., Baltimore, MD.
- **Advances in Understanding Benzene Epidemiology.** S. Lamm, Consultants in Epidemiology & Occupational Health, LLC (CEOH), Washington, DC.
- **WITHDRAWN.** D. Egilman, Brown University, Attleboro, MA.

Stokinger Award Lecture

Keeping TLVs® Within REACH

Noon–1:00 p.m. » Convention Center, 112



Lecturer: Bruce D. Naumann, PhD, DABT, Senior Principal Scientist and Director of Occupational and Environmental Toxicology, Merck, Whitehouse Station, NJ.

REACH is already having a significant impact on how we approach chemical management in Europe. As the first registration deadline approaches,

companies will need to evaluate a number of exposure scenarios, including worker exposures. Acceptability of exposure estimates will be assessed by comparing them to derived no-effect levels (DNELs) or the few formal limits established in the EU. TLVs® are not mentioned in the REACH regulation or guidance documents. DNELs will be established by individual companies or consortia (SIEFs) using very prescriptive methods (with specific assessment factors) described in the REACH guidance on preparation of chemical safety reports that leave little room for use of professional judgment. Different DNELs will likely be set for the same chemical and these may differ from the TLVs®, or national OELs based on TLVs®, that have been used for past exposure assessments. There is a concern that DNELs will displace the TLVs®; however, this concern may be overblown. Industrial hygienists have long recognized the importance of the TLVs® to worker health and safety. The TLV® Chemical Substances Committee applies the best science through the experience and expert judgment of its members when establishing and updating TLVs®. A review of the DNEL methodology in the REACH guidance suggests that DNELs will not differ significantly from the TLVs®. The *Documentation* of the TLV® for specific chemicals provides a comprehensive source of animal and human data, along with an expert interpretation of these data, and could serve as an important resource for those tasked with developing DNELs.

CR 325

Electrical Safety

1:00 p.m.–2:00 p.m. » Convention Center, 207

Presenter: W. Brown, Fairborn, OH.

Electricity is essentially everywhere at work, at home and recreation areas. There are about 30,000 electrically related safety incidents annually. Electrocutation is a major contributor to industrial deaths worldwide. We will discuss terminology and the human effects of contact with electricity as important to protecting yourself and others. Complying with electrical standards is the way to get it right during electrical installation and maintenance. We will review examples of conditions that need to be corrected to avoid concerns.

CR 326**Safety Beyond the Numbers**

1:00 p.m.–2:00 p.m. » Convention Center, 201

Presenter: M. Hrycusko, General Motors of Canada, Ltd., St. Catharines, ON, Canada.

Organizations have historically relied on meeting or exceeding OSHA or other safety-related metrics or accreditation systems as an indicator of their safety performance. This presentation will demonstrate that analyzing safety accidents and targeting and reinforcing specific safety behaviors has an impact on improving overall safety performance and reinforcing safety behavior in all employees. Participants will be provided with examples of targeting and observing specific safety behaviors and ways to measure and reinforce them.

PO 134**Risk Assessment (Management)**

1:00 p.m.–3:00 p.m. » Convention Center, 203

Arranger: A. Rossner, Clarkson University, Potsdam, NY.**Moderator:** B. Heckman, LaCroix Pryor Davis LLC, Lafayette, CA. **Monitor:** K. Yost, Coimm Scope, Inc., Claremont, NC.

1:00 p.m.

Assessing Perceived Health, Safety, and Environmental Risks. (245) A. Sheaffer, J. Yasaloni, LMI, Belcamp, MD.

1:20 p.m.

Retrospective Exposures to Carbon Monoxide: Correlating Predictive Models. (247) F. Boelter, ENVIRON International Corporation, Chicago, IL; F. Jones, ENVIRON International Corporation, Wauwatosa, WI.

1:40 p.m.

Use of a Retrospective Exposure Assessment to Examine Risk of Workers in Talc Mines and Mills in Vermont. (248) E. Mellas, A. Rossner, Clarkson University, Potsdam, NY.

2:00 p.m.

U.S. EPA BASE Data Contradicts Commonly Held Assumptions Regarding the Interpretation of Airborne Mold. (249) P. Haas, Morse Zehnter Associates, West Palm Beach, FL; E. Light, Building Dynamics, LLC, Ashton, MD; R. Morse, S. Lattanzio, Morse Zehnter Associates, Troy, NY.

2:20 p.m.

Direct-Reading Instrument Comparison for Measurement of Arsine and Hydrogen Selenide Gas. (250) J. Golden, 3M Company, Cottage Grove, MN; B. Mader, M. Dolan, 3M Company, St. Paul, MN.

2:40 p.m.

Application of Exposure Matrix and Risk Assessment of Industries and Processes Treated DCM in Korea. (251) K. Ha, Changwon National University, Gyungnam, Republic of Korea; D. Park, Korea National Open University, Seoul, Korea, Republic of; C. Yoon, Seoul National University, Seoul, Republic of Korea.

E-abstract Book

Review abstracts online...anywhere...any time.
Visit www.aiha.org/aihce10/education.

RT 245**Cell Phone Pants and Other Hot Topics in Nonionizing Radiation**

1:00 p.m.–3:00 p.m. » Convention Center, 205

Arranger: A. Butler, Butler Health and Safety, Inc., San Pedro, CA. **Moderator:** R. Hitchcock, LightRay Consulting, Inc., Cary, NC. **Monitors:** M. Phillips, University of Oklahoma, OK; W. Ringo, DMR and Associates, Louisville, KY.

Just when you thought it was safe to go back to basics in IH, the buzz picks up again: “Scientists declare that cell phones cause cancer,” “Hybrids are unsafe at any speed,” “Avoid hospitals with your medical implant,” “Radiation levels from UV lamps cause burns to patients.” These presentations will question the science behind these and other alarming claims. One speaker will discuss magnetic field hazards in hybrid vehicles. Another will tackle some of the stranger claims for electromagnetic field (EMF) protective devices and equipment found on the Internet. A third will discuss exposures of individuals with medical implants to various forms of nonionizing radiation, the hazards and the controls. On the other end of the EMF spectrum, the use of UV germicidal radiation looms as an issue in hospitals and other health-care facilities. The last presentation will cover uses of UV radiation, concerns to be addressed by industrial hygienists, and measures needed to protect workers.

- **Electromagnetic Interference (EMI) and Implanted Medical Devices.** S. Bagley, IAQ Services Inc., Fishers, IN.
- **Cell Phone Pants and Other Misnomers of NIR.** A. Butler, Butler Health and Safety, Inc., San Pedro, CA.
- **Is Your Hybrid Causing You Pain?** D. Baron, DB-Emf, Austin, TX.
- **Current Issues in UV Germicidal Irradiation.** N. Key, West Virginia University, Morgantown, WV.

PO 135**New Advances in Ventilation Technology**

1:00 p.m.–3:40 p.m. » Convention Center, 210

Arrangers: V. Kero, South Hackensack, NJ; S. Guffey, West Virginia University, Morgantown, WV. **Moderator:** V. Kero, Hackensack, NJ. **Monitors:** J. Friedman, AMEC, Minneapolis, MN; S. Battista, 3M, Maplewood, MN.

1:00 p.m.

The Use of Video Exposure Monitoring in a Training Video on the Hazard of Hexavalent Chromium in Welding. (253) M. Cohen, M. Beaudreau, J. Camp, V. Runnion, University of Washington, Seattle, WA.

1:20 p.m.

Experimental Study on the Performance of a Benchtop Enclosing Hood—Effects of Face Velocity and Cross-Draft Velocity. (254) X. He, S. Guffey, B. Lewis, West Virginia University, Morgantown, WV.

1:40 p.m.

Capture Hood Centerline Velocity Comparison to Dallavalle. (255) B. Lewis, S. Guffey, West Virginia University, Morgantown, WV.

» Technical Program: Thursday

2:00 p.m.

Experimental Study on the Performance of a Benchtop Enclosing Hood—Effects of Five Different Face Treatments. (256) X. He, S. Guffey, B. Lewis, West Virginia University, Morgantown, WV.

2:20 p.m.

Engineering Control Assessment for Liquid and Powder Flavorings. (257) A. Garcia, D. Hirst, NIOSH, Cincinnati, OH.

2:40 p.m.

Practical Technical Aides for Field Inspection and Certification of Local Exhaust Ventilation Systems. (258) G. Hrbek, LANL, Los Alamos, NM.

3:00 p.m.

Working Safely With Formaldehyde. (259) J. Mohr, Hyundai, Montgomery, AL.

3:20 p.m.

Considering ANSI/AIHA® Z-9 for Process Controls. (252) F. Boelter, R. Rottersman, ENVIRON International Corporation, Chicago, IL; R. Webb, ENVIRON International Corporation, Tampa, FL.

RT 246

Implementing a “Buy Quiet” Policy in Your Workplace

1:00 p.m.–4:00 p.m. » Convention Center, 109

Arranger and Moderator: J. Cissna, Portland General Electric, Portland, OR. **Monitor:** M. Krause, Veritox, Redmond, WA; K. Murray-del Aguila, BP, Houston, TX.

“Buy quiet” programs guide the identification, evaluation and procurement of low-noise tools and equipment for the workplace. A successful “buy quiet” program may be implemented from within the OEHS function, but it relies heavily on the informed efforts of engineering and procurement staff. This presentation equips industrial hygienists with the framework and practical tools for developing “buy quiet” programs that can be effectively integrated into the design, purchasing and construction phases of projects. “Buy quiet” programs are essential to the twenty-first century challenge of hearing loss. They represent a shift from hearing protection to hazard elimination. They solidify the gains accomplished by retrofit noise controls. The panelists in this roundtable will offer important perspectives on noise emission standards and manufacturer efforts in addition to on-the-ground experience with implementation of “buy quiet” policy.

- **Gathering and Delivering Noise Level Information for “Buy Quiet.”** C. Hayden, NIOSH, Cincinnati, OH.
- **Acceptance Testing.** D. Driscoll, Associates in Acoustics, Inc., Evergreen, CO.
- **Balanced Incentives for Including Noise Control in the Design Process in the Department of Defense.** M. Geiger, Naval Safety Center, Arlington, VA.
- **“Buy Quiet”: A Manufacturer’s Perspective.** K. Meitl, Caterpillar Corp., Peoria, IL.
- **Application of Noise Level Specifications for New Industrial Equipment.** R. Anderson, Anderson Consulting Associates, Lansing, MI.
- **“Buy Quiet”: On-the-Ground Experience at NASA.** B. Cooper, NASA, Cleveland, OH.

RT 247

Nanotechnology: A Forum on Globalization

1:00 p.m.–4:30 p.m. » Convention Center, 106

Arranger and Moderator: D. Ewert, OSO BioPharmaceuticals Manufacturing, LLC, Albuquerque, NM. **Monitors:** M. Hoover, NIOSH, Morgantown, WV; R. Lally, University of California-Irvine, Irvine, CA.

As occupational health professionals strive to maintain leading-edge methodologies and sustainability, we find ourselves relying upon an entirely new set of tools—systems that were created using the most technically advanced science in generations and available only as a result of the evolution in nano-based materials, engineering, and biotechnology. The business and science of leveraging physical properties at an atomic level is upon us and advancing more rapidly every year. Thus, we look forward to what will come with the realization that nanotechnology is changing not only our generation but those yet to be realized. This forum brings together experts in the business and science of nanotechnology. As a whole, the roundtable will provide practicing industrial hygienists with a comprehensive understanding of the scope and breadth of nanotechnology’s impact on the world. From a business perspective, authorities in the field will provide insight into real-world applications, while specialists in risk management, science, and informatics will discuss the means and methods for defending health and safety synergistically with advanced new products.

- **Nanotechnology and Business Development: A History of Development.** V. Caprio, NanoBusiness Alliance, Shelton, CT.
- **Managing Innovation and NanoProduct Development Risks.** G. King, nanoTox, Austin, TX.
- **U.S.-Based Activities Related to Nanotechnology.** B. Stockmeier, Argonne National Laboratory, Argonne, IL.
- **Exposure Scenarios and International Strategies to Fill Knowledge Gaps.** M. Riediker, Institute for Work and Health, Lausanne, Switzerland.
- **Building a Safe Future for Nanotechnology: The Insurance Perspective.** P. O’Neill, Chubb Group of Insurance Companies, Corfu, NY.
- **International Regulatory and Governance Developments in Nanotechnology.** L. Bergeson, Bergeson & Campbell, P.C., Washington, DC.
- **Environmental Implications of Consumer Nanotechnologies.** T. Benn, Arizona State University, Tempe, AZ.
- **Nanotechnology and Business Development: The Future of Innovation.** C. Gause, Luna Innovations, Danville, VA.

Please Turn in Evaluations!

Return session evaluations; bins are centrally located near meeting rooms.

RT 248**Respirator Program Needs and Experience in the Health-Care Setting**

1:00 p.m.–4:30 p.m. » Convention Center, 105

Arranger: J. Johnson, JSJ and Associates, Pleasanton, CA.**Moderator:** R. Metzler, Pittsburgh, PA. **Monitors:** S. Graham, U.S. Army, Aberdeen Proving Ground, MD; R. Metzler, Pittsburgh, PA.

Proper selection and use of respiratory protection in the health-care setting is currently a major topic under discussion at the national, state, and local levels. Respiratory protection has been identified as a necessary control to protect health-care workers, emergency responders and the public from airborne influenza exposures, especially during a pandemic. The history, hazards, research on exposure routes, current regulations and guidance, engineering controls, a representative respiratory program, and available respiratory equipment related to the use of respiratory protection for protection from airborne influenza exposure will be presented.

- **Past History and Experience Using Respiratory Protection in the Health-Care Setting.** M. Catlin, Service Employees International Union, Washington, DC
- **Hospital Design to Control Airborne Exposure, Current and Future Designs and Challenges.** E. Stewart, Kaiser Permanente, Oakland, CA.
- **Aerosol Transmission: Current Knowledge and Ongoing Research.** J. Szalajda, NIOSH, Pittsburgh, PA.
- **Respirator Program Requirements in the CA Aerosol Transmissible Disease Standard.** J. Johnson, JSJ and Associates, Pittsburgh, CA.
- **Commercially Available Respirators for Use in the Health-Care Setting.** J. Birkner, Moldex-Metric, Culver City, CA.
- **A National Health-Care Provider's Respirator Program.** L. Kaneshige, Kaiser Permanente, Oakland, CA.

RT 249**The Myth of Contractual Immunity: Legal Risks on Multi-employer Job Sites**

1:00 p.m.–4:30 p.m. » Convention Center, 113

Arranger: D. Adley, KTA – Tator, Inc., Pittsburgh, PA.**Moderator:** J. Keyes, CHESS, Inc., Woodbury, MN. **Monitors:** S. Keppta, NASA Johnson Space Center, Houston, TX; J. Skrabak, Camp, Dresser & McKee, Inc., Cambridge, MA.

Construction projects frequently involve several parties. There may be an owner and/or operator of an existing facility. There may be a consulting engineer or other professional(s) who assisted in the design and development of the project specification and perhaps provide third-party on-site observations during the construction project. There may be a general contractor, and one or more specialty subcontractors. This forum will explore the legal exposures of the various parties, both statutory and civil; the degree of protection afforded by typical contract provisions used to isolate or indemnify the various parties; the limitations of most commercially available general and professional liability policies; and steps that can mitigate the likelihood of an occurrence. A hypothetical accident involving workers killed while repairing corroded metal flooring in a storage tank that is part of a chemical manufacturing facility will be used to illustrate key points and provide continuity among the topics.

- **Statutory Liability under OSHA's Multi-Employer Policy.** K. White, Jackson Kelly PLLC, Denver, CO.
- **Statutory Liability under OSHA's Confined Spaces and Process Safety Management Standards.** D. Dahlstrom, Exponent, Bellevue, WA.
- **Civil Liability and Contractual Indemnity.** J. Walker, Wheeler Trigg O'Donnell LLP, Denver, CO.
- **Unique Liabilities under State-Specific Legislation.** N. Feldscher, New York City Department of Environmental Protection, Corona, NY.
- **Coverage Afforded by Standard Form General and Professional Liability Policies, as well as Owner-Controlled Insurance Programs.** D. DeLaRue, Willis HRH Construction Practice, Dallas, TX.
- **Mitigating Risks on Multi-Employer Worksites Using AIHA® Guideline 4—Health and Safety Requirements in Construction Contract Documents.** D. Adley, KTA - Tator, Inc., Pittsburgh, PA.

The findings and conclusions in the National Institute for Occupational Safety and Health abstract presentations have not been formally disseminated by the National Institute for Occupational Safety and Health and should not be construed to represent any agency determination or policy.

» Poster Sessions: Monday–Wednesday

Expo, Hall F

Posters are grouped by topic and authors are stationed at their posters at designated times to answer questions. It's a great spot on the Expo floor to meet colleagues and to discuss the latest research in OEHS!

Posters are open for viewing 9:30 a.m., Monday, May 24 through 1:00 p.m., Wednesday, May 26.

Poster Session Arrangers

- Chad Dowell, NIOSH, Cincinnati, OH.
- Aleksandr Stefaniak, NIOSH, Morgantown, WV.
- R. Kent Olstenstad, University of Alabama, Birmingham, AL. (Student)

Poster Session 401

Author Attend Time: Monday, May 24, 10:00 a.m.–Noon

Aerosols

- 261 High-flow Personal Respirable Dust Sampler for Increased Sensitivity.** S. Trakumas, SKC Inc., Eighty Four, PA.
- 262 Performance Evaluation of Biosampler Sampling Efficiency.** C. Lai, S. Jheng, S. Wun, J. Chang, Y. Huang, Chung Shan Medical University, Taichung, Taiwan; P. Hung, C. Chang, L. Li, Institute of Occupational Safety & Health, Council of Labor Affairs, Taipei, Taiwan.
- 263 Portable Electrostatic Aerosol Particle Classifier.** A. Ghimire, D. Rodier, S. Rowley, Particle Measuring Systems, Boulder, CO; B. Gorbunov, R. Muir, B. Steer, Naneum Ltd., Canterbury, United Kingdom.
- 264 Sampling for Respirable Particulates: A Side-by-Side Comparison of Methods.** J. Lang, C. Simmons, R. Jones, F. Boelter, Environ International Corporation, Chicago, IL.

Air Sampling Instrument Performance

- 265 A New Sampling Method Using Physiologic Sampling Pump.** E. Lee, L. Lee, M. Flemmer, J. Slaven, M. Harper, NIOSH, Morgantown, WV; M. Lin, W. Groves, The Pennsylvania State University, University Park, PA.

Field Detection, Sampling and Analysis

- 266 Evaluation of Chemical Exposures of Nail Salon Workers in California.** T. Nguyen, E. Tovar, P. Michalko, State Compensation Insurance Fund, Santa Ana, CA; H. Borman, State Compensation Insurance Fund, San Francisco, CA.
- 267 Validation of Nitrogen Dioxide and Sulfur Dioxide Using a Diffusive Sampler.** C. Kuhlman, SKC, Inc., Eighty Four, PA.
- 268 Simple, Real-Time Detection of Methamphetamine Chemicals.** R. Jeffers, D. Foy, E. Locke, K. Chapman, Morphix Technologies, Virginia Beach, VA.

Laboratory Health and Safety

- 269 Use of Nanoparticle Aerosol in Assessing Hood Containment Performance.** J. Davis, M. Rosenow, J. Woodring, G. Schafer, Argonne National Laboratory, Argonne, IL.
- 270 Evaluation of Potential Chemical Hazards in the Criminal Investigation Section of a Police Department.** K. Fent, A. Almazan, NIOSH, Cincinnati, OH.

Sampling and Lab Analysis

- 271 Field Comparison of Two Sampling Methods for Triglycidyl Isocyanurate.** S. Thygerson, J. West, R. Merrill, Brigham Young University, Provo, UT.

- 272 Fiber Examination Using Different Mounting Methods for Phase Contrast Microscopy.** E. Lee, M. Harper, J. Nelson, M. Andrew, NIOSH, Morgantown, WV; P. Hintz, NIOSH, Spokane, WA; G. Joy, NIOSH, Pittsburgh, PA; T. Pang, Ryerson University, Toronto, ON, Canada.
- 273 Analytical Methods for Determination of Compliance with Newly Established OEL Values in Poland.** J. Gromiec, W. Wesolowski, S. Brzezniak, M. Kucharska, Nofer Institute of Occupational Medicine, Lodz, Poland.
- 274 Determination of the Recovery Rate of Culturable Fungi from Swabs and Adhesive Tapes.** M. Putty, K. Ramanathan, EMLab P&K, San Bruno, CA.
- 275 The Effect of Concentration, Temperature, Air Sampling Volume on Breakthrough during Sampling of 1,3-Butadiene.** J. ROH, C. Kim, J. Won, J. Rhie, Yonsei University College of Medicine, SEOUL, Republic of Korea; C. Kim, Yonsei University, SEOUL, Republic of Korea.
- 276 A Method for the Simultaneous Determination of Airborne Ozone and Carbonyls Using a Two-Bed Sampling Cartridge.** J. Desorcie, L. Sidisky, Supelco, Sigma-Aldrich, Bellefonte, PA; S. Uchiyama, National Institute of Public Health, Wako City, Japan.
- 277 Asbestos and Other Fiber Counting by Image Analysis.** M. Beauparlant, IRSST, Montreal, QC, Canada.
- 278 Identification and Quantitative Analysis of Wood Dust by Direct On-Filter Diffuse Reflectance.** M. Harper, M. Chirila, T. Lee, M. Flemmer, NIOSH, Morgantown, WV; J. Slaven, NIOSH, Morgantown, WV.

Poster Session 402

Author Attend Time: Monday, May 24, 2:00 p.m.–4:00 p.m.

Biological Monitoring

- 279 Hemoglobin Adducts and Plasma Metabolites as Biomarkers of Exposure to 1,6-Hexamethylene Diisocyanate.** S. Flack, L. Gaines, K. Fent, J. Thomasen, L. Ball, L. Nylander-French, University of North Carolina, Chapel Hill, Chapel Hill, NC; S. Whittaker, Local Hazardous Waste Management Program, Seattle & King County, Seattle, WA.
- 280 Factors Affecting Levels of Urinary Biomarker 1,6-Hexamethylene Diamine (HDA) after Exposure to 1,6-Hexamethylene Diisocyanate (HDI).** L. Gaines, K. Fent, S. Flack, J. Thomasen, L. Ball, L. Nylander-French, University of North Carolina, Chapel Hill, NC; S. Whittaker, Local Hazardous Waste Management Program, Public Health - Seattle & King County, Seattle, WA.
- 281 Bromide and N-acetyl-s-(n-propyl)-l-cysteine in Urine From Workers Exposed to 1-Bromopropane Solvents from Vapor Degreasing.** K. Hanley, M. Petersen, K. Cheever, NIOSH, Cincinnati, OH; L. Luo, Constella Group, Inc., Cincinnati, OH.

Biosafety and Environmental Microbiology

- 282 Exposure of Bioaerosols for Dentists during General Dental Practices.** W. Lin, Y. Huang, China Medical University, Taichung, Taiwan; P. Hung, C. Chuan, Institute of Occupational Safety and Health, Taipei, Taiwan.

283 Efficacy of Chlorine Dioxide Disinfection in Commercial Grocery Applications. K. Chapman, E. Locke, Morphix Technologies, Virginia Beach, VA; J. Tenney, ICA TriNova LLC, Newnan, GA.

284 Relationship between Bioaerosols and Environmental Factors in the Metro Stations. N. Hung, W. Lin, China Medical University, Taichung, Taiwan.

285 Microfungi Novelty from South Florida Outdoor Environment. G. Delgado, B. Krishnan, EMLab P&K, Ft. Lauderdale, FL.

Exposure Assessment Strategies

286 Predicting Long-Term Average Oil Mist Exposures for Workers in a Fastener Manufacturing Industry Based on its Manufacturing Rates. M. Chen, Chung Hwa University of Medical Technology, Tainan, Taiwan; P. Tsai, J. Soo, National Cheng Kung University, Tainan, Taiwan; C. Chang, Institute of Occupational Safety and Health, Council of Labor Affairs, Taipei, Taiwan.

287 Air and Real-Time Diacetyl Exposure Assessment at a Flavoring and Modified Dairy Product Manufacturing Plant. R. Saito, C. Piacitelli, R. Boylstein, R. Kanwal, N. Sahakian, G. Kullman, NIOSH, Morgantown, WV.

288 Response to Potential Mercury Contamination Associated with a Gas Plant Turnaround Activity in South Texas, Including Industrial Hygiene Monitoring and Assessment Results. J. Koehn, Jan Koehn, CIH, Inc., Houston, TX.

289 Dust and Soy Antigen Exposures at a Soy Processing Plant. R. Boylstein, G. Kullman, K. Cummings, D. Gaughan, C. Piacitelli, D. Beezhold, B. Green, F. Blachere, T. Bledsoe, J. Cox-Ganser, K. Kreiss, NIOSH, Morgantown, WV.

290 Recommended Methodology for Evaluating Metalworking Fluid Exposures. M. Rodriguez, N. Burton, L. Tapp, J. Eisenberg, S. Evans, NIOSH, Cincinnati, OH.

291 Skin Physiology-Based Indicators for Indoor Microclimatic Change. C. Chen, C. Wu, Y. Chen, China Medical University, Taichung, Taiwan.

292 Assigning of Skin Notation According to the Different Models of Skin Absorption. S. Czerczak, M. Kupczewska Dobecka, M. Jakubowski, Nofer Institute of Occupational Medicine, Lodz, Poland.

Health-Care Industries

293 Cost Gains Realized by Preventing Health-Care Worker Claims. D. Boyd, Liberty Mutual, Wausau, WI.

294 NIOSH Assessment of Occupational Exposures to Glutaraldehyde. B. Jacklitsch, G. Dotson, D. Dankovic, K. MacMahon, L. Hodson, NIOSH, Cincinnati, OH.

295 St. Luke's Health System Employee Injury Scorecard: Implementing Employee Injury Rates Into Performance Improvement Metrics in Health-Care. D. Loucks, St. Luke's Regional Medical Center, Boise, ID.

Indoor Environmental Quality

296 Evaluation of Cancer among Occupants of Two Office Buildings. G. Burr, E. Page, S. Brueck, NIOSH, Cincinnati, OH.

297 Indoor Air Quality Concerns from a Treated Steam Release. E. Ranken, Massachusetts Institute of Technology, Cambridge, MA; R. Clifford, B Clifford Associates, Newton, MA.

Poster Session 403

Author Attend Time: Tuesday, May 25, 10:00 a.m.–Noon.

Agricultural Health and Safety

298 Computational and Experimental Study of Silo Blower Ventilation. N. Goyer, A. Bahloul, B. Roberge, IRSST, Montreal, QC, Canada; M. Chavez, M. Reggio, Polytechnique, Montreal, QC, Canada.

Community Environmental Health

299 Distribution of Health and Safety Information to Day Laborers. J. Hoffman, A. Turner, University of Cincinnati, Cincinnati, OH.

300 Community Exposures and Health Risks Associated with Residential Wood Burning in Canada. P. Williams, E Risk Sciences, LLP, Boulder, CO; K. von Stackelberg, E Risk Sciences, LLP, Boston, MA.

301 Risk Assessment and Clinical Effects of Aldehydes Exposure in Dwellings. D. Cottica, E. Grignani, P. Sacco, Fondazione Salvatore Maugeri, Padova, Italy.

Environmental Issues

302 Modeling the Environmental Fate of Polybrominated Diphenyl Ethers in Taiwan. Y. Wang, Y. Chen, L. Lin, S. Tsai, National Taiwan University, Taipei, Taiwan.

Ergonomics

303 Polyurethane Foam Spraying: Best Practices Guide. B. Roberge, Institut de Recherche Robet-Sauvé en Santé et en Sécurité du Travail, Montreal, QC, Canada; B. Teasdale, Association Sectorielle Paritaire Construction, Montreal, QC, Canada.

Industrial Hygiene General Practice

304 Evaluation of Composting Toilet Cleaning and Maintenance. N. Burton, C. Dowell, NIOSH, Cincinnati, OH.

305 1-Bromopropane Exposure in Dry Cleaning Establishments. J. Ramsey, NIOSH, Cincinnati, OH.

306 Evaluation of Carbon Monoxide Exposure among Airport Cargo Material Handlers. C. Dowell, NIOSH, Cincinnati, OH.

307 A Survey on the Status of Using Sulfuric Acid in Republic of Korea. J. Baek, KOSHA, Gwangju, Republic of Korea.

308 Employee Exposure to Solvents, Dust and Noise in Auto Collision Repair Shops. A. Bejan, D. Parker, Park Nicollet Institute, St. Louis Park, MN; L. Brosseau, University of Minnesota, Minneapolis, MN; J. Keyes, CHES, Inc., Woodbury, MN.

309 Guidance for Solid Waste Cleanup Along the U.S.-Mexico Border. R. Niemeier, NIOSH, Cincinnati, OH.

310 Chemical Exposure Control in the Biodiesel Industry. B. Law, T. Pearce, P. Siegel, NIOSH, Morgantown, WV.

Lead

311 Case Study: Industrial Hygiene Testing Results from a Comprehensive Lead Inspection and Risk Assessment of 294 Housing Units for Waterbury Eliminates Lead Hazards (W.E.L.H.), a HUD-Funded Program in Connecticut. L. Cannon, T. Neil, EnviroMed Services, Inc., Meriden, CT; J. Kunkel, Waterbury Eliminates Lead Hazards, Waterbury, CT.

» Poster Sessions: Monday–Wednesday

- 312 Changes of Air Lead Concentrations in Storage Battery Industries during 1989–2006 in Korea.** B. Lee, N. Kim, Soonchunhyang University, Cheonan, Republic of Korea.
- 313 Lead Exposure Due to Use of Powder-Actuated Tools.** M. Wiggins, Liberty Mutual Group, Lexington, SC.

Noise

- 314 Mass Transit Ridership Associated with Excessive Noise Exposure: Preliminary Data.** R. Gershon, J. Pearson, M. Akram, J. Spitzer, Columbia University, New York, NY; R. Neitzel, University of Washington, Seattle, WA; M. Sherman, Loyola University Maryland, Baltimore, MD.
- 315 A System for Capturing and Analyzing Impact Sounds with Readily Available Components.** E. Salazar Vega, L. Whitehead, University of Texas, Houston, TX.

Occupational Health

- 316 Work-Related Risk Factors of Myocardial Infarction in Poland—Epidemiological Studies.** A. Bortkiewicz, E. Gadzicka, J. Siedlecka, A. Szyjkowska, P. Viebig, T. Makowiec-Dabrowska, Nofer Institute of Occupational Medicine, Lodz, Poland.

Poster Session 404

Author Attend Time: Tuesday, May 25, 1:00 p.m.–3:00 p.m.

Engineering and Control Technology

- 317 Filtration and Loading Characteristics of Granular Bed Filters.** Y. Kuo, Chung Hwa University of Medical Technology, Tainan, Taiwan; S. Huang, M. Hsiao, C. Chen, National Taiwan University, Taipei, Taiwan; C. Chang, Institute of Occupational Safety and Health, CLA, Taipei, Taiwan.
- 318 Control of Metal (Manganese) Fume Exposure During Structural Steel Fabrication Shop Welding—A Case Study.** D. Weber, Liberty Mutual Insurance, Glastonbury, CT.
- 319 Methodological Challenges in Comparing Copper with Aluminum in Air Conditioning Systems.** C. Feigley, J. Khan, D. Salzberg, H. Hamoodi, University of South Carolina, Columbia, SC; J. Albrecht, Albrecht Environmental, Wando, SC.

Nanotechnology

- 320 Emissions and Exposure Monitoring during Carbon Nanofiber Production.** D. Evans, NIOSH, Cincinnati, OH.
- 321 Material Safety Data Sheets for Nanoproducts.** G. Burdge, BMT Designers and Planners, Arlington, VA; J. Erdman, Office of Chief of Naval Operations, Arlington, VA.

Personal Protective Clothing and Equipment

- 322 A Wind-Driven Method to Assessing Nano- and Sub-micron Particle Penetration through Fabrics.** P. Gao, R. Shaffer, M. Yang, A. Shepherd, NIOSH, Pittsburgh, PA; P. Jaques, EG&G Technical Services, Pittsburgh, PA.
- 323 Development of a Pesticide-Related Personal Protective Equipment Surveillance Module in Agriculture.** K. Faulkner, M. D'Alessandro, D. Groce, National Personal Protective Technology Laboratory, Pittsburgh, PA; S. Locke, K. Hamre, L. Elinson, Westat, Inc., Rockville, MD; J. Mendeloff, RAND Center for Health and Safety in the Workplace, Pittsburgh, PA.

Respiratory Protection

- 324 Digital 3-D Headforms Representative of the Current Chinese Workers.** S. Benson, EG&G Technical Services Inc., Pittsburgh, PA; W. Chen, D. Yu, H. Wang, Huazhong University of Science & Technology, Wuhan, China; J. Hsiao, Z. Zhuang, NIOSH, Pittsburgh, PA.
- 325 Effect of Biological Decontamination Methods on Filtering Facepiece Respirator Fit.** D. Viscusi, R. Shaffer, K. Faulkner, NIOSH, Pittsburgh, PA; M. Bergman, A. Palmiero, J. Powell, EG&G Technical Services, Inc., Pittsburgh, PA.
- 326 The Effect of Protective Factors on Repeated Decontamination of Filtering Facepiece Respirator Coupons Exposed to MS₂-Containing Droplet Nuclei.** E. Fisher, EG&G Technical Services Inc., Pittsburgh, PA; J. Williams, R. Shaffer, NIOSH, Pittsburgh, PA.
- 327 Development of In-situ Real-time Adsorptive Carbon Residual Life Indicator Based on Electrochemical Impedance.** R. Jeffers, H. Anderson, J. Parker, E. Locke, G. Manivannan, Morphix Technologies, Virginia Beach, VA.

Risk Assessment/Risk Management

- 328 DNELs Setting Based on Example of But-2-yno-1,4-diol According to REACH Principles.** M. Kupczewska-Dobecka, S. Czerczak, R. Swiercz, Nofer Institute of Occupational Medicine in Poland, Lodz, Poland.
- 329 Dangerous Chemical Substances Releases in Poland during 2005–2007 in the Context of Threats for Human Health and Environment.** A. Palaszewska-Tkacz, S. Czerczak, Nofer Institute of Occupational Medicine, Lodz, Poland.
- 330 Frequency and Structure of Emergency Releases of Dangerous Chemicals in Poland during 2005–2007.** A. Palaszewska-Tkacz, S. Czerczak, Nofer Institute of Occupational Medicine, Lodz, Poland.
- 331 Medical Cost Avoidance Modeling.** J. Yasalonis, G. Bratt, LMI, Belcamp, MD.
- 332 Development of a Web-based Chemical Control Banding Program for Small and Medium Enterprises in Korea.** Y. Shin, J. Ha, Inje University, Gimhae, Republic of Korea; G. Ahn, University of Massachusetts Lowell, Lowell, MA; J. Kim, Kosin University, Busan, Republic of Korea; H. Park, B. Kim, S. Lee, Korea Occupational Safety and Health Agency, Incheon, Republic of Korea; B. Ku, NIOSH, Cincinnati, OH; S. Kim, Sungkyunkwan University, Suwon, Republic of Korea; J. Woo, Wonjin Green Hospital, Seoul, Republic of Korea; H. Lee, Korean Industrial Health Association, Seoul, Republic of Korea.
- 333 Applications of Benchmark Dose Extrapolation, Ordinal Regression, and Probabilistic Uncertainty Factor Methods for Characterizing Occupational Risks.** A. Maier, Toxicology Excellence for Risk Assessment, Cincinnati, OH.

Toxicology

- 334 Acute Poisonings in Poland: Thirty Years of Experiences.** M. Kotwica, S. Czerczak, Nofer Institute of Occupational Medicine, Lodz, Poland.

Poster Session 405—Student

Author Attend Time: Wednesday, May 26, 10:00 a.m.–Noon



SAFE·IN·SOUND

EXCELLENCE IN HEARING LOSS PREVENTION AWARD

Does your Construction, Manufacturing or Services company have a **Successful** hearing loss prevention program?

Have you or your company, from any economic sector, created an **Innovative** approach to hearing loss prevention?

Does your company deserve (or do you know of a company that deserves) an award for Hearing Loss Prevention? If so, there is now an award for you. *Safe-in-Sound* is a new award for excellence in hearing loss prevention being offered by the National Institute for Occupational Safety and Health (NIOSH) and the National Hearing Conservation Association (NHCA). ***The next round of awards will be given in February 2011.*** For more information and how to apply visit:

www.safeinsound.us

APPLICATION DUE DATE: SEPTEMBER 1, 2010



Colorado Convention Center, Halls A and F

Hours

Monday, May 24, 9:00 a.m.–5:30 p.m.
 Tuesday, May 25, 9:00 a.m.–3:00 p.m.
 Wednesday, May 26, 9:00 a.m.–1:30 p.m.

Expo Opening Cocktail Reception

Bring your complimentary drink ticket from your registration packet and join us on **Monday, 4:00 p.m.–5:30 p.m.**

Prizes—Prize Booth #1644

Complete the prize drawing form in your program addendum and drop it in the bins in the Prize Booth. Monday and Tuesday feature drawings for money and complimentary registrations to AIHce 2011 in Portland, Oregon.

Passport to Prizes—Prize Booth #1644

Have your passport stamped by participating exhibitors and drop your entry at the Prize Booth by noon on Wednesday. Winning names will be drawn at **12:30 p.m. on Wednesday**. The grand prize is a trip to AIHce 2011 in Portland, Oregon; second prize is \$1,000.

Special Exhibits

NEW! Photo Display: Holding Mother Earth Sacred Booth 845

Sponsored by the AIHA® Social Concerns Committee



This collaborative effort between Earl Dotter, Cindy Becnel, and four tribal communities illustrates the valuable contributions made by these sovereign nations in energy resource development (conventional, renewable, and alternative), job creation and worker safety. It also honors tribal beliefs and initiatives that guide these communities toward tribal sustainability while “Holding

Mother Earth Sacred.”

Partially funded by The NIOSH Mountain and Plains Education and Research Center and the UC Denver Anschutz Medical Campus Office of Diversity and Inclusion.

AIHce 2010 Clandestine Drug Lab Exhibit Booth 544

Provided by the AIHA® Clan Lab Working Group and North Metro Task Force



AIHA® once again features a mock clandestine drug lab display that focuses on the interdisciplinary nature of addressing these hazards, involving public safety agencies, industrial hygienists, health professionals and utilities, to name a few. This year's display features:



The Endangered Children Decontamination Trailer

The Endangered Children Decontamination Trailer is the first step for children found in a meth manufacturing environment. It is a decontamination facility designed for children and serves as the location of their first medical evaluation. These children are removed from their



homes and must leave everything behind due to toxic contamination. North Metro's goal is to have the trailer serve as a safe gateway where children are provided for, acknowledged and cleansed. The trailer responds to the request of any first responder agency for incidents involving children from as far south as Castle Rock and as far north as Longmont.

» Expo Theater: Product Demos and Presentations, Hall F

Monday, May 24

See presentation descriptions on pages 38 and 44.

10:00 a.m.

Galson Laboratories LEED Testing Demonstration, Galson Laboratories

10:30 a.m.

IQM 60 Portable Indoor Air Quality Monitoring System, Kanomax USA, Inc.

11:30 a.m.

Dual Detector Portable GC for Coal Mine Safety Monitoring, HNU PID Analyzers, LLC

Noon

Installing Filters in a Paramount® Ductless Fume Hood, Labconco Corp.

12:30 p.m.

Revolutionary Finger-Mounted Vibration Dosimeter for Personal Exposure Monitoring and Assessing Risk of Raynaud's Syndrome of Occupational Origin (Vibration White-finger Disease) and Carpal Tunnel Syndrome, Larson Davis

1:00 p.m.

EVM-7: Particulate and Air Quality Monitoring Designed with Efficiency in Mind, Quest Technologies, a 3M Company

1:30 p.m.

3M™ E-A-Rfit™ Validation System Demonstration, 3M Occupational Health and Environmental Division

Tuesday, May 25

See presentation descriptions on pages 54 and 61.

9:30 a.m.

Explosion Proof/Dust Ignition Proof Vacuum Cleaner System, Tiger-Vac Inc. USA

10:00 a.m.

Reducing Strains/Sprains and Overuse Injuries in the Workplace with ART (Active Release Techniques), ART Corporate Solutions, Inc.

10:30 a.m.

Writing GHS-Compliant Safety Data Sheets Using On-Demand MSDS Authoring Software, SiteHawk

Noon

PhoCheck Tiger, a Revolutionary PID That Sets New Performance Standards While Minimizing Costs, ION Science Americas LLC

12:30 p.m.

Detection of TDI/MDI in Soil—To What Extent to Excavate, Morphix Technologies

1:00 p.m.

Personal Monitoring Using Universal Passive Sampling Devices, Entech Instruments, Inc.

1:30 p.m.

Rapid, Versatile Bacteria and Fungi Testing On Site with Mycometer—There Is No Substitute for Good Science, Mycometer, Inc.

2:00 p.m.

CANWrite™ MSDS Authoring Software, CCOHS

Wednesday, May 26

See presentation descriptions on pages 72 and 78.

9:30 a.m.

Using the ChemPro100i for Real-Time Detection of Hard-to-Measure Toxic Industrial Chemicals (TICs), Envirionics USA

10:00 a.m.

The Radiation Alert Sentry Alarming Dose/Rate Meter, S.E. International, Inc.

Noon

Rivo Software LTD's Safety Management Systems' Best Practices Introducing Industrial Hygiene Modules, Safety Management Systems, Inc.

12:30 p.m.

A Quantum Leap in Powder Weighing Safety and Efficiency—Quantos™ Automated Powder Dosing Solution from METTLER TOLEDO, Mettler-Toledo, Inc.



**Colorado
Safety
Association**

Expo Theater sponsored by Colorado Safety Association

» Expo: AIHce 2010 Sponsors

AIHce gratefully acknowledges the following Sponsors:

3E Company

Passport to Prizes, Booth 1123



Actio Corporation

Passport to Prizes, Booth 1131



American Board of Industrial Hygiene

Passport to Prizes, Booth 719



American Heart Association

Aisle Sign, Booth 615



Bullard

Final Program Packet Insert, Booth 1011



Colorado Safety Association

Exclusive Sponsor of Expo Theater, Booth 1441



Crowcon Detection Instruments, Inc.

Final Program Packet Insert, Booth 1636



DataChem Software, Inc.

Passport to Prizes, Booth 1126



EFT's Crystal Clean

Clandestine Drug Lab Exhibit, Booth 402



EMSL Analytical, Inc.

Passport to Prizes, Booth 1317



Factory Direct Safety & Environmental Inc.

Opening & General Sessions, Booth 915



GASTEC

Aisle Sign, Booth 806



HNU-PID Analyzers, LLC

Aisle Sign, Booth 536



Industrial Scientific Corporation

Smart Card, Passport to Prizes, Booth 1213



Liberty Mutual Insurance Co.

Passport to Prizes, Booth 622



Nextteq, LLC

Aisle Sign, Booth 1012



Raeco Rents

Passport to Prizes, Booth 1340



S.E. International, Inc.

Passport to Prizes, Booth 718



Scientific Analytical Institute, Inc.

Cyber Cafe, Booth 1341



Sensidyne, LP

Lanyards, Aisle Sign, Booth 1211



Silvent North America

Final Program Packet Insert, Booth 1624



SiteHawk

Passport to Prizes, Booth 1023



Thermo Scientific — Air Quality Instruments & Niton Analyzers

Standing Sign Boards, Booth 1017



TSI

Aisle Sign, Booth 1003



United Phosphorus Limited

Opening & General Sessions, Booth 915





SPONSORED BY
THE AHA[®] ACADEMY
OF INDUSTRIAL HYGIENE



PCIH 2010

BIG IDEAS. BIG SOLUTIONS.


OCTOBER 9-12

FORT WORTH 

WWW.PCIH2010.ORG ★ *Registration opens in June*





» Expo: Floor Plan



 = Passport to Prizes Sponsor



Passport and Prize Drop Off

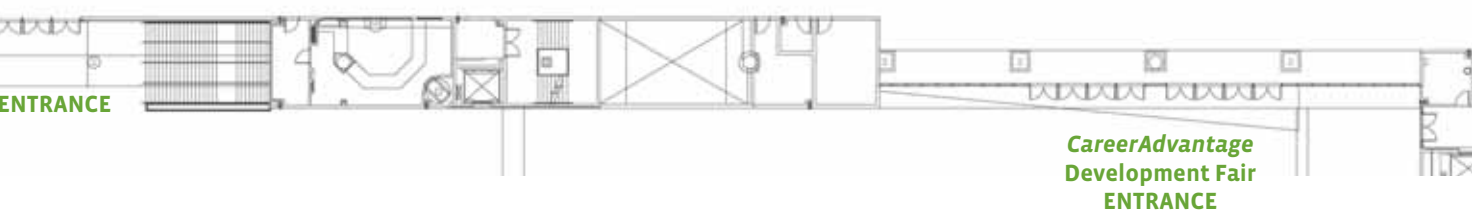
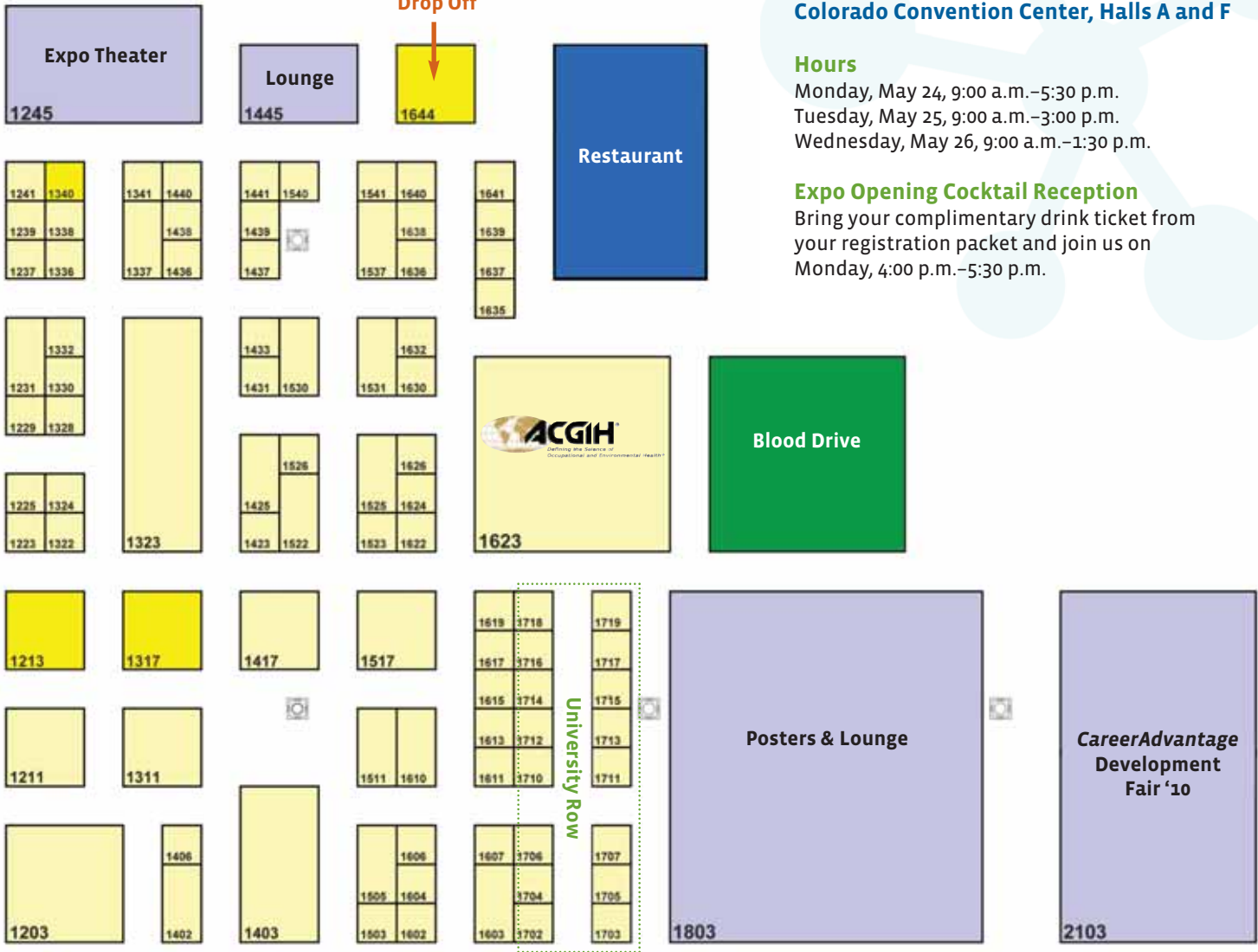
Colorado Convention Center, Halls A and F

Hours

Monday, May 24, 9:00 a.m.–5:30 p.m.
Tuesday, May 25, 9:00 a.m.–3:00 p.m.
Wednesday, May 26, 9:00 a.m.–1:30 p.m.

Expo Opening Cocktail Reception

Bring your complimentary drink ticket from your registration packet and join us on Monday, 4:00 p.m.–5:30 p.m.



» Expo: Exhibitors by Aisle

Aisle 400

402 EFT Holdings, Inc.
 403 Masimo
 406 US Navy Recruiting
 407 Clement Communications
 410 DEB
 411 AirClean Systems
 422 Risk Prevention Systems, LLC
 412 AllOne Health

Aisle 500

502 Tisch Scientific
 504 *Occupational Health & Safety Magazine*
 505 Larson Davis
 510 ART Corporate Solutions, Inc.
 511 Mycometer, Inc.
 516 QLAB
 517 Baseline-MOCON
 518 Tiger-Vac Inc. (USA)
 519 IHI Environmental
 522 Nilfisk — CFM
 523 Total Safety U.S., Inc.
 524 Supelco/Sigma-Aldrich
 525 ICU — A Total Safety Company
 526 Hays Affinity Solutions
 527 Fabenco, Inc.
 530 Flow Sciences, Inc.
 531 CDC/NIOSH
 536 HNU-PID Analyzers, LLC
 537 Occupational Safety & Health Administration (OSHA)
 540 ErgoGenesis LLC
 541 EarthShift LLC

Aisle 600

603 Prism Analytical Technologies, Inc. (PATI)
 607 Particle Measuring Systems
 609 AMEC
 610 NARDA Safety Test Solutions
 613 Critical Environment Technologies Canada Inc.
 615 American Heart Association
 616 Medtox Laboratories
 618 RJ Lee Group, Inc.
 619 Arizona Instrument, LLC
 622 Liberty Mutual Insurance Co.
 623 American Industrial Hygiene Association (AIHA®)
 624 Brush Wellman Inc.
 626 Redshift Technologies, Inc.
 635 AIDII — Italian Association of Industrial Hygienists
 636 National Jewish Health
 637 Euro Safety & Health

638 National Hearing Conservation Association
 639 Ohio Lumex Company
 640 Contour Design Inc.
 641 MSDSONline

Aisle 700

702 RKI Instruments
 703 CCOHS
 705 Kinetics Noise Control
 706 Mettler-Toledo, Inc.
 707 Ashtead Technology Rentals
 708 Innov-X Systems
 712 National Library of Medicine
 713 International Safety Systems, Inc.
 714 The Ergonomics Center
 715 HUD Office of Healthy Homes and Lead Hazard Control
 716 American Biological Safety Associations
 717 Savannah River Nuclear Solutions, LLC, Accredited Laboratory
 718 S.E. International, Inc.
 719 American Board of Industrial Hygiene
 734 Clemex
 735 AIHA® Proficiency Analytical Testing Programs, LLC
 736 Air Quality Sciences
 737 A&B Labs
 738 Defense Health Services System
 741 Meinhard Glass Products

Aisle 800

802 Board of Certified Safety Professionals (BCSP)
 803 Assay Technology, Inc./ AT Labs/MNR Services
 804 Center for Toxicology and Environmental Health, LLC
 806 Gastec Corporation
 808 GRAS Sound & Vibration
 809 CASELLA USA
 812 *Industrial Safety & Hygiene News*
 816 Geotech Environmental Equipment, Inc.
 817 Air Systems International
 818 Concentra Inc.
 823 EMLab P&K
 827 TRP — Technical Response Planning Corp.
 831 NuAire, Inc.
 834 OraSure Technologies
 835 Freeport-McMoRan Copper and Gold Inc.

838 Phonak LLC
 839 Emilcott
 840 Hellman & Associates, Inc.
 841 Health Physics Society

Aisle 900

902 Photovac, Inc.
 903 Galson Laboratories
 908 *Industrial Hygiene News/ Rimbach Publishing*
 909 Zefon International
 913 BGI Instruments
 915 Factory Direct Safety and Environmental Inc.
 915 United Phosphorus Limited
 917 Fiberlock Technologies, Inc.
 922 Columbia Analytical Services, Inc.
 923 Aerobiology Laboratory Associates, Inc.
 924 Working Concepts, Inc.
 925 Kanomax USA, Inc.
 930 Compur Monitors, Inc.
 931 TechniData America
 932 Golder Associates
 933 Dakota Software Corporation
 935 Affygility Solutions
 939 Safetec
 940 AirLab
 941 Rivo Software Ltd.

Aisle 1000

1003 TSI
 1011 Bullard
 1012 Nextteq, LLC
 1017 Thermo Scientific — Air Quality Instruments & Niton Analyzers
 1022 Medgate, Inc.
 1023 SiteHawk
 1024 Northrop Grumman Corporation
 1027 Pyramid, LLC
 1030 Knorr Associates Inc.
 1032 ChemWatch NA
 1034 KMI
 1038 PureSafety

Aisle 1100

1103 MSA
 1109 Draeger Safety Inc.
 1117 BUREAU VERITAS NORTH AMERICA, INC.
 1122 IHS
 1123 3E Company
 1126 Datachem Software, Inc.
 1131 Actio Corporation
 1133 ProcessMAP Corporation
 1135 Open Range Software
 1139 Compliance Solutions
 1141 MSDSpro LLC



Aisle 1200

- 1203 3M
- 1203 Quest Technologies, a 3M company
- 1211 Sensidyne, LP
- 1213 Industrial Scientific Corporation
- 1222 Travelers Laboratory
- 1223 Showa Best Glove, Inc.
- 1224 Taylor & Francis
- 1225 Morphix Technologies
- 1229 ALS Laboratory Group (formerly DataChem Laboratories, Inc.)
- 1230 DCM Clean-Air Products, Inc.
- 1231 OHD
- 1232 Health Conservation, Inc. (HCI)
- 1234 SanAir Technologies Laboratory, Inc.
- 1237 E.A.R., Inc.
- 1239 VPP Participants' Association
- 1240 QuanTEM Laboratories, LLC.
- 1241 WorkCare, Inc.

Aisle 1300

- 1311 DuPont
- 1317 EMSL Analytical, Inc.
- 1322 PathCon Laboratories
- 1323 North by Honeywell
- 1324 CPLab Safety
- 1328 Bruel & Kjaer
- 1330 Austin Pure Air
- 1332 Therm Omega Tech, Inc.
- 1336 Lab Safety Supply
- 1337 Insights & Research
- 1338 Portagas Inc.
- 1340 Raeco Rents
- 1341 Scientific Analytical Institute, Inc.

Aisle 1400

- 1402 GfG Instrumentation, Inc.
- 1403 SKC
- 1406 Labconco Corp.
- 1417 RAE Systems
- 1423 Examintetics, Inc.
- 1425 Indoor Biotechnologies, Inc.
- 1431 Met One Instruments, Inc.
- 1433 Environmental Technology (Publications)
- 1436 Wiley-VCH
- 1437 RMD Instruments
- 1439 Air Force Recruiting Services
- 1440 (CRBOH) Canadian Registration Board of Occupational Hygienists
- 1441 Colorado Safety Association

Aisle 1500

- 1503 ESIS Risk Control Services
- 1505 Analytics Corporation
- 1511 Entech Instruments, Inc.
- 1517 Scott Health & Safety
- 1522 AliMed
- 1523 ENMET Corporation
- 1525 Interactive Safety Products, Inc.
- 1526 Dade Moeller & Associates
- 1530 ERSI
- 1531 Edge Eyewear
- 1537 ION Science Americas LLC
- 1541 Gasmot Technologies Inc.

Aisle 1600

- 1602 Argus-Hazco
- 1603 GrayWolf Sensing Solutions
- 1604 Schneider Laboratories, Inc.
- 1606 Environics USA
- 1607 National Safety Council (NSC)
- 1610 Bios International Corporation
- 1611 Air Techniques International
- 1613 Forensic Analytical Laboratories
- 1615 TRS-Environmental
- 1617 Tetra Tech
- 1619 Kitagawa America, LLC
- 1622 *EHS Today* (formerly *Occupational Hazards*)
- 1623 ACGIH®
- 1624 Silvent North America
- 1626 Alliant
- 1630 Mercury Instruments USA
- 1632 Complete Equity Markets, Inc.
- 1635 Safeware, Inc.
- 1636 Crowcon Detection Instruments, Ltd.
- 1640 Walsh Environmental Scientists and Engineers, LLC

Aisle 1700

- 1702 Purdue University
- 1703 University of Toledo Health College of Medicine Dept of Public Health & Homeland Security
- 1704 Tulane University — CAEPH
- 1706 University of Cincinnati Environmental and Occupational Hygiene
- 1707 University of California, Berkeley — School of Public Health
- 1710 University of Michigan COHSE
- 1711 The University of Findlay
- 1712 RMCOEH - University of Utah
- 1713 NESHTA/CET Board of Certification
- 1714 Johns Hopkins Bloomberg School of Public Health
- 1715 University of Washington — Environmental & Occupational Health Sciences
- 1716 University of South Florida College of Public Health, Sunshine ERC
- 1717 The University of Alabama at Birmingham — Deep South Center
- 1718 NIOSH/ERC/CE
- 1719 Univ. of Illinois/Great Lakes Centers for Occupational & Environmental Safety & Health

» Expo: Exhibitors by Alphabet

The Shaded boxes indicate the **NEW** exhibitors at AIHce 2010!

3E Company.....1123

1905 Aston Ave.
Carlsbad, CA 92008
(760) 602-8700
info@3ecompany.com
www.3ecompany.com

3E provides a comprehensive set of outsourced EH&S solutions, including MSDS management, transportation, waste management, spill response, training, regulatory reporting and hazardous waste management.

3M.....1203

Bldg. 235 - 2W - 70
St. Paul, MN 55144
(800) 328-1667
lmkuschel@mmm.com
www.3m.com/occsafety

Maintenance-free and reusable respirators; supplied and powered air purifying respirators; hearing, head, eye and face protection; software and training materials; welding products air monitoring systems, sorbent materials and gas detection.

A&B Labs.....737

10100 I-10 East Freeway, Ste. 100
Houston, TX 77029
(713) 453-6060
lisa@ablabs.com
www.ablabs.com

AIHA® accredited, NELAP certified, U.S. Green Building Council Laboratory. Providing analytical services in industrial hygiene, indoor/ambient air, microbiology, environmental food and LEED since 1988. BTLIMS laboratory software management.

ACGIH®.....1623

1330 Kemper Meadow Drive
Cincinnati, OH 45240-4148
(513) 742-2020
mail@acgih.org
www.acgih.org

The ACGIH® Pavilion will showcase the resources for which it is well known - books, educational events, membership, technical information, and demonstrations of its well-known computer resources.

Actio Corporation.....1131

30 International Drive
Portsmouth, NH 03801
(866) 522-8102
contact@actio.net
www.actio.net

Actio's chemical management solutions include Actio Gatekeeper, Actio Regulator, MSDS Vault, Reach Tracker, Sustainability Tracker and MSDS Author.

Aerobiology Laboratory Associates, Inc......923

43760 Trade Center Place, Ste. 100
Dulles, VA 20166
(877) 648-9150
caroline@aerobiology.net
www.aerobiology.net

Aerobiology Laboratory Associates, Inc. is an AIHA® EMLAP microbiology laboratory and a NVLAP-accredited asbestos PLM laboratory with locations in the Washington, D.C. area, Atlanta, Georgia, and Denver, Colorado.

NEW! Affyility Solutions.....935

13498 Cascade St.
Broomfield, CO 80020
(303) 884-3028
dcalhoun@affyility.com
www.affyility.com

Accelerate your company's EH&S performance with our simple, affordable web-based tool for EHS management in the life science industry.

AIDII — Italian Association of Industrial Hygienists.....635

Via Morgagni G, Bagtista, 32
Milan, Milan 20129
Italy
0038-2-2024-0956
aidii@aidii.it
www.aidii.it

Promotional material for IOHA 2010, 8th International Scientific Conference.

AIHA® Proficiency Analytical Testing Programs, LLC.....735

2700 Prosperity Ave., Ste. 250
Fairfax, VA 22031
(703) 846-0799
smorgante@aiha.org
http://aihaaccreditedlabs.org
Proficiency Analytical Testing Programs, LLC.

NEW! Air Force Recruiting Services.....1439

550 D St. W.
Randolph AFB, TX 78150
(210) 565-0506
janet.campbell@rs.af.mil
http://airforce.com

“Do something amazing”—we offer over 140 exciting career fields, many of them high-tech. As an Airman, you'll receive valuable job training and earn college credit at the same time. Plus, we will pay up to 100 percent tuition assistance to help you further your college education.

AirClean Systems.....411

3248 Lake Woodard Drive
Raleigh, NC 27604
info@aircleansystems.com
www.aircleansystems.com

Manufactures a complete range of ductless fume hoods and laminar flow hoods designed to protect the operator, the process, or both from toxic vapors, fumes, gases, and particulate. In addition to standard hoods, AirClean Systems manufactures numerous application-oriented products such as PowerSafe balance enclosures, PCR workstations, and microscope enclosures.

Air Quality Sciences.....736

2211 Newmarket Parkway, Ste. 106
Marietta, GA 30067
770-933-0641
info@aq.com
www.aqs.com

Media equipment, pump rental equipment, chamber analysis, building consulting.

Air Systems International.....817

829 Juniper Crescent
Chesapeake, VA 23320
(800) 866-8100
sales@airsystems.com
www.airsystems.com

Breathing air filtration, compressors, and cascade systems. Confined space ventilation, HEPA filter Hexavalent Chromium welding fume extractors, area lighting systems and welding fume extraction.



Air Techniques International.....1611
 11403 Cronridge Drive
 Owings Mills, MD 21117
 (410) 363-9696
 info@atitest.com
 www.atitest.com

ATI is a global leader in developing, manufacturing, and servicing equipment for testing high purity air filters and respirators. Showcasing portable mask testing products at AIHce 2010.

NEW! AirLab.....940
 180 Blue Ravine Road
 Folsom, CA 95630
 (916) 605-3360
 sales@airlabonline.com
 www.airlabonline.com

The AirLab Test Kit allows homeowners to screen for common indoor air hazards, providing reliable and understandable information regarding their indoor air quality.

AliMed.....1522
 297 High St.
 Dedham, MA 02026
 (800) 225-2610 ext. 496
 srose@alimed.com
 www.alimed.com

Ergonomics, health and safety, office and industrial products.

NEW! Alliant.....1626
 320 North Cedar Bluff Road, Ste. 200
 Knoxville, TN 37923
 (865) 250-0895
 tadouglas@alliantcorp.com
 www.alliantcorp.com

AllOne Health.....412
 600 West Cummings Park, #3400
 Woburn, MA 01801
 800-350-4511
 info@allonehealth.com

With nearly 40 years of experience, AllOne Health is a leading global provider of occupational health and safety services, including on-site medical services, medical surveillance testing, pre-employment screening, and medical management services.

ALS Laboratory Group (formerly DataChem Laboratories, Inc.).....1229
 960 West LeVoy Drive
 Salt Lake City, UT 84123
 (801) 266-7700 ext. 314
 marketing@datachem.com
 www.datachem.com

ALS Laboratory Group, formerly DataChem Laboratories, Inc., is a premier provider of industrial hygiene and environmental analytical chemistry testing services with a global reputation for quality, legally defensible data.

AMEC.....609
 11810 North Creek Parkway N.
 Bothell, WA 98011
 (425) 368-0969
 mike.s.smith@amec.com
 www.amec.com

Industrial hygiene consulting services, indoor air quality/mold surveys, regulated materials management, infrared thermography surveys, chemical risk/exposure assessment and expert witness services.

NEW! American Biological Safety Associations.....716
 1200 Allanson Road
 Mundelein, IL 60060
 (847) 949-1517
 ed@absaoffice.org
 www.absa.org

ABSA promotes biosafety as a scientific discipline and serves the needs of biosafety professionals by providing biosafety resources such as education, publications, and web tools.

American Board of Industrial Hygiene.....719
 6015 West St. Joseph Highway, Ste. 102
 Lansing, MI 48917
 (517) 321-2638
 abih@abih.org
 www.abih.org

Promotion of industrial hygiene certification.

American Heart Association.....615
 7272 Greenville Ave.
 Dallas, TX 75231
 (214) 706-1114
 thomas.bennett@heart.org
 www.americanheart.org/cpr

As part of the mission of the American Heart Association, we are dedicated to

providing First Aid, CPR, AED, and Bloodborne Pathogens training for Occupational and Environmental Health and Safety (OEHS) Professionals.

American Industrial Hygiene Association (AIHA®).....623
 2700 Prosperity Ave., Ste. 250
 Fairfax, VA 22031
 (703) 846-0741
 infonet@aiha.org
 www.aiha.org

With more than 60 years as the world's premier organization for OEHS professionals, AIHA® can provide the quality technical, professional, and career resources you need to excel in your field.

Analytics Corporation.....1505
 10329 Stony Run Lane
 Ashland, VA 23005
 (804) 365-3000
 jmcloskey@analyticscorp.com
 www.analyticscorp.com

Analytics provides industrial hygiene laboratory and environmental testing services. We have been accredited by AIHA® since 1981, and offer a three-day standard turnaround time.

Argus-Hazco.....1602
 46400 Continental Drive
 Chesterfield, MI 48047
 (586) 840-3200
 info@argus-hazco.com
 www.argus-hazco.com

Argus-Hazco is your safety solution provider for environmental and industrial hygiene instrumentation, respiratory protection, sampling equipment and safety supplies.

Arizona Instrument, LLC.....619
 3375 North Delaware St.
 Chandler, AZ 85225
 (602) 470-1414
 sales@azic.com
 www.azic.com

Arizona Instrument, The Home of Jerome, designs, manufactures, and markets portable Jerome gas analyzers including the 631-X and 860 for hydrogen sulfide and the 431-X for mercury vapor.

» Expo: Exhibitors by Alphabet

ART Corporate Solutions, Inc.510

175 South Union Blvd., Ste. 230
Colorado Springs, CO 80910
(719) 473-2026
moreinfo@activerelease.com
www.artcorpsolutions.com
Corporate soft-tissue injury prevention and first aid programs designed to assist in reducing OSHA recordable injuries and expenses attributed to MSDs.

Ashtead Technology Rentals.....707

19407 Park Row, Ste. 160
Houston, TX 77084
(800) 242-3910
infousa@ashtead-technology.com
www.ashtead-technology.com
Industry leader in rental equipment for environmental monitoring, non-destructive testing and remote visual inspections. Visit our website or call today 800-242-3910 for a free catalog.

Assay Technology, Inc./AT Labs/ MNR Services803

1382 Stealth St.
Livermore, CA 94551
(800) 833-1258
rena@assaytech.com
www.assaytech.com
Air samplers and analytical services for more than 200 vapors and aerosols, featuring personal monitoring badges. AIHA®-accredited, full-service IH laboratories. Respirator cartridge/canister service life testing.

NEW! Austin Pure Air1330

8261 Fort Smith Road
Peyton, CO 80831
(719) 495-5028
raysteitz@sbcglobal.net
www.austinpureair.com
Solves indoor air problems cost-effectively using patented, filter-less innovative technology to remove 99.5 percent of impurities including viruses, mold, pollutants down to .001 microns.

Baseline-MOCON.....517

P.O. Box 649
Lyons, CO 80540
(303) 823-6661
sales@baselineindustries.com
www.baseline-mocon.com
Manufacturer of online gas chromatographs, continuous hydrocarbon analyzers, micro photoionization detectors, and OEM FIDs & PIDs.

BGI Instruments.....913

58 Guinan St.
Waltham, MA 02451
(781) 891-9380
info@bgiusa.com
www.bgiusa.com
At BGI, solutions in aerosol research, ambient particulate sampling and industrial hygiene provide the specialist with instrumentation to successfully perform sampling and measurement techniques.

Bios International Corporation ...1610

10 Park Place
Butler, NJ 07405
(973) 492-8400
sales@biosint.com
www.biosint.com
Bios International leads primary flow measurements. DryCal standards are supported by ISO 17025 accreditation uncertainty analyses and inter-lab comparisons with NIST and other labs worldwide.

Board of Certified Safety Professionals (BCSP).....802

208 Burwash Ave.
Savoy, IL 61874
(217) 359-9263
bcsp@bcsp.org
www.bcsp.org
Safety certifications through examination, including the Certified Safety Professional (CSP) certification and the OHST, CLCS, CHST, and STS certifications through the CCHST.

Bruel & Kjaer1328

2815-A Colonnades Court
Norcross, GA 30071
(440) 333-3065
info@bksv.com
www.bkhome.com
Bruel and Kjaer offers world-class sound measurement solutions. Look for our Noise Dose meters and renowned sound meters. Highlighting the show is the Type 2250 Hand Held Noise Analyzer and the new Type 4447 Human Vibration Analyzer.

Brush Wellman Inc.624

6070 Parkland Blvd.
Mayfield Heights, OH 44124
(800) 383-4097
ehs@brushwellman.com
www.brushwellman.com
Information on working safely with beryllium, beryllium alloys and beryllia ceramics.

Bullard1011

1898 Safety Way
Cynthiana, KY 41031
(859) 234-6611
info@bullard.com
www.bullard.com
Servicing workers in the industrial, fire service, and law enforcement markets, Bullard is a leading manufacturer of hard hats, PAPRs, supplied air respirators, and air quality equipment.

BUREAU VERITAS NORTH AMERICA, INC1117

22345 Roethel Drive
Novi, MI 48375
(248) 344-2665
emily.alden@us.bureauveritas.com
www.us.bureauveritas.com
Bureau Veritas is the leader in health, safety, & environmental (HSE) services. These include routine and specialized lab analyses, asbestos, pharmaceutical testing, and consulting for industrial hygiene, safety, training and auditing.

Casella USA809

17 Old Nashua Road, #15
Amherst, NH 03031
(603) 672-0031
info@casellausa.com
www.CasellaUSA.com
Quality instruments for the professional for dust and particulate, heat stress and workplace noise monitoring including pumps, noise dosimeters and sound level meters.



CCOHS703

135 Hunter Street E.
Hamilton, ON L8N 1M5
Canada
(905) 572-2981 ext. 4411
clientservices@ccohs.ca
www.ccohs.ca

CCOHS promotes the total well-being—physical, psychosocial and mental health—of workers by providing information, training, education, management systems and solutions that support health and safety programs and the prevention of injury and illness.

CDC/NIOSH531

4676 Columbia Parkway
Cincinnati, OH 45226
(513) 533-8532
niosh-publications@cdc.gov
www.cdc.gov/niosh

Center for Toxicology and Environmental Health, LLC.....804

5120 North Shore Drive
North Little Rock, AR 72086
(501) 801-8500
bbailey@cteh.com
www.cteh.com

CTEH® is a science-based company specializing in industrial hygiene, toxicology, and emergency response consulting services.

ChemWatch NA1032

2706 Greystone Road
Nashville, TN 37204
(615) 250-9553
info@chemwatchna.com
www.chemwatchna.com

ChemWatch MSDS database with over 190,000 translated substances and 6 million vendor MSDS, inventory, labeling, first response modules. PC, Lan, web.

NEW! Clement Communications ...407

3 Creek Parkway, PO Box 2208
Upper Chichester, PA 19061
customerservice@clement.com
www.clement.com

Full-service employee communications company focused on providing awareness, education and reinforcement tools for organizations to communicate important issues to employees. For more than 90 years, Clement has designed programs to motivate, inspire, educate and training to help our clients reduce corporate risk and change employee behaviors.

NEW! Clemex734

800 Guimond
Longueuil, QC J4G 1T5
Canada
(888) 651-6573 ext. 37
Marcl@clemex.com
www.clemex.com

The measuring of particle contamination is of the utmost importance in the health & security industries. That is why the Clemex PFilter is specially designed to analyze particulates and asbestos fibers on filter.

NEW! Colorado Safety Association.....1441

4730 Oakland St., #500
Denver, CO 80239
(303) 373-1937
frontdesk@coloradosafety.org
www.coloradosafety.org

EHS consulting and training, defensive driving, first aid/CPR, CSMA compliance assistance.

Columbia Analytical Services, Inc.....922

2655 Park Center Drive
Simi Valley, CA 93065
(805) 526-7161
afortune@caslab.com
www.caslab.com

Columbia Analytical is an employee-owned, certified, full-service environmental analytical laboratory network with locations across the United States.

Complete Equity Markets, Inc.....1632

1090 Flex Court
Lake Zurich, IL 60047
(800) 323-6234
cstraka@cemins.com
www.cemins.com

ASSE Sponsored Liability Insurance.

Compliance Solutions.....1139

3980 Quebec St., Second Floor
Denver, CO 80207
(800) 711-2706
comments@csregs.com
www.csregs.com

Quality EH&S courses in 67 cities, and over 50 courses available online.

Compur Monitors, Inc.930

100 E. Nasa Road One, Ste. 308
Webster, TX 77598
(281) 338-7885
uscompur@compur.us
www.compur.com

Gas detection instruments for toxic and combustible gases, fixed and portable.

Concentra Inc.....818

5080 Spectrum Drive, Ste. 1200 W.
Addison, TX 75001
(800) 232-3550
amy_kidder@concentra.com
www.concentra.com

Concentra provides urgent care, occupational medicine, and integrated health, wellness, and productivity services from 324 medical centers, 270 employer on-sites, and a medical consulting network.

Contour Design Inc.640

10 Industrial Drive
Windham, NH 03087
(800) 462-6678
ergoinfo@contourdesign.com
www.contourdesign.com

Ergonomic input devices such as the RollerMouse Free, RollerMouse PRO, and Contour Mouse.

» Expo: Exhibitors by Alphabet

CPLab Safety1324

14 Commercial Blvd., Ste. 113
Novato, CA 94949
(415) 883-2600 ext. 103
carel@cplabsafety.com
www.calpaclab.com

Safety ECO Funnels; gasket in the hinged lid, made of HDPE. Available with assortment of screw cap sizes to fit common lab waste containers. Customize with HPLC adapters. Safety cabinets, cans, plastic and glass labware, eyewear, gloves.

(CRBOH) Canadian Registration Board of Occupational Hygienists.....1440

224 Parkside Court
Port Moody, BC V3H 4Z8
Canada
(613) 580-2424 ext. 15857
registrar@crboh.ca
www.crboh.ca

The core mission of CRBOH is to prescribe minimum levels of professional and technical competence in the practice of occupational hygiene by way of a review of credentials and an examination process.

Critical Environment Technologies Canada Inc.613

Unit 145, 7391 Vantage Way
Delta, BC V4G 1M3
Canada
(604) 940-8741
teresa@cetci.com
www.yestek.com

Critical Environment Technologies Canada Inc. is a leading global supplier of gas detection systems, including self-contained systems, controllers and transmitters, and Indoor Air Quality (IAQ) portable instruments.

Crowcon Detection Instruments, Ltd......1636

21 Kenton Lands Road
Erlanger, KY 41018-1845
(859) 957-1039
salesusa@crowcon.com
www.crowcon.com

Portable and fixed gas detection instruments.

Dade Moeller & Associates.....1526

1835 Terminal Drive, Ste. 200
Richland, WA 99354
(509) 946-0410
krista.alley@moellerinc.com
www.moellerinc.com

Dade Moeller & Associates is a nationally-recognized consulting firm specializing in radiological & nuclear safety, public & environmental health protection, occupational safety & health, and radiation safety training. We provide the full range of professional and technician services in radiation protection, health physics, and worker safety to government and commercial nuclear clients.

NEW! Dakota Software Corporation933

23240 Chagrin Blvd., Ste. 620
Cleveland, OH 44122
(216) 765-7100
dakotamarketing@dakotasoft.com
www.dakotasoft.com

Dakota Software has provided EHS management software to regulated industries, consultants, and government since 1988. Dakota's suite of products, Profiler, Auditor, Tracer and Scout can be used in combination or independently to proactively manage compliance at the point of control.

DataChem Software, Inc......1126

69 Milk Street, Ste. 300
Westboro, MA 01581
(800) 377-9717
cliff.goede@datachemsoftware.com
www.certistep.com

DataChem Software produces computer-based training programs that help professionals prepare for their certification exams, such as the CIH, CSP, ASP, CHMM, CPE, OHST, CLCS, CHST and STS-C exams.

DCM Clean-Air Products, Inc.1230

9605 Camp Bowie W.
Fort Worth, TX 76116
(817) 696-0044
dennis@dcmcleanair.com
www.dcmcleanair.com

Dust collection at the point of generation, retrofitting handheld tools, sanders, grinders, drills, routers, cut-off saws, both central and portable HEPA vacuum systems.

DEB410

1100 South Highway 27
Stanley, NC 28164
(704) 263-4240
cser@debsbs.com
www.debglobal.com

DEB offers an industrial skin safety regimen designed to provide personal protection through skin care and help prevent skin problems and occupational skin disease.

Defense Health Services System ...738

5201 Leesburg Pike, Ste. 900
Falls Church, VA 22041
(703) 575-4500
syreeta.collier.ctr@tma.osd.mil
www.health.mil/dhss

The Defense Occupational Environmental Health Readiness System - Industrial Hygiene (DOEHRSH) manages occupational and environmental health readiness data and actively tracks chemical and physical hazards for the Department of Defense Military Health System.

Draeger Safety Inc......1109

101 Technology Drive
Pittsburgh, PA 15275-1057
(412) 787-8383
prodinfo@draeger.net
www.draeger.com

Draeger, an international leader in safety technology, offers stationary and mobile detection, respiratory protection, fire training systems, diving equipment and alcohol and drug detection units.

DuPont.....1311

5401 Jefferson Davis Highway
Richmond, VA 23234
(800) 931-3456
personalprotection@usa.dupont.com
www.PersonalProtection.dupont.com

DuPont is committed to protecting people. From first responders to industrial workers, DuPont provides protective apparel solutions to meet your safety needs. DuPont Personal Protection offers a wide range of proven, science-based solutions, including some of the most trusted brands in the industry: Tyvek® for dry particulate hazards; Tychem® for liquid and gas chemical hazards; Nomex® and Protera® for thermal hazards and Kevlar® for cut and abrasion protection.



NEW! E.A.R., Inc.1237
 PO Box 18888
 Boulder, CO 80308
 info@earinc.com
 www.earinc.com
 Custom-fit hearing protection and communication systems for plant employees, managers and in-field operators.

NEW! EarthShift LLC541
 830 Taft Rd.
 Huntington, VT 05462
 info@earthshift.com
 www.earthshift.com
 Life cycle assessment (software and training and consulting), environmental management consulting including total cost assessment, an environmental and health risk evaluation of sustainable development considerations.

Edge Eyewear1531
 P.O. Box 845
 Layton, UT 84041
 (801) 444-9396
 sales@wolfpeak.net
 www.edge-eyewear.com
 Safety and ballistic-rated eyewear.

NEW! EFT Holdings, Inc.402
 1012 Oster Drive, Ste. A
 Huntsville, AL 35816
 (256) 489-9245
 kirvine@easydecon.com
 www.easydecon.com
 Crystal clean methamphetamine decontaminant and easy decon disinfectant for mold and fungus and crime scene cleanup.

EHS Today (formerly Occupational Hazards)1622
 1300 East 9th St.
 Cleveland, OH 44114
 (216) 931-9473
 marci.bushek@penton.com
 www.occupationalhazards.com
EHS Today (formerly Occupational Hazards) is a monthly publication for safety professionals featuring information to meet OSHA & EPA compliance requirements, improve management of safety, industrial hygiene and environmental programs, and find products/services to protect employees and property.

Emilcott839
 466 Southern Blvd.
 Chatham, NJ 07928
 (800) 886-3645
 balves@emilcott.com
 www.emilcott.com
 Emilcott specializes in occupational health and safety consulting and training services. We are featuring our Greenlight Environmental Monitoring System.

EMLab P&K823
 1150 Bayhill Drive, Ste. 100
 San Bruno, CA 94066
 (650) 829-5800
 cmackelprang@emlabpk.com
 www.emlabpk.com
 With 14 locations and 25 service centers nationwide, EMLab P&K specializes in analyzing air and surface samples for mold, fungi, asbestos, allergens including USP797.

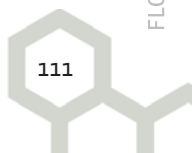
EMSL Analytical, Inc.1317
 107 Haddon Ave.
 Westmont, NJ 08108
 (800) 220-3675
 rsmith@emsl.com
 www.emsl.com
 EMSL Analytical, Inc. has been providing quality and innovative laboratory services under the same private ownership for 29 years. With 35 US locations and 1 Canadian location, ISO 17025 compliant quality systems, cGMP laboratories, FDA registration, full service analytical testing, full service sampling equipment, products and media division, free IH pump loan and rental programs, highly qualified staff of over 500 professionals including numerous PhDs and CIHs and the most accredited laboratories by AIHA® in their EMLAP, IHLAP, and ELLAP programs, EMSL is clearly recognized as the leader in the asbestos, IH, environmental microbiology, IAQ, radon, materials characterization and products industries.

ENMET Corporation1523
 P.O. Box 979
 680 Fairfield Court
 Ann Arbor, MI 48106
 (734) 761-1270
 info@enmet.com
 www.enmet.com
 Toxic, combustible and oxygen detectors, portable and continuous multi-channel fixed systems for health, safety and medical applications. Multifunctional gas detectors and training seminars for confined space safety.

Entech Instruments, Inc.1511
 2207 Agate Court
 Simi Valley, CA 93065
 (805) 527-5939
 susanmoore@entechinst.com
 www.entechinst.com
 Entech Instruments, Inc. announces a breakthrough technology for whole-air sample collection—Helium Diffusion Sampling™ (HDS). Entech now offers “universal” HDS active sampling solutions that simplify the collection of chemicals for GC/MS analysis.

Environics USA1606
 1308 Continental Drive, Ste. J
 Abingdon, MD 21009
 (410) 612-1250
 sales@environicsusa.com
 www.environicsusa.com
 Envionics manufactures portable and fixed gas and vapor detectors for Chemical Warfare Agents (CWAs) and hard-to-measure Toxic Industrial Chemicals (TICs).

Environmental Technology (Publications)1433
 Oak Court Porters Wood
 St. Albans, Herts
 United Kingdom
 44-1727-858-840
 info@envirotechpubs.com
 www.envirotechpubs.com
 Publishers of International Environmental Technology, Asian Environmental Technology and Petro Industry News.



» Expo: Exhibitors by Alphabet

ErgoGenesis LLC.....540

1 BodyBilt Place
Navasota, TX 77868
(936) 825-1700 ext. 209
dgrimes@ergogenesis.com
www.bodybilt.com

ErgoGenesis is offering state-of-the-art ergonomic seating products, which include the 4-Arm, STRETCH seat, ROHO and seat slider. We also offer ErgoFusion, our line of ergonomic accessories.

ERSI1530

311 Rotterdam Industrial Park, Bldg. 3, Bay 1
Schenectady, NY 12306
(518) 355-9617
info@ersi-usa.com
www.ersi-usa.com

Asbestos, lead, hazardous waste remediation, demolition and dismantlement services.

ESIS Risk Control Services1503

100 Sebeth Drive, Ste. A5
Cromwell, CT 06416
(860) 635-6475
jim.kenny@esis.com
www.esis.com/rcs

ESIS is a risk management services company with an AIHA®-accredited laboratory. Services include industrial hygiene, ergonomics, risk management, audits, environmental assessments, training and laboratory services.

Euro Safety & Health637

2 The Dana
Shrewsbury, 5Y1 2HP
United Kingdom
44-1743-362-076
sean@eurosh.com
www.eurosh.com

U.S.: (203) 727-2891. EHS consulting, REACH compliance and only representative services, online training courses.

Examinetics, Inc.....1423

8900 Indian Creek Parkway, Ste. 500
Overland Park, KS 66210
(913) 748-2000
sales@examinetics.com
www.examinetics.com

Examinetics, Inc. is the nation's largest provider of mobile occupational health screening and data management services. The company offers hearing conservation, respiratory clearance, physician examinations and online reporting.

Fabenco, Inc.527

2002 Karbach
Houston, TX 77092
(713) 686-6620
rachel@safetygate.com
www.safetygate.com

Self-closing safety gates for fall protection.

NEW! Factory Direct Safety and Environmental Inc.....915

9595 Six Pines Drive
The Woodlands, TX 77350
(877) 311-3373
sales@factorydirectsafety.com

Factory Direct Safety & Environmental is a leader in innovative safety and environmental solutions, and recently launched a new line of Uniphos pumps and gas detection tubes.

Fiberlock Technologies, Inc.917

150 Dascomb Road
Andover, MA 01810
(800) 342-3755
info@fiberlock.com
www.fiberlock.com

Professional mold remediation, lead and asbestos abatement products and mobile containment and isolation units.

Flow Sciences, Inc.530

2025 Mercantile Drive
Leland, NC 28451
(910) 763-1717
info@flowsciences.com
www.flowsciences.com

Flow Sciences, Inc. designs and manufactures safety containment solutions for research and development laboratories, pilot facilities, automation equipment and robotics, manufacturing and production plants.

Forensic Analytical Laboratories.....1613

3777 Depot Road, Ste. 409
Hayward, CA 94545
(510) 266-8165
jflores@forensica.com
www.forensica.com

Forensic Analytical provides high quality mold, bacteria, asbestos, and lead industrial hygiene laboratory services. Stop by booth 1613 for additional information on mold by qPCR.

NEW! Freeport-McMoRan Copper and Gold Inc.835

1 North Central Ave.
Phoenix, AZ 85004
(602) 366-7498
scott_ferin@fmi.com
www.fcx.com

A leading international mining company with headquarters in Phoenix, Arizona. We operate large, long-lived, geographically diverse assets on four continents, with significant proven and probable reserves of copper, gold and molybdenum.

Galson Laboratories903

6601 Kirkville Road
East Syracuse, NY 13057
(315) 671-3944
junangst@galsonlabs.com
www.galsonlabs.com

You get the best option of state-of-the-art lab testing, comprehensive detector tube technology and cutting-edge real-time instrument monitoring and instrument rental. You have a full spectrum of hygiene monitoring solutions when you use Galson Labs.

Gasmet Technologies Inc.1541

1410 Taschereau, Ste. 202
LaPrairie, QC J5R 4E8
Canada
(450) 659-4567
sales@gasmet.com
www.gasmet.com

On display, the Gasmet DX-4030, the first truly portable FTIR analyzer in the world. The ideal instrument for IH and emergency response applications.



Gastec Corporation.....806
 8-8-6 Fukayanaka, Ayase-city
 Kanagawa, 252-1195
 Japan
 81-467-79-3910
 international@gastec.co.jp
 www.gastec.co.jp/
 Gastec Corporation designs and manufactures a complete line of gas detector tube systems and other instrumentation for health and safety.

NEW! Geotech Environmental Equipment, Inc.....816
 2650 East 40th Ave.
 Denver, CO 80205
 (800) 833-7958
 sales@geotechenv.com
 www.geotechenv.com
 Personal gas monitors, PIDs, FIDs, particle counters, air sample pumps, calibration gas, calibration and repair services, equipment rentals.

GfG Instrumentation, Inc.....1402
 1194 Oak Valley Drive, Ste. 20
 Ann Arbor, MI 48108
 (734) 769-0573
 info@gfg-inc.com
 www.gfg-inc.com
 Develops and manufactures portable gas detectors, fixed systems and respiratory airline monitors. Protection from combustibles, oxygen hazards and toxic gases.

Golder Associates.....932
 3730 Chamblee Tucker Road
 Atlanta, GA 98052
 (425) 883-0777
 solutions@golder.com
 www.golder.com
 Golder Associates is an employee-owned, global group of companies specializing in ground engineering and environmental services. We offer technical excellence in a variety of disciplines.

GRAS Sound & Vibration.....808
 2285 East Enterprise Parkway
 Twinsburg, OH 44087
 (330) 425-1201
 melody@gras.us
 GRAS offers a wide range of standard measurement microphones, preamplifiers and accessories, all designed and manufactured in accordance with international standards.

GrayWolf Sensing Solutions1603
 6 Research Drive
 Shelton, CT 06484
 (203) 402-0477
 salesteam@GrayWolfSensing.com
 www.wolfsense.com
 Advanced mobile PC-based environmental instruments for measuring indoor air quality, toxic gas and air velocity parameters including VOCs, CO₂, CO, particulates, formaldehyde, ozone and more.

Hays Affinity Solutions.....526
 1133 20th St. NW, #450
 Washington, DC 20036
 (202) 263-4018
 hcifuentes@hayscompanies.com
 www.aiha.haysaffinity.com
 AIHA® partners with Hays Affinity to provide all eligible members with comprehensive professional liability coverage specifically designed to meet your needs as an industrial hygienist.

Health Conservation, Inc. (HCI)1232
 415 Financial Court
 Rockford, IL 61107
 (815) 964-4465 ext. 130
 inquiries@hcihealth.com
 www.hcihealth.com
 HCI - Nationwide leader for mobile audiometric, respiratory fit testing/clearance, vision screening, on-site delivery of test results, training programs, and database management.

Health Physics Society.....841
 HPS 1313 Dolley Madison
 McLean, VA 22101
 (703) 790-1745
 hps@burkinc.com
 www.hps.org
 Radiation safety services and products. Information from the Health Physics Society and the AIHA® Ionizing Radiation Committee.

NEW! Hellman & Associates, Inc. ...840
 11913 West I-70 Frontage Road N.
 Wheat Ridge, CO 80033
 (303) 384-9828
 rhellman@ehscompliance.com
 www.ehscompliance.com
 VPP STAR Site provides outsourced EHS management, construction safety support, compliance support, risk management and loss control staff documentation, training, environmental, VPP support, air and stormwater permit database management.

HNU-PID Analyzers, LLC.....536
 780 Corporate Park Drive
 Pembroke, MA 02359
 (800) 724-5600
 sales@hnu.com
 www.hnu.com
 Portable GC including coal mine gas applications, low-cost continuous VOC monitors, hand-held multigas analyzers, single channel affordable PID, process GCs.

HUD Office of Healthy Homes and Lead Hazard Control.....715
 415 7th St. SW, Room 8236
 Washington, DC 20410
 202-402-2096
 Clyde.K.Rodkey@hud.gov
 www.hud.gov
 Established by Congress, the HUD Office of Healthy Homes and Lead Hazard Control provides public outreach and technical assistance to reduce lead-based paint hazards.

ICU — A Total Safety Company.....525
 26022 Oak Ridge Drive
 The Woodlands, TX 77380
 (281) 363-9939
 tboswell@totalsafety.com
 www.icusafety.com
 Quantitative and qualitative workplace exposure assessment, industrial hygiene field services, OSHA compliant safety programs, emergency action plans, custom-developed training manuals, contractor safety, audits.

» Expo: Exhibitors by Alphabet

NEW! IHI Environmental.....519

3000 Youngfield Street, Ste. 105
Wheat Ridge, CO 80215
(303) 980-8749
robbins@ihi-env.com
www.ihi-env.com
IHI Environmental has 30 years of experience performing industrial hygiene, occupational safety, and environmental consulting services throughout the Western United States (UT, CO, AZ, CA, WA) .

IHS1122

9 Monroe Parkway, Ste. 150
Lake Oswego, OR 97035
(800) 275-6737
enviroinfo@ihs.com
www.ihs.com/environment
IHS Dolphin is a leader in total chemical management with customer-tailored application integrating MSDS automation, hazcom, inventory management, environmental reporting and supply chain greening.

Indoor Biotechnologies, Inc.....1425

1216 Harris St.
Charlottesville, VA 22903
(434) 984-2307
axtsay@inbio.com
www.inbio.com
Indoor Biotechnologies specializes in innovative products for environmental studies of allergic diseases. The company markets a rapid-test for mites and offers INDOOR® Allergen Analysis Service.

Industrial Hygiene News/ Rimbach Publishing.....908

8650 Babcock Blvd.
Pittsburgh, PA 15237
(412) 364-5366
info@rimbach.com
www.rimbach.com
Industrial Hygiene News provides information on products and services for measuring and controlling various health hazards in the work environment.

Industrial Safety & Hygiene News812

2401 West Big Beaver, Ste. 700
Troy, MI 48084
(248) 362-3700
hackneyk@bnpmedia.com
www.ishn.com
The only monthly tabloid-sized publication in the safety and health market, *ISHN* covers high-hazard worksites in manufacturing, construction, health and service industries. Qualify for your FREE subscription at www.ISHN.com.

Industrial Scientific Corporation1213

1001 Oakdale Road
Oakdale, PA 15071
(412) 788-4353
info@indsci.com
www.indsci.com
Industrial Scientific Corporation is the world's leading provider of Gas Detection as a Service, dedicated to eliminating death in the workplace by the end of this century.

Innov-X Systems708

100 Sylvan Road, Ste. 100
Woburn, MA 01801
(781) 938-5005
sales@innov-xsys.com
www.innov-xsys.com
From lead paint testing to instant meth lab identification to ID of toxic metals, portable elemental XRF analyzers by Innov-X are powerful, cost-effective and non-destructive.

Insights & Research1337

1400 Holcomb Bridge Road
Roswell, GA 30076
(770) 587-7586
fmayfie@bellsouth.net

Interactive Safety Products, Inc.1525

9825-A Northcross Center Court
Huntersville, NC 28078-7302
(800) 251-7377
sales@helmetssystem.com
www.helmetssystem.com
Pureflo, PureWeld and P-Series Powered Air Purifying Respirators, PAPR for pharmaceutical, metal working, and welding. Head top design, monitors air flow, battery and filter life.

International Safety Systems, Inc.....713

P.O. Box 475
Washingtonville, NY 10992
(203) 331-6464
toral.mehta@issehs.com
www.issehs.com
ISS with offices in USA, India, China and Brazil provides high quality and cost-effective services around the world to more than 250 workplaces in more than 20 countries.

ION Science Americas LLC1537

35 Crossroad
Waterbury, VT 05676
(802) 244-5153 ext. 202
info@ionscience-americas.com
www.ionscience.com
PhoCheck Series portable gas detectors/PID TVOC fixed intrinsically safe PID, FirstCheck portable PID/4 gas detector, SF6 leak detector, MVI mercury vapor indicator.

Johns Hopkins Bloomberg School of Public Health1714

615 North Wolfe St. W., #7517
Baltimore, MD 21205
(410) 955-0423
mdoyle@jhsp.edu
www.jhsp.edu/erc
The Johns Hopkins ERC offers graduate degree programs and continuing education in occupational and environmental medicine, nursing, and industrial hygiene, occupational injury epidemiology and biomarkers.

Kanomax USA, Inc.925

P.O. Box 372
Andover, NJ 07821
(973) 786-6386
info@kanomax-usa.com
www.kanomax-usa.com
Dust monitor, IAQ monitor, particle monitor, anemometer, gas monitor, sound level meter, thermohygrometer.

Kinetics Noise Control705

6300 Irelan Place
Dublin, OH 43017
(614) 889-0480
industrialsales@kineticsnoise.com
www.kineticsnoise.com
A manufacturer of innovative noise and vibration control products, Kinetics Noise Control has the engineered solution for your noise and vibration control problems.



Kitagawa America, LLC1619
 200 Wanaque Ave., Ste. 204
 Pompton Lakes, NJ 07442
 (973) 616-5410
 info@Kitagawa-America.com
 www.komyokk.co.jp/english
 Gas detector tubes, VOC sample collection, breathing air analysis kits, HazMat kits, OEM gas sensors, IAQ test kits.

KMI1034
 586 Argus Road, Ste. 103
 Oakville, ON L6J 3J3
 Canada
 (416) 410-4817
 contactus@kminnovations.com
 www.kminnovations.com
 Specializing in industry-leading EHS management software including incident management, audit and inspection, and corrective action management. KMI systems are fast to deploy, easy to use and provide real time and money savings.

Knorr Associates Inc.1030
 10 Park Place
 Butler, NJ 07405
 (973) 492-8500
 sales@knorrassociates.com
 www.knorrassociates.com
 DataPipe is an easy to use and customizable modular software solution for collecting and managing EH&S information via web or Windows. Includes form designer, extensive reporting capabilities and risk analysis tools.

Lab Safety Supply1336
 401 South Wright Road
 Janesville, WI 53547
 (800) 356-0783
 custsvc@labsafety.com
 www.labsafety.com
 North America's leading distributor of safety and industrial supplies including respirators, air monitors, instrumentation sampling equipment, personal protection equipment and much more.

Labconco Corp.1406
 8811 Prospect Ave.
 Kansas City, MO 64132
 (816) 333-8811
 labconco@labconco.com
 www.labconco.com
 Protecting your laboratory environment with fume hoods, biosafety cabinets, balance enclosures, glove boxes, water purification systems and glassware washers.

Larson Davis505
 3425 Walden Ave.
 Depew, NY 14043
 (716) 926-8243
 sales@LarsonDavis.com
 www.larsondavis.com
 Noise dosimeters, human vibration monitors, sound level meters and octave band analyzers.

Liberty Mutual Insurance Co.622
 71 Frankland Road
 Hopkinton, MA 01748
 (800) 230-6263
 ethel.patricio@libertymutual.com
 www.libertymutual.com
 AIHA®-accredited industrial hygiene laboratory and nationwide global industrial hygiene consulting group experienced in qualitative and quantitative risk assessment and control of chemical and physical agents as well as bioaerosol.

NEW! Masimo403
 40 Parker
 Irvine, CA 92618
 (949) 297-7534
 sbaldwin@masimo.com
 www.masimo.com
 Pulse co-oximeter.

ANNOUNCING

VibTrack HAVTM
 Revolutionary
**NEW Hand-arm Vibration
 Dosimeter**

- Wearable
- Continuous Exposure Data
- Intrinsically Safe*

LARSON DAVIS
 A PCB PIEZOTRONICS DIV.
 www.LarsonDavis.com
 Call 24-hours toll free 888-258-3222
 sales@larsondavis.com

*pending

» Expo: Exhibitors by Alphabet

Medgate, Inc.1022

95 St. Clair Ave. W., Ste. 1700
Toronto, ON M4V 1N6
Canada

(416) 863-6800
srikhi@medgate.com
www.medgate.com

Medgate develops the industry's most advanced occupational health and safety software, used by leading organizations and government agencies, hospitals and more than 45 of the Fortune 500 companies to cut costs, boost productivity, and improve the health and safety of their employees.

Medtox Laboratories.....616

432 West County Road D
St. Paul, MN 55112

(651) 628-6175
pmandich@medtox.com
www.medtox.com

MEDTOX assists our customers in developing laboratory and on-site testing programs that save them time, energy and money. Services and products include SAMHSA certified laboratory testing; lab-based oral fluid testing; PROFILE® instant testing cups, cassettes and Test Systems (manufactured by MEDTOX in the USA); eChain®, our electronic chain of custody solution; and a full menu of clinical laboratory testing options from our clinical reference laboratory.

NEW! Meinhard Glass Products741

700 Corporate Circle, Ste. A
Golden, CO 80401

sales@meinhard.com
www.meinhard.com
ALPXS fast air sampler, Certified Reference Materials.

NEW! Mercury Instruments USA..1630

8550 West Ken Caryl Ave.
Littleton, CO 80128

(303) 972-3740
alex@test4mercury.com
www.mercury-instrumentsUSA.com

Mercury Instruments USA provides Mercury Monitoring Equipment Including: custom mercury vapor monitoring systems for mercury determination in gases such as: air, nitrogen, hydrogen, natural gas and others. Sales, rentals, calibration and service of the portable Mercury Tracker 3000IP and bench top VM3000 mercury vapor detectors and laboratory analyzers. Online process analyzers for mercury monitoring of waste streams. We are also a proud distributor of MeDeX 80 a non-toxic, non-corrosive product that removes mercury vapor from the atmosphere.

Met One Instruments, Inc.....1431

1600 Northwest Washington Blvd.
Grants Pass, OR 97526

(541) 471-7111 ext. 118
handhelds@metone.com
www.metone.com

Met One Instruments, Inc. designs and manufactures particle counters, aerosol monitors, and air quality instrumentation for handheld (portable), OEM, and regulatory (PM₁₀, PM_{2.5}) applications.

NEW! Mettler-Toledo, Inc.706

1900 Polaris Parkway
Columbus, OH 43240

(800) 638-8537
labinsidesales@mt.com
www.mt.com

Mettler-Toledo is a leading global manufacturer of precision instruments. The company is the world's largest manufacturer and marketer of weighing instruments for use in laboratory, industrial and food retailing applications. The company also holds top-three market positions in several related analytical instruments markets and is a leading provider of automated chemistry systems used in drug and chemical compound discovery and development.

Morphix Technologies1225

2557 Production Road
Virginia Beach, VA 23454

(757) 431-2260
sales@morphtec.com
www.morphtec.com

Morphix manufactures the ChromAir and SafeAir direct-reading badges and color comparatons and the Chameleon hands-free, power-free, toxic industrial chemical detectors.

MSA.....1103

121 Gamma Drive
Pittsburgh, PA 15238

(724) 776-8600
info@msanet.com
www.msanet.com

Personal protective equipment, including respiratory protection, gas detection, head, eye, and hearing protection.

MSDSonline641

350 North Orleans, Ste. 950
Chicago, IL 60654

(312) 881-2000
sales@msdsonline.com
www.msdsonline.com

MSDSonline is a leading provider of on-demand EH&S compliance solutions for managing MSDS, reporting workplace incidents, training employees and administering other critical safety information.

MSDSpro LLC.....1141

1300 East 68th Ave., #208A
Anchorage, AK 99518

(907) 272-6635 ext. 801
joan@msdspro.com
www.msdsp.com

MSDS and chemical inventory management, SARA reporting, secondary container labels, chemical authorization, intranet software, online solutions, employee right-to-know, MSDS data services. WHMIS compliance.



Mycometer, Inc......511
 5002 South MacDill Ave.
 Tampa, FL 33611
 (813) 831-6511
 Irogers@mycometer.com
 www.mycometer.com
 Mycometer offers rapid, reliable, robust onsite analysis for fungi and bacteria in air, bulk, water surface samples. Award-winning, field-proven technology for investigation, remediation, and delicate materials assessment.

NARDA Safety Test Solutions610
 435 Moreland Road
 Hauppauge, NY 11788
 (631) 231-1700 ext. 5663
 kiesha.leuzzi@l-3com.com
 www.narda-sts.com
 Nonionizing radiation safety products. Nardalert and RadMan RF personal monitors, ELF/VLF, RF and microwave safety instruments.

NEW! National Hearing Conservation Association638
 3030 West 81st Ave.
 Westminster, CO 80031
 (303) 224-9022
 nhcaoffice@hearingconservation.org
 www.hearingconservation.org
 Hearing conservation educational resources and materials, hearing conservation service provider directory.

NEW! National Jewish Health636
 1400 Jackson St.
 Denver, CO 80206
 (303) 398-1622
 riddera@njhealth.org
 www.njhealth.org
 Worker protection, OSHA compliance, respiratory fit-testing and fit device leasing, industrial hygiene services and consulting, indoor allergens and mold testing, medical evaluations and surveillance, beryllium health and safety, education and training.

National Library of Medicine712
 6707 Democracy Blvd., Ste. 510
 Bethesda, MD 20892
 (301) 496-3147
 tehip@tehl.nlm.nih.gov
 www.sis.nlm.nih.gov
 The National Library of Medicine provides FREE Internet access to its toxicology, chemical, and environmental health information resources at <http://tox.nlm.nih.gov>. Database searches will be demonstrated.

National Safety Council (NSC)1607
 1121 Spring Lake Drive
 Itasca, IL 60143
 (800) 621-7619
 customerservice@nsc.org
 www.nsc.org
 The National Safety Council saves lives by preventing injuries and deaths at work, in homes and communities, and on the roads, through leadership, research, education and advocacy as well as through the annual NSC Congress & Expo.

NESHTA/CET Board of Certification1713
 P.O. Box 10321
 Phoenix, AZ 85064-0321
 (602) 956-6099
 neshta@neshta.org
 www.neshta.org
 Nonprofit membership association for professional EHS trainers. CET Board of Certification is an independent voluntary certification agency for EHS trainers.

Nextteq, LLC1012
 8406 Benjamin Road, Ste. J
 Tampa, FL 33634
 (877) 312-2333 ext. 86
 info@nextteq.com
 www.nextteq.com
 Nextteq, LLC is the trusted leader in the safety and industrial hygiene industries offering solutions for gas detection, first response/hazmat training, and respiratory protection.

Nilfisk — CFM522
 300 Technology Drive
 Malvern, PA 19355
 (800) 645-3475
 questions@nilfisk-advance.com
 www.pa.nilfisk-advance.com
 Nilfisk CFM helps the industrial sector meet their individual cleaning requirements and challenges with an extensive range of high-performance, HEPA-filtered industrial vacuum cleaners.

NIOSH/ERC/CE1718
 2180 East Galbraith
 Cincinnati, OH 45237
 (513) 558-1729
 judy.jarrell@uc.edu
 Information on continuing education courses for all 17 NIOSH ERC CE programs.

North by Honeywell1323
 2000 Plainfield Pike
 Cranston, RI 02921
 (800) 430-4110
 honeywellsafetyproducts@honeywell.com
 www.northsafety.com
 Safety products, eye, face, head, hearing protection, respiratory, fall and fibre metal products.

Northrop Grumman Corporation1024
 1436 Legend Hills Drive, Ste. 200
 Clearfield, UT 84105
 (801) 774-3007
 michael.baghoomian@ngc.com
 www.eesoh.com
 Northrop Grumman's DoD-endorsed Environmental, Safety and Occupational Health Information System (ESOH-MIS) is credited with supporting the USAF leadership position in Org ESOH management. The ESOH-MIS is supported on the USAF Global Combat Support (GCSS).

» Expo: Exhibitors by Alphabet

NuAire, Inc.....831

2100 Fernbrook Lane
Plymouth, MN 55447
(763) 553-1270
john.peters@nuaire.com
www.nuaire.com

Polypropylene fume hoods, casework, and accessories; biological safety cabinets; CO2 incubators; ultra-low temperature freezers; laminar airflow equipment; isolators/glove boxes.

Occupational Health & Safety Magazine.....504

14901 Quorum Drive
Dallas, TX 75254
(972) 687-6700
smay@1105media.com
www.ohsonline.com

Occupational Health & Safety is the leading print and online publication in the health, safety and hygiene market.

Occupational Safety & Health Administration (OSHA).....537

200 Constitution Ave. NW
Washington, DC 20210
(202) 693-1999
chatmon.veneta@dol.gov
www.osha.gov

Safety and health publications.

OHD.....1231

197 Cahaba Valley Parkway
Birmingham, AL 35124
(205) 980-0180
sales@ohdusa.com
www.ohdusa.com

OHD "Quantifit," a whole new level in quantitative respirator fit testing. Smaller, lighter, portable, on-board data storage, Internet upgrades, keyboard, printer connection. DoseBadge Dosimetry System, wireless, robust, meets all your dosimetry needs.

Ohio Lumex Company.....639

9263 Ravenna Road, Unit A3
Twinsburg, OH 44087
United States
mail@ohiolumex.com
www.ohiolumex.com

Ohio Lumex specializes in the most sensitive field portable mercury analyzers used for mercury remediation and emergency response. Gas analyzers, laboratory equipment, rental and repair.

Open Range Software1135

P.O. Box 80
Crab Orchard, TN 37223
(800) 669-6742
sales@openrangesoftware.com
www.openrangesoftware.com

Industrial hygiene sampling and hazard assessment software is our passion at Open Range Software LLC. Let us show you our friendly and proven database solutions.

NEW! OraSure Technologies.....834

220 East First St.
Bethlehem, PA 18015
(610) 882-1820
deverett@orasure.com
www.orasure.com

OraSure Technologies is the pioneer of oral fluid diagnostics for drug testing (Intercept), alcohol testing (QED) and Cotinine testing (OraSure) for occupational safety and wellness.

Particle Measuring Systems.....607

5475 Airport Blvd.
Boulder, CO 80301
(303) 443-7100
srowley@pmeasuring.com
www.pmeasuring.com

Nanoparticle detectors, impactors, DMA-Differential Mobility Analyzers, SMPS, on-site Nanoparticle Exposure Assessment.

PathCon Laboratories.....1322

270 Scientific Drive, Ste. 3
Norcross, GA 30092
(770) 446-0540
bshelton@pathcon.com
www.pathcon.com

Microbiological evaluation/occupational health consultation for buildings with occupant health complaints. Laboratory analyses include bacteria and fungi in air and *legionella* bacteria in water.

Phonak LLC838

4520 Weaver Parkway
Warrenville, IL 60555
(630) 851-7075
helmut.ermann@phonak.com
www.phonak-communications.com

Custom modular hearing protection.

Photovac, Inc.902

300 Second Ave.
Waltham, MA 02451
(781) 290-0777
customerservice@photovac.com
www.photovac.com

Gas detection monitors for industrial hygiene, environmental monitoring and first responder applications featuring photoionization detection (PID), flame ionization (FID) and gas chromatography (GC) technologies. See our new DataFID.

Portagas Inc.1338

6717-B Polk St.
Houston, TX 77011
(713) 928-6477
roert@portagas.com
www.portagas.com

Calibration gas and equipment for environmental monitoring and industrial hygiene. Portagreen cylinders.

Prism Analytical Technologies, Inc. (PATI)603

1200 North Fancher
Mt. Pleasant, MI 48858
(989) 772-5088
prism@pati-air.com
www.pati-air.com

Prism is the leading U.S. consultative air testing laboratory devoted to the chemical identification and analysis of air contaminants in factories, commercial buildings, schools, and homes.

ProcessMAP Corporation.....1133

1301 International Parkway, #160
Sunrise, FL 33323
(954) 515-5040
sales@processmap.com
www.processmap.com

ProcessMAP Corporation will demonstrate its market-leading software for industrial hygiene data management, qualitative assessments, corrective actions management and more.



Purdue University1702
 School of Health Sciences
 550 Stadium Mall Drive
 West Lafayette, IN 47907-2051
 (765) 494-1439
 neil@purdue.edu
 www.healthsciences.purdue.edu
 Undergraduate and graduate MS and PhD education and research in occupational and environmental health sciences. ABET-accredited in industrial hygiene at the BS and MS level.

PureSafety1038
 730 Cool Springs Blvd., Ste. 400
 Franklin, TN 37067
 (800) 202-3016
 sales@puresafety.com
 www.puresafety.com
 Software and information solutions for workforce safety and health.

QLAB516
 5 Allison Drive
 Cherry Hill, NJ 08003
 (856) 489-0011
 wtang@qlabusa.com
 www qlabusa.com
 QLab specializes in microbiological analysis for indoor environmental quality assessment. We focus on providing quality analysis with personal attention.

QuanTEM Laboratories, LLC1240
 2033 Heritage Park Drive
 Oklahoma City, OK 73120
 (800) 822-1650
 marketing@quantem.com
 www.quantem.com
 Environmental laboratory services.

Quest Technologies, a 3M company1203
 1060 Corporate Center Drive
 Oconomowoc, WI 53066
 (262) 567-9157 ext. 112
 mjwesemann@mmm.com
 www.questtechnologies.com
 Quest Technologies, a 3M company, is a world-class manufacturer and leader in the field of occupational safety, industrial hygiene and environmental instrumentation.

RAE Systems1417
 3775 North First Street
 San Jose, CA 95134
 (408) 952-8200
 raesales@raesystems.com
 www.raesystems.com
 RAE Systems is a leading global developer and manufacturer of rapidly deployable, multi-sensor chemical and radiation detection monitors and networks for homeland security and industrial applications.

Raeco Rents1340
 135 Bernice Drive
 Bensenville, IL 60106
 (800) 852-9795
 sales@raeco.com
 www.raecorents.com
 Rental and sales of instruments to serve the industrial hygiene, safety, and environmental markets.

Redshift Technologies, Inc.626
 34 East 29th St.
 New York, NY 10016
 (212) 683-8993
 info@redshift-tech.com
 www.redshift-tech.com
 Redshift has developed customizable EH&S software, and provided expert software integration consulting for over 10 years: hazcom, environmental, occupation health, process safety and metrics.

NEW! Risk Prevention Systems, LLC422
 121 Shields Park Dr., St.e F
 Kernersville, NC 27284
 info@riskpreventionsystems.com
 www.riskpreventionsystems.com
 Green chemistry and supporting systems.

NEW! Rivo Software Limited941
 Innovation Center, Warwick
 Technology Park
 Warwick, CV34 6UW
 United Kingdom
 44-1926-311300
 enquiries@rivo.co.uk
 www.rivosoftware.com
 Rivo Software is a world-class provider of safety, health and environmental compliance software. Developed with industry leading clients, Rivo's web-based, modular platform "Safeguard" has helped organisations based throughout 65 countries to demonstrate compliance, deliver business improvement and gain competitive advantage. Safeguard is configured to meet an organization's exact business requirements, providing a solution that truly meets the needs of the client.

RJ Lee Group, Inc.618
 350 Hochberg Road
 Monroeville, PA 15146
 (724) 325-1776
 jschafer@rjlg.com
 www.rjlg.com
 RJ Lee Group, Inc. is a fully accredited industrial hygiene laboratory specializing in microscopy, x-ray diffraction, organic and inorganic analysis.

RKI Instruments702
 33248 Central Ave.
 Union City, CA 94587
 (800) 754-5165
 orders@rkiinstruments.com
 www.rkiinstruments.com
 Manufacturer of portable/fixed gas detection equipment and sensor technology. Products include smallest 4-gas monitor, 5-sample draw with 100 percent volume methane, and 6-gas portable.

RMCOEH — University of Utah1712
 391 Chipeta Way, Ste. C
 Salt Lake City, UT 84108
 (801) 581-4055
 luz.dominguez@hsc.utah.edu
 www.medicine.utah.edu/rmcoeh
 Academic and continuing education programs in occupational safety and health.

RMD Instruments1437

44 Hunt St.
Watertown, MA 02472
(617) 668-6901
sales@RMDInc.com
www.rmd-LPA1.com
The RMD LPA-1 XRF Lead Paint Spectrum Analyzer is the most reliable, most durable and most cost efficient XRT lead paint inspection available today.

S.E. International, Inc.718

P.O. Box 39
Summertown, TN 38483-0039
(931) 964-3561
radiationinfo@seintl.com
www.seintl.com
Radiation Alert® handheld ionizing radiation detection instruments for surface and air contamination. Proven reliable in environmental, industrial, laboratory, health physics, emergency response and educational fields.

Safetec939

7700 NE Parkway Drive, Ste. 125
Vancouver, WA 98662
United States
tiffanyj@safetec.com
www.safetec.net
Safetec is the global leader in chemical and regulatory compliance technologies and services specializing in chemical inventory control, msds management and environmental reporting.

NEW! Safeware, Inc.1635

4880 Robb St., Unit 4
Wheat Ridge, CO 80033
sales@safewareinc.com
www.safewareinc.com
Safeware offers a full line of safety products and technical services. We provide safety, service and response.

SanAir Technologies

Laboratory, Inc.1234
1551 Oakbridge Drive, Ste. B
Powhatan, VA 23139
(888) 895-1177
dburrrington@sanair.com
www.sanair.com
AIHA®- and NVLAP-accredited full-service laboratory offering analytical services specializing in fungi and bacteria detection and identification of *legionella*, asbestos and materials testing.

Savannah River Nuclear Solutions, LLC,

Accredited Laboratory717
735 B Savannah River Site
Aiken, SC 29808
(803) 952-7885
linda.youmans-mcdonald@srs.gov
Radiological and nonradiological laboratory analysis for asbestos, beryllium, lead, hexavalent chromium, and other metals. AIHA®-accredited.

Schneider Laboratories, Inc.1604


2512 West Cary St.
Richmond, VA 23220-5117
(800) 785-5227
info@slabinc.com
www.slabinc.com
Industrial hygiene and environmental commercial analytical laboratory specializing in organic compounds, asbestos, lead and metals in various matrices: lead-based paint, soil, wipes, hazardous wastes, drinking water, building materials, wastewater.

Scientific Analytical

Institute, Inc.1341
302 Pomona Drive, Ste. L
Greensboro, NC 27407
(336) 292-3888
ibunker@sailab.com
www.sailab.com
SAI is a fully accredited analytical laboratory specializing in projects relating to asbestos, lead, microbiology, CR(V1), and respirable silica. Employee-owned and quality-driven.

*When you analyze the alternatives
we're clearly the formula to choose.*

**INDUSTRIAL HYGIENE LABORATORY
SAVANNAH RIVER SITE**



- Specialized capabilities for unusual sample matrices:
 - High Alpha Levels • High Dose Rate
 - Tritium • Listed Components
- Unique capabilities for AIHA accredited analyses from radiological and non-radiological areas including:
 - Beryllium
 - Asbestos
 - Lead
 - Cadmium
 - Zinc
 - Total Chromium
 - Hexavalent Chromium
 - Other metals

Contact:
Linda Youmans-McDonald
Hi Technical Manager
linda.youmans-mcdonald@srs.gov
Ph: 803.952.7885
Fax: 803.952.7881



Scott Health & Safety1517

4320 Goldmine Road
Monroe, NC 28110
(800) 247-7257
sh-sale@tycoint.com

www.scotthealthsafety.com

Respiratory protection equipment, self contained breathing apparatus, confined space entry, gas detection monitors.

Sensidyne LP1211

16333 Bay Vista Drive
Clearwater, FL 33702
(727) 530-3602

info@Sensidyne.com
www.sensidyne.com

Universal area gas monitor and the only low ppm gas detector for ammonia with Factory Mutual (FM) performance approval. Manufactures a full line of air sampling pumps, detector tubes and calibration equipment.

Showa Best Glove, Inc.1223

579 Edison St.
Menlo, GA 30731
(706) 862-6755

usa@showabestglove.com
www.bestglove.com

Showa Best Glove offers more than 1,800 glove choices for use primarily in the industrial, construction, automotive, health care, retail and commercial fishing industries.

NEW! Silvent North America1624

6625 Daniel Burnham Drive
Portage, IN 46368
(800) 263-5638

info@silvent.com
www.silvent.com

Airguns and air nozzles for blow-off applications designed to reduce noise, conserve air and improve safety.

SiteHawk1023

709 Nissan Drive
Smyrna, TN 37167
(615) 459-0064 ext. 22

sales@sitehawk.com
www.sitehawk.com

SiteHawk offers a complete approach to MSDS and chemical data management through web-based, user-friendly software and managed services. Organizations utilize SiteHawk solutions for MSDS management, MSDS authoring, and chemical inventory management.

SKC1403

863 Valley View Road
Eighty Four, PA 15330
(724) 941-9704

skcorder@skcinc.com
www.skcinc.com

World leader in sampling technologies for the occupational and environmental health and safety professional. Products include sample pumps, collection media, instruments and accessories for sampling gases/vapors, particulates and other contaminants.

Spiramid, LLC1027

13763 Royal Red Terrace
Chantilly, VA 20151
(703) 378-0151

info@spiramid.com
www.spiramid.com

Maximize your ROI with Spiramid's leading EH&S software. The industrial hygiene module offers the most comprehensive qualitative and quantitative functionality available anywhere.

Supelco/Sigma-Aldrich524

595 North Harrison Road
Bellefonte, PA 16823
(814) 359-5934

bobbiejo.seyler@sial.com
www.sigma-aldrich.com

Products from active and passive air sampling for thermal or solvent desorption to HPLC and GC columns and associated supplies and accessories for sample analyses.

Taylor & Francis1224

325 Chestnut St.
Philadelphia, PA 19106
(215) 625-8900

melody.harris@taylorandfrancis.com
www.taylorandfrancis.com

Publisher of books and journals including *Journal of Occupational and Environmental Hygiene*, the official publication of ACGIH® and AIHA®.

TechniData America931

Rockwood Office Park, 503 Carr Road,
#120

Wilmington, DE 19809
(302) 633-2800

marketingus@technidata.com
www.technidata.com

Health and safety.

NEW! Tetra Tech1617

234 Mall Blvd.
King of Prussia, PA 19406
(610) 382-1540

odette.mina@tetrattech.com
www.tetrattech.com

Tetra Tech is an environmental consulting firm providing environmental, health and safety, carbon management, disaster management/emergency response, energy and sustainability, process engineering and water/wastewater services worldwide.

The Ergonomics Center714

3701 Neil St.
Raleigh, NC 27607
(919) 515-2052

mcnierney@TheErgonomicsCenter.com
www.theergonomicscenter.com

We provide ergonomics consulting, training, and research in the U.S. and Latin America.

The University of Alabama at Birmingham — Deep South Center1717

1530 Third Ave. S., RPHB 520D
Birmingham, AL 35294-0022
(205) 934-7178

cherie@uab.edu
www.soph.uab.edu/dsc

Graduate-level MPH and PhD programs in industrial hygiene and occupational health and safety as well as continuing education courses in a variety of subjects.

The University of Findlay1711

1000 North Main St.
Findlay, OH 45840
(419) 434-6919

carter@findlay.edu
www.findlay.edu

The University of Findlay, Environmental Safety and Occupational Health Program.

» Expo: Exhibitors by Alphabet

Therm Omega Tech, Inc......1332
 353 Ivyland Road
 Warminster, PA 18974
 (215) 674-9992 ext. 225
 pdriscoll@thermomegatech.com
 www.thermomegatech.com
 Manufacturer of self-actuating temperature control valves, tempered water systems for showers/eye wash stations, hose/washdown stations. Mixing/diverting valves to provide temperature process control and a line of energy saving products.

Thermo Scientific — Air Quality Instruments & Niton Analyzers.....1017
 27 Forge Parkway
 Franklin, MA 02038
 (508) 553-0430
 customerservice@aqi.thermo.com
 www.thermo.com/ih
 We provide a comprehensive line of gas detectors for monitoring the presence of combustible and toxic gases in the environment as well as for metal analysis.

Tiger-Vac Inc. (USA).....518
 73 Southwest 12th Ave.
 Dania, FL 33004
 (954) 925-3625
 sales@tiger-vac.com
 www.tiger-vac.com
 Manufacturer of industrial vacuum cleaners for controlled and hazardous locations.

NEW! Tisch Scientific.....502
 145 South Miami Ave.
 Cleves, OH 45002
 (513) 467-0222
 salesteam@tisch-env.com
 www.scientificfilters.com
 Direct manufacturing and distributing of syringe filters, membrane filters, capsule filters, disk filters, cartridge filters, micro filtration papers.

Total Safety U.S., Inc......523
 11111 Wilcrest Green, Ste. 300
 Houston, TX 77042
 (713) 353-7100
 lmachalick@totalsafety.com
 www.totalsafety.com
 Integrated safety services and products.

Travelers Laboratory.....1222
 90 Lambertson Road
 Windsor, CT 06095
 (800) 842-0355
 tberkan@travelers.com
 Comprehensive IH analytical services, which includes free pump loan program, free comprehensive analytical scan service, perm pump loan, free technical webinars, equipment rentals and training.

TRP — Technical Response Planning Corp......827
 9720 Cypresswood Drive
 Houston, TX 77070
 (281) 955-9600
 slamoureux@trpcorp.com
 www.trpcorp.com
 Environmental and planning consultants: customized web based planning systems for business continuity, crisis management, security, pandemic, emergency and oil spill response, fire and confined space pre-plans, tactical plans. HAZWOPER and ICS training, exercise facilitation.

TRS-Environmental.....1615
 1830 West Airfield Drive
 DFW Airport, TX 75261
 (972) 456-4000
 trs@trs-environmental.com
 www.trs-environmental.com
 Rental of environmental, monitoring, sampling and analyzing equipment.

TSI.....1003
 500 Cardigan Road
 Shoreview, MN 55126
 (800) 874-2811
 answers@tsi.com
 www.tsi.com
 TSI Incorporated is a leading supplier of industrial hygiene/exposure monitoring, respirator fit-testing, indoor air quality and ventilation testing and balancing direct reading, portable instrumentation.

Tulane University — CAEPH.....1704
 1440 Canal St., Ste. 800
 New Orleans, LA 70112
 (504) 988-3786
 DLinfo@tulane.edu
 www.dL.caeph.tulane.edu
 Tulane University offers distance learning graduate degrees in industrial hygiene and occupational health and safety management, among others. These programs feature a real-time interactive format.

United Phosphorus Limited.....915
 Readymoney Terrace
 Worli, Mumbai 400018
 India
 91-22-2493-0681
 singhrv@uniphos.com
 www.uniphos-she.com
 Gas detector tubes, sensors, transmitters.

University of California, Berkeley — School of Public Health.....1707
 50 University Hall, #7360
 Berkeley, CA 94720
 (510) 642-8365
 mariongillen@berkeley.edu
 http://sph.berkeley.edu
 Industrial hygiene graduate degree program offering MS, MPH and PhD degrees. NIOSH traineeships available for eligible students at this University of California, Berkeley program.

University of Cincinnati Environmental and Occupational Hygiene.....1706
 P.O. Box 670056
 Cincinnati, OH 45267-0056
 (513) 558-5710
 carol.rice@uc.edu
 www.uc.edu/erc
 Academic, research, and professional development programs in environmental and occupational, occupational safety and ergonomics, environmental and occupational medicine, and occupational health nursing.



University of Illinois/Great Lakes Centers for Occupational & Environmental Safety & Health.....1719
 2121 West Taylor St.
 Chicago, IL 60612
 (312) 996-6904
 syn@uic.edu
 www.uic.edu/sph/glakes
 The Great Lakes Center for Occupational and Environmental Safety and Health exists to improve, promote and maintain the health of workers and communities.

University of Michigan COHSE.....1710
 109 South Observatory St.
 Ann Arbor, MI 48109-2029
 (734) 936-0749
 sph.inquiries@umich.edu
 www.engin.umich.edu/dept/ioe/COHSE
 Continuing and graduate education.

University of South Florida College of Public Health, Sunshine ERC.....1716
 13201 Bruce B. Downs Blvd., MDC 56
 Tampa, FL 33612-3805
 (813) 974-0989
 hosman@health.usf.edu
 http://health.usf.edu/publichealth/erc/index.htm
 Information regarding masters and doctoral programs in industrial hygiene at the University of South Florida College of Public Health and information about the USF Sunshine ERC.

University of Toledo Health College of Medicine Dept of Public Health & Homeland Security.....1703
 3015 Arlington Ave.
 Toledo, OH 43614
 mary.alderman@utoledo.edu
 www.hsc.utoledo.edu/med/pubhealth
 Educational materials for Masters and Certificate Programs in Industrial Hygiene and Public Health.

University of Washington — Environmental & Occupational Health Sciences.....1715
 Box 357234
 Seattle, WA 98195
 (206) 543-6991
 ehadmin@u.washington.edu
 http://depts.washington.edu/envhlth/
 Graduate, undergraduate and continuing education in occupational and environmental health and safety; industrial hygiene field research and consultation; Region X OSHA-authorized training.

U.S. Navy Recruiting406
 5722 Integrity Drive
 Millington, TN 38054
 (800) 872-6289
 jmitri@graphicresource.com
 You're looking for a job or career that maximizes your talents, challenges you to take on a leadership role, and gives you an adrenaline rush in the process. You've just found it! The US Navy puts you in command of cutting-edge technology, advanced systems, billions of dollars in aviation, submarine and surface ship equipment. Envision yourself as a Navy Officer, and accelerate your life™. More information at www.navy.com or 1 (800) USA-NAVY.

VPP Participants' Association1239
 7600 East Leesburg Pike, #440
 Falls Church, VA 22043-2004
 (703) 761-1146
 membership@vpppa.org
 www.vpppa.org
 The Voluntary Protection Participants' Association, Inc., (VPPPA) was formed in 1985 by representatives of worksites and companies participating in OSHA's Voluntary Protection Programs. The association is a nonprofit 501(c)(3) organization comprised of member companies dedicated to the highest standards of workplace safety, health and environmental protection through cooperation between government and industry. VPPPA's products and services include regional and national conferences, workshops, mentoring program, training materials and publications.

NEW! Walsh Environmental Scientists and Engineers, LLC.....1640
 4888 Pearl East Circle, #108
 Boulder, CO 80301
 (303) 443-3282
 rcrandall@walshenv.com
 www.walshenv.com
 Walsh specializes in employee health and safety, indoor environmental quality, and hazardous materials management with six offices in Colorado and one in Wyoming.

Wiley-VCH1436
 111 River St.
 Hoboken, NJ 07030
 (201) 748-6000
 mwunschel@wiley.com
 www.wiley.com
 Wiley-Blackwell, the scientific, technical, medical and scholarly publishing business of John Wiley & Sons, is the world's leading society publisher and offers peer-reviewed primary research and evidence-based medicine across thousands of online journals, books, reference works and databases.

WorkCare, Inc.1241
 300 South Harbor Blvd., Ste. 600
 Anaheim, CA 92805
 (800) 455-6155
 info@workcare.com
 www.workcare.com
 WorkCare provides consulting medical director services nationwide, specializing in medical surveillance, drug testing, on-site programs, disability and incident intervention, travel medicine and absence management.

Working Concepts, Inc.924
 8217 Southeast 267th Ave.
 Gresham, OR 97080
 (503) 663-3374
 info@softknees.com
 www.softknees.com
 We offer solutions for people who kneel or stand at fixed workstations. Reducing negative physical impacts of everyday tasks is what our products are about.

Zefon International909
 5350 Southwest First Lane
 Ocala, FL 34474
 (800) 282-0073
 sales@zefon.com
 www.zefon.com
 Zefon International is a leading manufacturer and distributor of air and surface sampling equipment, devices, and media used to monitor indoor environmental, occupational health, and safety conditions.

Aerosol Technology

Air Techniques International, 1611
 BGI Instruments, 913
 Emilcott, 839
 EMSL Analytical, Inc., 1317
 Geotech Environmental Equipment Inc., 816
 Kanomax USA Inc., 925
 Met One Instruments Inc., 1431
 Mycometer Inc., 511
 Particle Measuring Systems, 607
 SKC, 1403
 Thermo Scientific - Air Quality Instruments & Niton Analyzers, 1017
 TSI, 1003
 Asbestos
 Aerobiology Laboratory Associates Inc., 923
 BUREAU VERITAS NORTH AMERICA INC., 1117
 CASELLA USA, 809
 Clemex, 734
 DCM Clean-Air Products Inc., 1230
 DuPont, 1311
 ERSI, 1530
 Fiberlock Technologies Inc., 917
 Forensic Analytical Laboratories, 1613
 IHI Environmental, 519
Industrial Hygiene News/Rimbach Publishing, 908
 Kanomax USA Inc., 925
 Knorr Associates Inc., 1030
 Nilfisk - CFM, 522
 NIOSH/ERC/CE, 1718
 Raeco Rents, 1340
 SanAir Technologies Laboratory Inc., 1234
 Sensidyne LP, 1211
 SKC, 1403
 Tetra Tech, 1617
 Tiger-Vac Inc. (USA), 518
 Walsh Environmental Scientists and Engineers LLC, 1640
 Associations
 (CRBOH) Canadian Registration Board of Occupational Hygienists, 1440
 ACGIH®, 1623
 AIDII - Italian Association of Industrial Hygienists, 635
 American Biological Safety Associations, 716
 American Heart Association, 615
 American Industrial Hygiene Association (AIHA®), 623
 National Hearing Conservation Association, 638
 VPP Participants' Association, 1239

Biological Monitoring

AllOne Health, 412
 BGI Instruments, 913
 Emilcott, 839
 EMSL Analytical Inc., 1317
 Environics USA, 1606
 Galson Laboratories, 903
 Liberty Mutual Insurance Co., 622
 Met One Instruments Inc., 1431
 MSA, 1103
 Mycometer Inc., 511
 National Jewish Health, 636
 NIOSH/ERC/CE, 1718
 OraSure Technologies, 834
 SKC, 1403
 Tetra Tech, 1617
 Tisch Scientific, 502

Biosafety

American Biological Safety Associations, 716
 CPLab Safety, 1324
 E.A.R., Inc., 1237
 EFT Holdings Inc., 402
 Fiberlock Technologies Inc., 917
 Kanomax USA Inc., 925
 Labconco Corp., 1406
 Mycometer Inc., 511
 NuAire Inc., 831
 Tetra Tech, 1617
 Tiger-Vac Inc. (USA), 518

Communications/ Telecommunications

Clement Communications, 407
 Tulane University - CAEPH, 1704

Computer Applications

3E Company, 1123
 ACGIH®, 1623
 Actio Corporation, 1131
 Affyigility Solutions, 935
 CCOHS, 703
 ChemWatch NA, 1032
 Dakota Software Corporation, 933
 Datachem Software Inc., 1126
 Hellman & Associates Inc., 840
 IHS, 1122
 KMI, 1034
 Knorr Associates Inc., 1030
 Medgate Inc., 1022
 MSDSONline, 641
 MSDSpro LLC, 1141
 Northrop Grumman Corporation, 1024
 Open Range Software, 1135
 ProcessMAP Corporation, 1133
 PureSafety, 1038
 Redshift Technologies Inc., 626
 Rivo Software Ltd., 941
 Safetec, 939

SiteHawk, 1023
 Spiramid LLC, 1027
 TRP - Technical Response Planning Corp., 827

Confined Space

Air Systems International, 817
 Ashtead Technology Rentals, 707
 Baseline-MOCON, 517
 Concentra Inc., 818
 Crowdon Detection Instruments Ltd., 1636
 Draeger Safety Inc., 1109
 Emilcott, 839
 ENMET Corporation, 1523
 GfG Instrumentation Inc., 1402
 Hellman & Associates Inc., 840
 HNU-PID Analyzers LLC, 536
 IHI Environmental, 519
 Industrial Scientific Corporation, 1213
 International Safety Systems Inc., 713
 Kitagawa America LLC, 1619
 Knorr Associates Inc., 1030
 Lab Safety Supply, 1336
 Liberty Mutual Insurance Co., 622
 MSA, 1103
 Portagas Inc., 1338
 RAE Systems, 1417
 Raeco Rents, 1340
 RKI Instruments, 702
 Safeware, Inc., 1635
 Scott Health & Safety, 1517
 Sensidyne LP, 1211
 Tetra Tech, 1617
 Therm Omega Tech Inc., 1332
 Thermo Scientific - Air Quality Instruments & Niton Analyzers, 1017
 Total Safety U.S. Inc., 523
 TRS-Environmental, 1615

Education/Training

ACGIH®, 1623
 Aerobiology Laboratory Associates Inc., 923
 American Heart Association, 615
 Bruel & Kjaer, 1328
 Bureau Veritas North America Inc., 1117
 CCOHS, 703
 CDC/NIOSH, 531
 Clement Communications, 407
 Columbia Analytical Services Inc., 922
 Compliance Solutions, 1139
 Datachem Software Inc., 1126
 EMSL Analytical Inc., 1317
 ENMET Corporation, 1523
 Euro Safety & Health, 637
 Golder Associates, 932
 Health Conservation Inc. (HCI), 1232
 Hellman & Associates Inc., 840



HUD Office of Healthy Homes and Lead Hazard Control, 715
 ICU - A Total Safety Company, 525
 International Safety Systems Inc., 713
 Johns Hopkins Bloomberg School of Public Health, 1714
 Liberty Mutual Insurance Co., 622
 MSDSONline, 641
 NARDA Safety Test Solutions, 610
 National Jewish Health, 636
 National Library of Medicine, 712
 National Safety Council (NSC), 1607
 NESHTA/CET Board of Certification, 1713
 NIOSH/ERC/CE, 1718
 Purdue University, 1702
 PureSafety, 1038
 RJ Lee Group, Inc., 618
 RMCOEH - University of Utah, 1712
 SKC, 1403
 Tetra Tech, 1617
 The Ergonomics Center, 714
 The University of Alabama at Birmingham - Deep South Center, 1717
 The University of Findlay, 1711
 Travelers Laboratory, 1222
 Tulane University - CAEPH, 1704
 University of California, Berkeley - School of Public Health, 1707
 University of Cincinnati Environmental and Occupational Hygiene, 1706
 University of Illinois/Great Lakes Centers for Occupational & Environmental Safety & Health, 1719
 University of Michigan COHSE, 1710
 University of South Florida College of Public Health, Sunshine ERC, 1716
 University of Toledo, 1703
 University of Washington - Environmental & Occupational Health Sciences, 1715

EHS Regulatory Compliance

3E Company, 1123
 Actio Corporation, 1131
 Affyigility Solutions, 935
 ChemWatch NA, 1032
 Colorado Safety Association, 1441
 Dakota Software Corporation, 933
 Emilcott, 839
 Gasmel Technologies Inc., 1541
 Hellman & Associates Inc., 840
 IHI Environmental, 519
 Medgate Inc., 1022
 MSDSONline, 641
 Nextteq LLC, 1012
 Nilfisk - CFM, 522
 ProcessMAP Corporation, 1133
 Safetec, 939

TechniData America, 931
 Tetra Tech, 1617

Emergency Response Planning

3M, 1203
 American Heart Association, 615
 Center for Toxicology and Environmental Health LLC, 804
 ChemWatch NA, 1032
 DuPont, 1311
 ENMET Corporation, 1523
 Fiberlock Technologies Inc., 917
 Golder Associates, 932
 Hellman & Associates Inc., 840
 ICU - A Total Safety Company, 525
 Masimo, 403
 National Library of Medicine, 712
 Ohio Lumex Co., 639
 Tetra Tech, 1617
 The University of Findlay, 1711
 Tiger-Vac Inc. (USA), 518
 TRP - Technical Response Planning Corp., 827
 Tulane University - CAEPH, 1704
 Walsh Environmental Scientists and Engineers LLC, 1640

Environmental Consulting

Affyigility Solutions, 935
 AllOne Health, 412
 AMEC, 609
 Bruel & Kjaer, 1328
 Bureau Veritas North America Inc., 1117
 Center for Toxicology and Environmental Health LLC, 804
 Colorado Safety Association, 1441
 Compliance Solutions, 1139
 Concentra Inc., 818
 Dade Moeller & Associates, 1526
 Earth Shift LLC, 541
 Emilcott, 839
 ESIS Risk Control Services, 1503
 Euro Safety & Health, 637
 Golder Associates, 932
 Hellman & Associates Inc., 840
 ICU - A Total Safety Company, 525
 IHI Environmental, 519
 Indoor Biotechnologies Inc., 1425
 Innov-X Systems, 708
 Kinetics Noise Control, 705
 NIOSH/ERC/CE, 1718
 Northrop Grumman Corporation, 1024
 Prism Analytical Technologies Inc. (PATI), 603
 ProcessMAP Corporation, 1133
 RJ Lee Group Inc., 618
 TechniData America, 931
 Tetra Tech, 1617
 The University of Findlay, 1711
 Tisch Scientific, 502

TRP - Technical Response Planning Corp., 827
 University of Washington - Environmental & Occupational Health Sciences, 1715
 Walsh Environmental Scientists and Engineers LLC, 1640

Environmental Products/Services

3E Company, 1123
 A&B Labs, 737
 ACGIH®, 1623
 Actio Corporation, 1131
 Air Systems International, 817
 AllOne Health, 412
 Analytics Corporation, 1505
 Argus-Hazco, 1602
 Ashtead Technology Rentals, 707
 BGI Instruments, 913
 Bios International Corporation, 1610
 Bruel & Kjaer, 1328
 CCOHS, 703
 Columbia Analytical Services Inc., 922
 Compliance Solutions, 1139
 Dakota Software Corporation, 933
 DCM Clean-Air Products Inc., 1230
 Earth Shift Inc., 541
 EMLab P&K, 823
 EMSL Analytical Inc., 1317
 Entech Instruments Inc., 1511
 Fiberlock Technologies Inc., 917
 Gasmel Technologies Inc., 1541
 Gastec Corporation, 806
 Geotech Environmental Equipment Inc., 816
 GfG Instrumentation Inc., 1402
 GrayWolf Sensing Solutions, 1603
 Hellman & Associates Inc., 840
 HNU-PID Analyzers LLC, 536
 HUD Office of Healthy Homes and Lead Hazard Control, 715
 IHS, 1122
 Indoor Biotechnologies Inc., 1425
Industrial Hygiene News/Rimbach Publishing, 908
 Industrial Scientific Corporation, 1213
 Kanomax USA Inc., 925
 Kinetics Noise Control, 705
 Kitagawa America LLC, 1619
 Met One Instruments Inc., 1431
 Mycometer Inc., 511
 Nextteq LLC, 1012
 Northrop Grumman Corporation, 1024
 Prism Analytical Technologies Inc. (PATI), 603
 RAE Systems, 1417
 Raeco Rents, 1340
 Redshift Technologies Inc., 626
 RJ Lee Group Inc., 618
 Safetec, 939

SanAir Technologies Laboratory Inc., 1234
 Scientific Analytical Institute Inc., 1341
 Silvent North America, 1624
 SKC, 1403
 Supelco/Sigma-Aldrich, 524
 TechniData America, 931
 Therm Omega Tech Inc., 1332
 Thermo Scientific - Air Quality Instruments & Niton Analyzers, 1017
 TRS-Environmental, 1615

Ergonomics

3M, 1203
 ACGIH®, 1623
 AliMed, 1522
 ART Corporate Solutions Inc., 510
 Bureau Veritas North America Inc., 1117
 CCOHS, 703
 Colorado Safety Association, 1441
 Concentra Inc., 818
 Contour Design Inc., 640
 ErgoGenesis LLC, 540
 ESIS Risk Control Services, 1503
 Euro Safety & Health, 637
 Golder Associates, 932
 Hellman & Associates Inc., 840
 ICU - A Total Safety Company, 525
Industrial Hygiene News/Rimbach Publishing, 908
 International Safety Systems Inc., 713
 Knorr Associates Inc., 1030
 Liberty Mutual Insurance Co., 622
 NuAire Inc., 831
 Tetra Tech, 1617
 The Ergonomics Center, 714
 University of California, Berkeley - School of Public Health, 1707
 University of Washington - Environmental & Occupational Health Sciences, 1715
 Working Concepts Inc., 924

First Aid

American Heart Association, 615

Flowmeter

BGI Instruments, 913
 Bios International Corporation, 1610
 GrayWolf Sensing Solutions, 1603
 TSI, 1003

Gas Detection

3M, 1203
 Arizona Instrument LLC, 619
 Ashtead Technology Rentals, 707
 Assay Technology Inc./AT Labs/MNR Services, 803

Baseline-MOCON, 517
 Compur Monitors Inc., 930
 Critical Environment Technologies Canada Inc., 613
 Crowcon Detection Instruments, Ltd., 1636
 Draeger Safety Inc., 1109
 ENMET Corporation, 1523
 EnviroNics USA, 1606
 Factory Direct Safety and Environmental Inc., 915
 Galson Laboratories, 903
 Gasmeter Technologies Inc., 1541
 Gastec Corporation, 806
 Geotech Environmental Equipment Inc., 816
 GfG Instrumentation Inc., 1402
 GrayWolf Sensing Solutions, 1603
 HNU-PID Analyzers, LLC, 536
Industrial Hygiene News/Rimbach Publishing, 908
 Industrial Scientific Corporation, 1213
 ION Science Americas LLC, 1537
 Kanomax USA Inc., 925
 Kitagawa America LLC, 1619
 Lab Safety Supply, 1336
 Mercury Instruments USA, 1630
 Morphix Technologies, 1225
 MSA, 1103
 Nextteq LLC, 1012
 Ohio Lumex Co., 639
 Particle Measuring Systems, 607
 Photovac Inc., 902
 Portagas Inc., 1338
 RAE Systems, 1417
 Raeco Rents, 1340
 RKI Instruments, 702
 Safeware, Inc., 1635
 Scott Health & Safety, 1517
 Sensidyne LP, 1211
 SKC, 1403
 Thermo Scientific - Air Quality Instruments & Niton Analyzers, 1017
 TRS-Environmental, 1615
 TSI, 1003
 United Phosphorus Limited, 915
 Zefon International, 909

Government Agencies

CDC/NIOSH, 531
 HUD Office of Healthy Homes and Lead Hazard Control, 715
 National Library of Medicine, 712
 Occupational Safety & Health Administration (OSHA), 537

Hazardous Waste

3E Company, 1123
 Alliant, 1626
 AllOne Health, 412
 Ashtead Technology Rentals, 707

Bureau Veritas North America Inc., 1117
 CCOHS, 703
 Center for Toxicology and Environmental Health LLC, 804
 ChemWatch NA, 1032
 CPLab Safety, 1324
 DuPont, 1311
 EFT Holdings Inc., 402
 Emilcott, 839
 ERSI, 1530
 Forensic Analytical Laboratories, 1613
 Hellman & Associates Inc., 840
 IHS, 1122
Industrial Hygiene News/Rimbach Publishing, 908
 Johns Hopkins Bloomberg School of Public Health, 1714
 Knorr Associates Inc., 1030
 Mercury Instruments USA, 1630
 Nilfisk - CFM, 522
 NIOSH/ERC/CE, 1718
 Northrop Grumman Corporation, 1024
 S.E. International Inc., 718
 Sensidyne LP, 1211
 TechniData America, 931
 Tetra Tech, 1617
 Tiger-Vac Inc. (USA), 518
 University of California, Berkeley - School of Public Health, 1707

Hearing Conservation

3M, 1203
 AllOne Health, 412
 Bruel & Kjaer, 1328
 CASELLA USA, 809
 CDC/NIOSH, 531
 Concentra Inc., 818
 E.A.R., Inc., 1237
 Euro Safety & Health, 637
 Examinetics Inc., 1423
 Galson Laboratories, 903
 Health Conservation Inc. (HCI), 1232
 Hellman & Associates Inc., 840
 International Safety Systems Inc., 713
 Johns Hopkins Bloomberg School of Public Health, 1714
 Kinetics Noise Control, 705
 Knorr Associates Inc., 1030
 Lab Safety Supply, 1336
 Larson Davis, 505
 Liberty Mutual Insurance Co., 622
 MSA, 1103
 National Hearing Conservation Association, 638
 National Jewish Health, 636
 OHD, 1231
 Phonak LLC, 838
 Quest Technologies, a 3M company, 1203
 Raeco Rents, 1340



Safeware Inc., 1635
 Silvent North America, 1624
 Spiramid, LLC, 1027
 Tetra Tech, 1617

Heat Stress

ACGIH®, 1623
 Alliant, 1626
 Argus-Hazco, 1602
 Casella USA, 809
 Galson Laboratories, 903
 Hellman & Associates Inc., 840
 ICU - A Total Safety Company, 525
 International Safety Systems Inc., 713
 Knorr Associates Inc., 1030
 Liberty Mutual Insurance Co., 622
 Quest Technologies, a 3M
 company, 1203
 Raeco Rents, 1340
 Therm Omega Tech, Inc., 1332

Indoor Air Quality

A&B Labs, 737
 ACGIH®, 1623
 Aerobiology Laboratory Associates
 Inc., 923
 AirLab, 940
 Alliant, 1626
 ALS Laboratory Group (formerly
 DataChem Laboratories Inc.), 1229
 Argus-Hazco, 1602
 Arizona Instrument LLC, 619
 Ashtead Technology Rentals, 707
 Assay Technology Inc./AT Labs/MNR
 Services, 803
 Austin Pure Air, 1330
 Baseline-Mocon, 517
 BGI Instruments, 913
 Bios International Corporation, 1610
 Bureau Veritas North America
 Inc., 1117
 Center for Toxicology and
 Environmental Health LLC, 804
 Columbia Analytical Services Inc., 922
 Compur Monitors Inc., 930
 CPLab Safety, 1324
 Critical Environment Technologies
 Canada Inc., 613
 Draeger Safety Inc., 1109
 EFT Holdings Inc., 402
 Emilcott, 839
 EMLab P&K, 823
 EMSL Analytical Inc., 1317
 ENMET Corporation, 1523
 Entech Instruments Inc., 1511
 Environics USA, 1606
 ESIS Risk Control Services, 1503
 Euro Safety & Health, 637
 Fiberlock Technologies, Inc., 917
 Forensic Analytical Laboratories, 1613
 Galson Laboratories, 903

Gasmot Technologies Inc., 1541
 Gastec Corporation, 806
 Geotech Environmental Equipment
 Inc., 816
 GfG Instrumentation Inc., 1402
 Golder Associates, 932
 GrayWolf Sensing Solutions, 1603
 Health Conservation Inc. (HCI), 1232
 Hellman & Associates Inc., 840
 HNU-PID Analyzers LLC, 536
 IHI Environmental, 519
 Indoor Biotechnologies Inc., 1425
Industrial Hygiene News/Rimbach
Publishing, 908
 Industrial Scientific Corporation, 1213
 International Safety Systems Inc., 713
 ION Science Americas LLC, 1537
 Johns Hopkins Bloomberg School of
 Public Health, 1714
 Kanomax USA Inc., 925
 Kitagawa America, LLC, 1619
 Knorr Associates Inc., 1030
 Labconco Corp., 1406
 Liberty Mutual Insurance Co., 622
 Meinhard Glass Products, 741
 Mercury Instruments USA, 1630
 Met One Instruments Inc., 1431
 Morphix Technologies, 1225
 Mycometer Inc., 511
 National Jewish Health, 636
 Nextteq LLC, 1012
 NIOSH/ERC/CE, 1718
 NuAire Inc., 831
 Particle Measuring Systems, 607
 PathCon Laboratories, 1322
 Photovac Inc., 902
 Prism Analytical Technologies Inc.
 (PATI), 603
 Quest Technologies, a 3M
 company, 1203
 RAE Systems, 1417
 Raeco Rents, 1340
 Risk Prevention Systems LLC, 422
 S.E. International Inc., 718
 SanAir Technologies Laboratory
 Inc., 1234
 Scientific Analytical Institute
 Inc., 1341
 Sensidyne LP, 1211
 SKC, 1403
 Supelco/Sigma-Aldrich, 524
 Tetra Tech, 1617
 Thermo Scientific - Air Quality
 Instruments & Niton Analyzers, 1017
 Tisch Scientific, 502
 Total Safety U.S. Inc., 523
 Travelers Laboratory, 1222
 TRS-Environmental, 1615
 TSI, 1003
 University of California, Berkeley -
 School of Public Health, 1707

Walsh Environmental Scientists and
 Engineers, LLC, 1640
 Zefon International, 909

Industrial Hygiene Consulting

Affygility Solutions, 935
 Alliant, 1626
 AllOne Health, 412
 American Heart Association, 615
 Bruel & Kjaer, 1328
 Bureau Veritas North America
 Inc., 1117
 Center for Toxicology and
 Environmental Health LLC, 804
 ChemWatch NA, 1032
 Critical Environment Technologies
 Canada Inc., 613
 Dade Moeller & Associates, 1526
 Defense Health Services System, 738
 Draeger Safety Inc., 1109
 DuPont, 1311
 E.A.R., Inc., 1237
 Emilcott, 839
 ESIS Risk Control Services, 1503
 Euro Safety & Health, 637
 Golder Associates, 932
 Health Conservation Inc. (HCI), 1232
 Hellman & Associates Inc., 840
 ICU - A Total Safety Company, 525
 IHI Environmental, 519
 Innov-X Systems, 708
 International Safety Systems Inc., 713
 Johns Hopkins Bloomberg School of
 Public Health, 1714
 Kinetics Noise Control, 705
 Knorr Associates Inc., 1030
 Liberty Mutual Insurance Co., 622
 Mercury Instruments USA, 1630
 National Jewish Health, 636
 Nextteq, LLC, 1012
 NIOSH/ERC/CE, 1718
 Northrop Grumman Corporation, 1024
 ProcessMAP Corporation, 1133
 RKI Instruments, 702
 Spiramid, LLC, 1027
 TechniData America, 931
 Tetra Tech, 1617
 Total Safety U.S. Inc., 523
 Tulane University - CAEPH, 1704
 University of Washington -
 Environmental & Occupational
 Health Sciences, 1715
 Walsh Environmental Scientists and
 Engineers, LLC, 1640

Labels

ChemWatch NA, 1032
 Lab Safety Supply, 1336
 Safeware, Inc., 1635

Laboratory Health

ACGIH®, 1623
 Actio Corporation, 1131
 Aerobiology Laboratory Associates Inc., 923
 AIHA® Proficiency Analytical Testing Programs, LLC, 735
 AirClean Systems, 411
 American Biological Safety Associations, 716
 Clemex, 734
 Contour Design Inc., 640
 CPLab Safety, 1324
 Critical Environment Technologies Canada Inc., 613
 EMSL Analytical Inc., 1317
 Flow Sciences Inc., 530
 Gasmet Technologies Inc., 1541
 Gastec Corporation, 806
 GfG Instrumentation Inc., 1402
 Kitagawa America LLC, 1619
 Lab Safety Supply, 1336
 Labconco Corp., 1406
 Mercury Instruments USA, 1630
 Met One Instruments Inc., 1431
 MSA, 1103
 MSDSonline, 641
 National Jewish Health, 636
 Nextteq LLC, 1012
 Nilfisk - CFM, 522
 NuAire, Inc., 831
 Particle Measuring Systems, 607
 Redshift Technologies Inc., 626
 S.E. International Inc., 718
 SanAir Technologies Laboratory Inc., 1234
 Sensidyne LP, 1211
 Supelco/Sigma-Aldrich, 524
 Tiger-Vac Inc. (USA), 518
 Tisch Scientific, 502

Laboratory Services/Consulting

A&B Labs, 737
 Aerobiology Laboratory Associates Inc., 923
 Affyigility Solutions, 935
 AIHA® Proficiency Analytical Testing Programs LLC, 735
 Air Techniques International, 1611
 AirLab, 940
 ALS Laboratory Group (formerly DataChem Laboratories, Inc.), 1229
 Analytics Corporation, 1505
 Assay Technology, Inc./AT Labs/MNR Services, 803
 Bruel & Kjaer, 1328
 Bureau Veritas North America Inc., 1117
 Columbia Analytical Services Inc., 922
 Dade Moeller & Associates, 1526

EMLab P&K, 823
 EMSL Analytical Inc., 1317
 ESIS Risk Control Services, 1503
 Forensic Analytical Laboratories, 1613
 Galson Laboratories, 903
 Indoor Biotechnologies Inc., 1425
 Innov-X Systems, 708
 Kanomax USA Inc., 925
 Liberty Mutual Insurance Co., 622
 Medtox Laboratories, 616
 Mycometer Inc., 511
 National Jewish Health, 636
 NIOSH/ERC/CE, 1718
 Ohio Lumex Co., 639
 OraSure Technologies, 834
 PathCon Laboratories, 1322
 Prism Analytical Technologies Inc. (PATI), 603
 QLAB, 516
 QuanTEM Laboratories LLC., 1240
 RJ Lee Group Inc., 618
 SanAir Technologies Laboratory Inc., 1234
 Savannah River Nuclear Solutions LLC, Accredited Laboratory, 717
 Schneider Laboratories Inc., 1604
 Scientific Analytical Institute Inc., 1341
 Travelers Laboratory, 1222
 TSI, 1003

Lead Abatement

DCM Clean-Air Products Inc., 1230
 DuPont, 1311
 ERSI, 1530
 Fiberlock Technologies Inc., 917
 HUD Office of Healthy Homes and Lead Hazard Control, 715
 Knorr Associates Inc., 1030
 Nilfisk - CFM, 522
 RMD Instruments, 1437
 Sensidyne LP, 1211
 Thermo Scientific - Air Quality Instruments & Niton Analyzers, 1017
 Tiger-Vac Inc. (USA), 518

Management Consulting

ACGIH®, 1623
 AllOne Health, 412
 Bureau Veritas North America Inc., 1117
 Dade Moeller & Associates, 1526
 Earth Shift, LLC, 541
 ESIS Risk Control Services, 1503
 Golder Associates, 932
 Health Conservation Inc. (HCI), 1232
 Hellman & Associates Inc., 840
 ICU - A Total Safety Company, 525
 Johns Hopkins Bloomberg School of Public Health, 1714
 ProcessMAP Corporation, 1133

RJ Lee Group Inc., 618
 Spiramid LLC, 1027
 The Ergonomics Center, 714
 Tulane University - CAEPH, 1704

Mobile Health Testing

AllOne Health, 412
 CDC/NIOSH, 531
 Concentra Inc., 818
 Examintetics Inc., 1423
 GrayWolf Sensing Solutions, 1603
 Health Conservation Inc. (HCI), 1232
 National Hearing Conservation Association, 638

Mold Detection/Remediation

A&B Labs, 737
 ACGIH®, 1623
 Aerobiology Laboratory Associates Inc., 923
 Alliant, 1626
 Ashtead Technology Rentals, 707
 DCM Clean-Air Products Inc., 1230
 EFT Holdings Inc., 402
 ERSI, 1530
 ESIS Risk Control Services, 1503
 Fiberlock Technologies Inc., 917
 Galson Laboratories, 903
 Hellman & Associates Inc., 840
 Kanomax USA Inc., 925
 Mycometer Inc., 511
 National Jewish Health, 636
 Nilfisk - CFM, 522
 NIOSH/ERC/CE, 1718
 Prism Analytical Technologies Inc. (PATI), 603
 Risk Prevention Systems LLC, 422
 SanAir Technologies Laboratory Inc., 1234
 Sensidyne LP, 1211
 SKC, 1403
 Tetra Tech, 1617
 Walsh Environmental Scientists and Engineers LLC, 1640
 Zefon International, 909

MSDS

3E Company, 1123
 Actio Corporation, 1131
 Affyigility Solutions, 935
 CCOHS, 703
 Center for Toxicology and Environmental Health LLC, 804
 ChemWatch NA, 1032
 Euro Safety & Health, 637
 Hellman & Associates Inc., 840
 IHS, 1122
 Knorr Associates Inc., 1030
 MSDSonline, 641
 MSDSpro LLC, 1141
 Northrop Grumman Corporation, 1024



ProcessMAP Corporation, 1133
 Redshift Technologies Inc., 626
 Safetec, 939
 SiteHawk, 1023
 Spiramid LLC, 1027
 TechniData America, 931
 Tetra Tech, 1617

Occupational Epidemiology

Euro Safety & Health, 637
 Johns Hopkins Bloomberg School of
 Public Health, 1714
 Mercury Instruments USA, 1630
 National Jewish Health, 636
 Northrop Grumman Corporation, 1024
 SKC, 1403
 Spiramid LLC, 1027
 TSI, 1003
 University of California, Berkeley -
 School of Public Health, 1707
 University of Washington -
 Environmental & Occupational
 Health Sciences, 1715

Occupational Health Consulting

Alliant, 1626
 AllOne Health, 412
 American Heart Association, 615
 ART Corporate Solutions Inc., 510
 Bruel & Kjaer, 1328
 Bureau Veritas North America
 Inc., 1117
 Center for Toxicology and
 Environmental Health LLC, 804
 Concentra Inc., 818
 Critical Environment Technologies
 Canada Inc., 613
 Dade Moeller & Associates, 1526
 Defense Health Services System, 738
 E.A.R., Inc., 1237
 Emilcott, 839
 ESIS Risk Control Services, 1503
 Golder Associates, 932
 Hellman & Associates Inc., 840
 ICU - A Total Safety Company, 525
 International Safety Systems Inc., 713
 Johns Hopkins Bloomberg School of
 Public Health, 1714
 Knorr Associates Inc., 1030
 Mercury Instruments USA, 1630
 National Jewish Health, 636
 National Safety Council (NSC), 1607
 Nextteq, LLC, 1012
 NIOSH/ERC/CE, 1718
 Northrop Grumman Corporation, 1024
 OraSure Technologies, 834
 ProcessMAP Corporation, 1133
 RJ Lee Group Inc., 618
 TechniData America, 931
 Tetra Tech, 1617
 Tulane University - CAEPH, 1704

University of California, Berkeley -
 School of Public Health, 1707
 University of Washington -
 Environmental & Occupational
 Health Sciences, 1715
 WorkCare Inc., 1241

Product Health

Actio Corporation, 1131
 Assay Technology Inc./AT Labs/MNR
 Services, 803
 Brush Wellman Inc., 624
 Bullard, 1011
 CCOHS, 703
 Compliance Solutions, 1139
 Critical Environment Technologies
 Canada Inc., 613
 E.A.R., Inc., 1237
 Earth Shift LLC, 541
 ENMET Corporation, 1523
 Fiberlock Technologies Inc., 917
 Gastec Corporation, 806
 GfG Instrumentation Inc., 1402
 Hellman & Associates Inc., 840
 Kanomax USA Inc., 925
 Masimo, 403
 Medgate Inc., 1022
 MSDSpro LLC, 1141
 National Safety Council (NSC), 1607
 Nextteq LLC, 1012
 OHD, 1231
 ProcessMAP Corporation, 1133
 PureSafety, 1038
 Scientific Analytical Institute
 Inc., 1341
 Sensidyne LP, 1211
 Spiramid LLC, 1027
 TechniData America, 931

Protective Clothing

Argus-Hazco, 1602
 Bullard, 1011
 CDC/NIOSH, 531
 Draeger Safety Inc., 1109
 DuPont, 1311
*Industrial Hygiene News/Rimbach
 Publishing*, 908
 Insights & Research, 1337
 Lab Safety Supply, 1336
 Safeware, Inc., 1635
 Supelco/Sigma-Aldrich, 524
 Total Safety U.S. Inc., 523

Protective Eyewear

3M, 1203
 CPLab Safety, 1324
 Edge Eyewear, 1531
*Industrial Hygiene News/Rimbach
 Publishing*, 908
 Insights & Research, 1337
 Interactive Safety Products Inc., 1525

Lab Safety Supply, 1336
 MSA, 1103
 Safeware, Inc., 1635
 Supelco/Sigma-Aldrich, 524
 Total Safety U.S. Inc., 523
 TRS-Environmental, 1615

Protective Gloves

CPLab Safety, 1324
 DuPont, 1311
 Insights & Research, 1337
 Lab Safety Supply, 1336
 Safeware, Inc., 1635
 Showa Best Glove Inc., 1223
 Supelco/Sigma-Aldrich, 524
 Total Safety U.S. Inc., 523
 TRS-Environmental, 1615

Protective Wash/Skin Protection

Argus-Hazco, 1602
 CPLab Safety, 1324
 DuPont, 1311
*Industrial Hygiene News/Rimbach
 Publishing*, 908
 Supelco/Sigma-Aldrich, 524

Publications/Trade Magazines

ACGIH®, 1623
 American Biological Safety
 Associations, 716
 CDC/NIOSH, 531
 Clement Communications, 407
*EHS Today (formerly Occupational
 Hazards)*, 1622
 Environmental Technology
 (Publications), 1433
*Industrial Hygiene News/Rimbach
 Publishing*, 908
Industrial Safety & Hygiene News, 812
 National Safety Council (NSC), 1607
 NESHTA/CET Board of
 Certification, 1713
*Occupational Health & Safety
 Magazine*, 504
 Taylor & Francis, 1224
 Wiley-VCH, 1436

Radiation (Ionizing)

Argus-Hazco, 1602
 Environics USA, 1606
 Galson Laboratories, 903
 Health Physics Society, 841
 Liberty Mutual Insurance Co., 622
 NARDA Safety Test Solutions, 610
 RAE Systems, 1417
 S.E. International Inc., 718

Rental

Aerobiology Laboratory Associates
 Inc., 923
 Argus-Hazco, 1602

Ashtead Technology Rentals, 707
 Bruel & Kjaer, 1328
 Columbia Analytical Services Inc., 922
 Galson Laboratories, 903
 Geotech Environmental Equipment Inc., 816
 GrayWolf Sensing Solutions, 1603
 Industrial Scientific Corporation, 1213
 Larson Davis, 505
 Mercury Instruments USA, 1630
 National Jewish Health, 636
 OHD, 1231
 Ohio Lumex Co., 639
 Photovac Inc., 902
 Raeco Rents, 1340
 Safeware, Inc., 1635
 SKC, 1403
 Thermo Scientific - Air Quality Instruments & Niton Analyzers, 1017
 TRS-Environmental, 1615

Respiratory Protection

3M, 1203
 Air Systems International, 817
 AllOne Health, 412
 Argus-Hazco, 1602
 Bullard, 1011
 Concentra Inc., 818
 Draeger Safety Inc., 1109
 ENMET Corporation, 1523
 ESIS Risk Control Services, 1503
 Examinetics, Inc., 1423
 GfG Instrumentation Inc., 1402
 Health Conservation Inc. (HCI), 1232
 Hellman & Associates Inc., 840
Industrial Hygiene News/Rimbach Publishing, 908
 Insights & Research, 1337
 Interactive Safety Products Inc., 1525
 International Safety Systems Inc., 713
 Lab Safety Supply, 1336
 Liberty Mutual Insurance Co., 622
 Masimo, 403
 MSA, 1103
 National Jewish Health, 636
 Nextteq, LLC, 1012
 North by Honeywell, 1323
 Northrop Grumman Corporation, 1024
 OHD, 1231
 Raeco Rents, 1340
 Safeware, Inc., 1635
 Scott Health & Safety, 1517
 Supelco/Sigma-Aldrich, 524
 TSI, 1003

Risk and Exposure Assessment

Actio Corporation, 1131
 Affyigility Solutions, 935
 Center for Toxicology and Environmental Health LLC, 804

ChemWatch NA, 1032
 Concentra Inc., 818
 DuPont, 1311
 Earth Shift LLC, 541
 ESIS Risk Control Services, 1503
 Euro Safety & Health, 637
 Hays Affinity Solutions, 526
 Hellman & Associates Inc., 840
 ICU - A Total Safety Company, 525
 International Safety Systems Inc., 713
 Johns Hopkins Bloomberg School of Public Health, 1714
 Kinetics Noise Control, 705
 Larson Davis, 505
 Liberty Mutual Insurance Co., 622
 Masimo, 403
 Medgate Inc., 1022
 National Jewish Health, 636
 Northrop Grumman Corporation, 1024
 Open Range Software, 1135
 OraSure Technologies, 834
 ProcessMAP Corporation, 1133
 Redshift Technologies Inc., 626
 Spiramid LLC, 1027
 TechniData America, 931
 Tetra Tech, 1617
 The Ergonomics Center, 714
 TSI, 1003
 University of California, Berkeley - School of Public Health, 1707
 Walsh Environmental Scientists and Engineers LLC, 1640

Safety Products

3E Company, 1123
 3M, 1203
 ACGIH®, 1623
 Actio Corporation, 1131
 Air Clean Systems, 411
 American Heart Association, 615
 Argus-Hazco, 1602
 Assay Technology Inc./AT Labs/MNR Services, 803
 BGI Instruments, 913
 Bullard, 1011
 CASELLA USA, 809
 CCOHS, 703
 Clement Communications, 407
 Contour Design Inc., 640
 CPLab Safety, 1324
 Draeger Safety Inc., 1109
 DuPont, 1311
 E.A.R., Inc., 1237
 EMSL Analytical Inc., 1317
 ENMET Corporation, 1523
 Fabenco Inc., 527
 Factory Direct Safety and Environmental Inc., 915
 Fiberlock Technologies Inc., 917
 Flow Sciences Inc., 530
 Gastec Corporation, 806

GfG Instrumentation Inc., 1402
Industrial Hygiene News/Rimbach Publishing, 908
 Industrial Scientific Corporation, 1213
 Insights & Research, 1337
 Interactive Safety Products Inc., 1525
 Kitagawa America LLC, 1619
 Lab Safety Supply, 1336
 Mercury Instruments USA, 1630
 Morphix Technologies, 1225
 MSA, 1103
 MSDSonline, 641
 NARDA Safety Test Solutions, 610
 National Safety Council (NSC), 1607
 Nextteq LLC, 1012
 Nilfisk - CFM, 522
 North by Honeywell, 1323
 NuAire Inc., 831
 OraSure Technologies, 834
 RAE Systems, 1417
 Raeco Rents, 1340
 RKI Instruments, 702
 S.E. International Inc., 718
 Safeware, Inc., 1635
 Scott Health & Safety, 1517
 Sensidyne LP, 1211
 Silvent North America, 1624
 SiteHawk, 1023
 Spiramid LLC, 1027
 Supelco/Sigma-Aldrich, 524
 Therm Omega Tech Inc., 1332
 Tiger-Vac Inc. (USA), 518
 Total Safety U.S. Inc., 523
 TRS-Environmental, 1615
 Tulane University - CAEPH, 1704
 Working Concepts Inc., 924

Sampling, Analytical, and Laboratory Equipment

Aerobiology Laboratory Associates Inc., 923
 AIHA® Proficiency Analytical Testing Programs LLC, 735
 AirLab, 940
 Arizona Instrument LLC, 619
 Assay Technology Inc./AT Labs/MNR Services, 803
 Baseline-Mocon, 517
 BGI Instruments, 913
 Bios International Corporation, 1610
 Clemex, 734
 Columbia Analytical Services Inc., 922
 Critical Environment Technologies Canada Inc., 613
 EMLab P&K, 823
 EMSL Analytical Inc., 1317
 Entech Instruments Inc., 1511
 Factory Direct Safety and Environmental Inc., 915
 Flow Sciences Inc., 530
 Galson Laboratories, 903



Gasmet Technologies Inc., 1541
 Gastec Corporation, 806
 GfG Instrumentation Inc., 1402
 GrayWolf Sensing Solutions, 1603
 HNU-PID Analyzers LLC, 536
 Indoor Biotechnologies Inc., 1425
 Industrial Scientific Corporation, 1213
 ION Science Americas LLC, 1537
 Kitagawa America LLC, 1619
 Labconco Corp., 1406
 Mercury Instruments USA, 1630
 Met One Instruments Inc., 1431
 Mettler-Toledo Inc., 706
 Meinhard Glass Products, 741
 Morphix Technologies, 1225
 MSA, 1103
 Mycometer Inc., 511
 Nextteq LLC, 1012
 NuAire Inc., 831
 Ohio Lumex Co., 639
 OraSure Technologies, 834
 Particle Measuring Systems, 607
 Photovac Inc., 902
 Prism Analytical Technologies Inc. (PATI), 603
 S.E. International Inc., 718
 SanAir Technologies Laboratory Inc., 1234
 Sensidyne LP, 1211
 SKC, 1403
 Supelco/Sigma-Aldrich, 524
 Thermo Scientific - Air Quality Instruments & Niton Analyzers, 1017
 Tisch Scientific, 502
 Travelers Laboratory, 1222
 TRS-Environmental, 1615
 TSI, 1003
 Zefon International, 909

Special Products

Aerobiology Laboratory Associates Inc., 923, product validation
 Affygitly Solutions, 935, potent compound safety
 Air Force Recruiting Services, 1439, career opportunities
 Air Systems International, 817, emergency lighting
 ALS Laboratory Group (formerly DataChem Laboratories Inc.), 1229, dietary supplement analysis, illicit drug analysis
 American Biological Safety Associations, 716, biosafety resources
 ART Corporate Solutions Inc., 510, first aid, wellness
 Ashtead Technology Rentals, 707
 Assay Technology Inc./AT Labs/MNR Services, 803, personal monitoring badges

BGI Instruments, 913, calibration
 Board of Certified Safety Professionals (BCSP), 802, professional certification of safety
 Bruel & Kjaer, 1328
 Clemex, 734
 Complete Equity Markets Inc., 1632, insurance
 DCM Clean-Air Products Inc., 1230, dust collection and control
 DEB, 410, skin care
 EFT Holdings Inc., 402, methamphetamine decontamination
 Emilcott, 839, real-time environmental monitoring
 EMSL Analytical Inc., 1317
 Environmental Technology (Publications), 1433, specialist publication
 ERSI, 1530, demolition
 Euro Safety & Health, 637, REACH
 Fiberlock Technologies Inc., 917, mobile containment
 Flow Sciences Inc., 530
 Freeport-McMoRan Copper and Gold Inc., 835, mining
 GRAS Sound & Vibration, 808, precision measurement microphones
 Hays Affinity Solutions, 526, professional liability insurance
 Hellman & Associates Inc., 840, expert witness, EHS data management tools
 IHS, 1122
 Kinetics Noise Control, 705, noise control, noise abatement
 Larson Davis, 505, human vibration measurement equipment
 Masimo, 403, patient monitoring
 Medtox Laboratories, 616, drug testing
 Meinhard Glass Products, 741, reference materials
 MSDSonline, 641, on-demand training, on-demand injury/illness management, on-demand msds management
 NARDA Safety Test Solutions, 610
 National Jewish Health, 636, respiratory fit-testing, medical surveillance, beryllium health and safety
 Nextteq, 1012
 Nilfisk - CFM, 522, industrial vacuums
 Prism Analytical Technologies Inc. (PATI), 603, laboratory services
 ProcessMAP Corporation, 1133, information management software
 Pure Safety, 1038, safety & health software

Risk Prevention Systems LLC, 422, green chemistry and supporting systems
 RKI Instruments, 702
 RMD Instruments, 1437, XRF instrumentation
 S.E. International Inc., 718
 SKC, 1403
 Savannah River Nuclear Solutions LLC, Accredited Laboratory, 717, accredited laboratory analysis for radiological samples
 Scientific Analytical Institute Inc., 1341, material id and evaluation
 The University of Findlay, 1711, college information
 Therm Omega Tech Inc., 1332, cooling URST
 Tiger-Vac Inc. (USA), 518, vacuum cleaners
 Total Safety U.S. Inc., 523
 TRP - Technical Response Planning Corp., 827, software

Testing/Certification of Safety Products

AIHA® Proficiency Analytical Testing Programs, LLC, 735
 ALS Laboratory Group (formerly DataChem Laboratories Inc.), 1229
 Columbia Analytical Services Inc., 922
 Draeger Safety Inc., 1109
 Innov-X Systems, 708
 SanAir Technologies Laboratory Inc., 1234

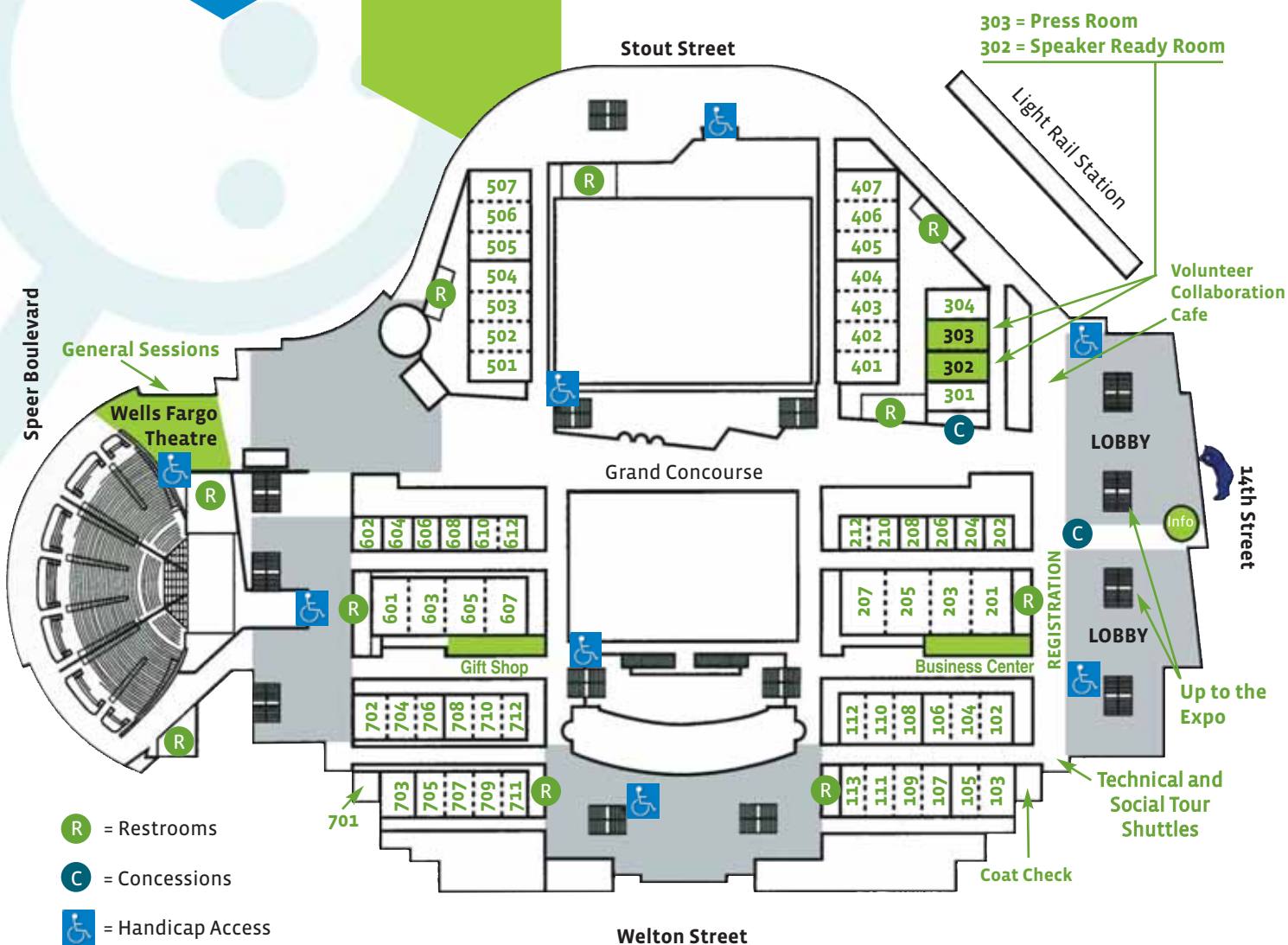
Toxicology

ACGIH®, 1623
 Affygitly Solutions, 935
 BGI Instruments, 913
 Casella USA, 809
 Center for Toxicology and Environmental Health LLC, 804
 ChemWatch NA, 1032
 Clemex, 734
 Draeger Safety Inc., 1109
 Johns Hopkins Bloomberg School of Public Health, 1714
 National Library of Medicine, 712
 OraSure Technologies, 834
 Tulane University - CAEPH, 1704
 University of California, Berkeley - School of Public Health, 1707
 University of Washington - Environmental & Occupational Health Sciences, 1715

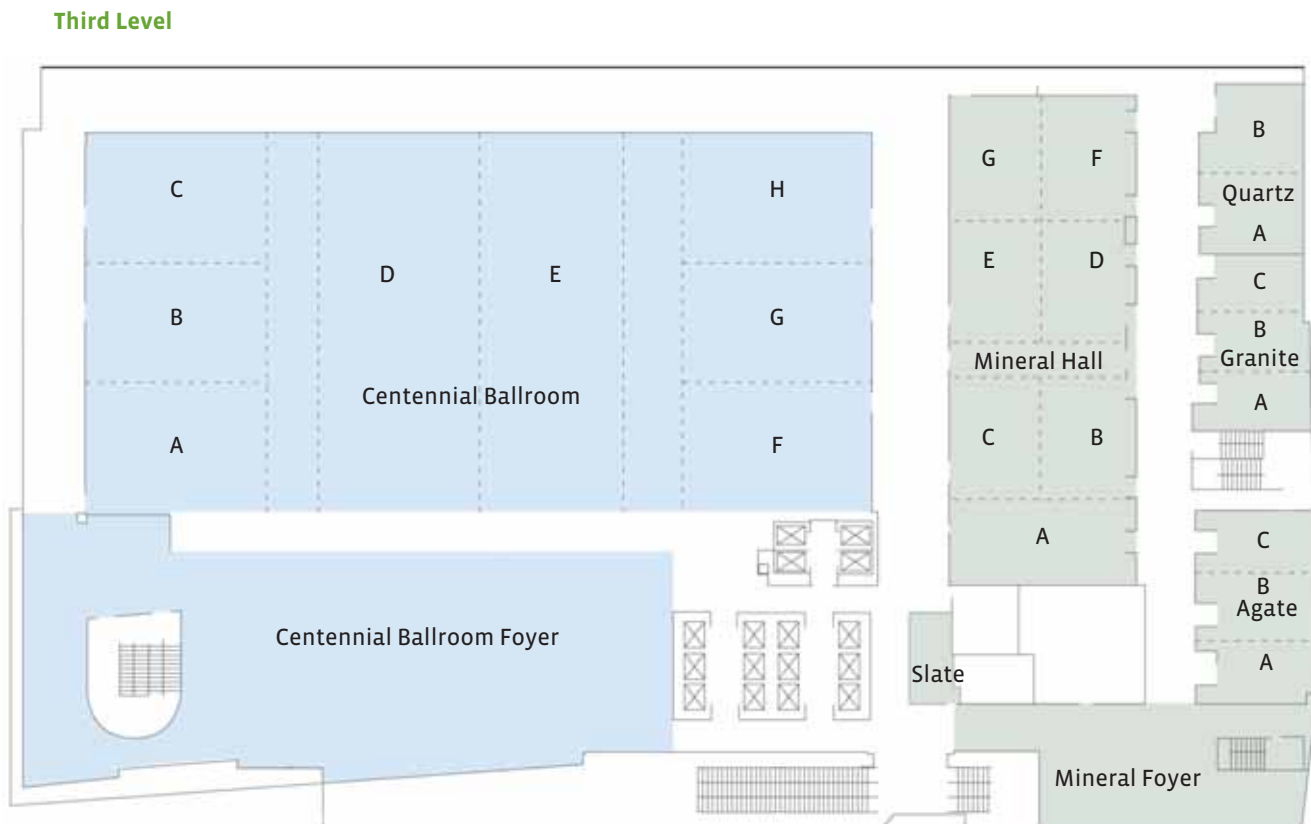
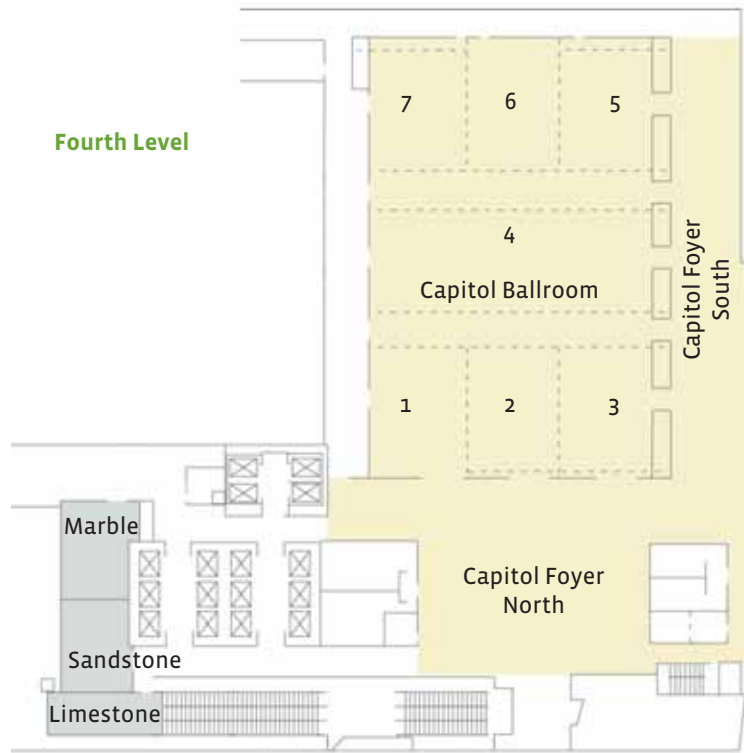
Ventilation

Air Systems International, 817

Maps & Indices



» Floor Plans: Hyatt Regency Denver Hotel



INFORMATION + ACTIVITIES

EDUCATION

EXPO 2010

FLOOR PLANS + INDICIES

» Indices: Technical Program by Topic

Aerosol Technology

PO 121 Aerosols.....Tuesday | 2:00 p.m.–6:00 p.m.....65

Biosafety

RT 224 Biological Safety Issues in Research/Pharmacological Settings.....Wednesday | 10:00 a.m.–Noon.....74

Communication and Training Methods

CR 311 Anything but Lecture! How to Use Other Safety Training Approaches and Methods.....Tuesday | 10:30 a.m.–11:30 a.m.55

PO 124 Communication and Training.....Wednesday | 10:00 a.m.–Noon74

RT 204 Training/Certification Models for Global Occupational Hygiene Professionals.....Monday | 10:30 a.m.–12:30 p.m.41

RT 206 Surmounting the Diversities of People and Formats of Effective Training.....Monday | 10:30 a.m.–12:30 p.m.42

Computer Applications

CR 304 From Compliance to Sustainability: Leveraging Information Systems to Address Today’s Environmental Responsibilities.....Monday | 2:00 p.m.–3:00 p.m.44

PO 126 Computer Applications.....Wednesday | 10:00 a.m.– Noon75

RT 226 Enhancing the Practice of Industrial Hygiene through Data Management Systems and Tools.....Wednesday | 10:00 a.m.–12:30 p.m.76

Confined Spaces

RT 219 Notable Confined Spaces.....Tuesday | 2:00 p.m.–5:00 p.m.64

Construction

CR 323 Urban Construction: Hazards and the Protection of the Public.....Thursday | 8:00 a.m.–9:00 a.m.87

PO 132 General Topics in Occupational Safety and Construction.....Thursday | 8:00 a.m.–11:00 a.m.88

RT 211 Assessment and Control of Chinese Drywall Emissions.....Monday | 2:00 p.m.–5:00 p.m.48

RT 212 Green Construction Practices: Integrating Occupational Safety and Health.....Monday | 2:00 p.m.–5:30 p.m.48

RT 215 Industrial Hygiene on the Construction Site II — Resources and Methods...Tuesday | 10:30 a.m.–1:00 p.m.58

RT 222 Welding Exposure Reduction Controls.....Tuesday | 2:00 p.m.–6:00 p.m.65

RT 234 Safety Culture in Construction: What Is It? How Can It Be Measured and Improved?.....Wednesday | 1:00 p.m.–4:00 p.m.82

RT 249 The Myth of Contractual Immunity: Legal Risks on Multi-employer Job Sites.....Thursday | 1:00 p.m.–4:30 p.m.93

Consulting

NEW! AIHA® Value Strategy Session on Methodologies.....Monday | 10:30 a.m.–12:30 p.m.39

NEW! AIHA® Value Strategy Session on Case Studies.....Wednesday | 10:00 a.m.–Noon73

RT 226 Enhancing the Practice of Industrial Hygiene through Data Management Systems and Tools.....Wednesday | 10:00 a.m.–12:30 p.m.....76

Emergency Response Planning

PO 120 Emergency Preparedness/Response.....Tuesday | 2:00 p.m.–4:40 p.m.62

RT 202 Tools and Techniques for Incident Preparedness and Response.....Monday | 10:30 a.m.–12:30 p.m.41

RT 217 H1N1 and Pandemic Planning: The Role of Occupational Health Professionals.....Tuesday | 10:30 a.m.–1:00 p.m.59

RT 240 Protecting Workers from Acute and Short-term Exposures to High Airborne Concentration.....Thursday | 8:00 a.m.–10:30 a.m.....88

Emerging Issues

Emerging Issues Session 1 — NIOSH-DREAM (Direct Reading Exposure Assessment Methods).....Monday | 2:00 p.m.–4:00 p.m.44

Emerging Issues Session 2 — New AIHA® Initiatives: Guideline Foundation and Strategic Standards Strategy Development.....Wednesday | 1:00 p.m.–3:00 p.m.79

Luncheon Discussions — Implementing NORA Strategic Plans.....Tuesday | 12:30 p.m.–1:30 p.m.60

Engineering

PO 135 New Advances in Ventilation TechnologyThursday | 1:00 p.m.–3:40 p.m.....91

Environmental Issues

CR 301 EMS Development at a Large K-12 School District: Policy to Practice.....Monday | 10:30 a.m.–11:30 a.m.39

CR 304 From Compliance to Sustainability: Leveraging Information Systems to Address Today's Environmental Responsibilities.....Monday | 2:00 p.m.–3:00 p.m.44

CR 306 Auditing Environmental Claims and AssertionsMonday | 2:00 p.m.–3:00 p.m.44

CR 307 The HS&E Professional's Role in Property Due Diligence Assessments.....Monday | 2:00 p.m.–3:00 p.m.44

CR 309 Pollution Prevention (P2) in USAF Weapon Systems AcquisitionTuesday | 10:30 a.m.–11:30 a.m.55

CR 313 Mining and Smelting Implications on Environmental and Health Risk in the Andes of PeruTuesday | 3:00 p.m.–4:00 p.m.66

CR 315 Environmentally Conscious DesignTuesday | 3:00 p.m.–4:00 p.m.66

CR 322 Standardized Approach to the "Green" Building Decommissioning ProcessWednesday | 5:00 p.m.–6:00 p.m.83

PO 119 Hazards in the Community and Environment: Taking Industrial Hygiene into the HomeTuesday | 2:00 p.m.–5:00 p.m.63

RT 207 Recent Developments in Vapor IntrusionMonday | 10:30 a.m.–12:30 p.m.42

RT 221 Unusual Hazards in LaboratoriesTuesday | 2:00 p.m.–5:30 p.m.64

Ergonomics

CR 324 Maximize Your Efforts to Reduce Strain and Sprain Injuries.....Thursday | 8:00 a.m.–9:00 a.m.87

PO 109 A Potpourri of Ergonomic Case Studies and Scientific ResearchMonday | 2:00 p.m.–5:00 p.m.47

RT 201 Research-based Design and Placement of Keyboards and MiceMonday | 10:30 a.m.–12:30 p.m.40

RT 216 Ergonomics Management Systems Roundtable: Applications and Lessons ..Tuesday | 10:30 a.m.–1:00 p.m.59

RT 218 Health-Care Ergonomics: Safe Patient and Resident Handling.....Tuesday | 2:00 p.m.–5:00 p.m.63

Exposure Assessment Strategies

PO 107 LeadMonday | 2:00 p.m.–4:20 p.m.45

PO 108 Hazardous Occupational Exposures — Case Studies.....Monday | 2:00 p.m.–4:20 p.m.45

PO 112 Emerging Exposure Modeling Strategies.....Tuesday | 10:30 a.m.–12:30 p.m.56

PO 125 Methodologies for Exposure Assessment.....Wednesday | 10:00 a.m.–Noon75

PO 130 Beryllium Health and Safety Research and Case StudiesWednesday | 5:00 p.m.–7:40 p.m.84

RT 237 Health Hazard and Control Banding Strategies and Applications in the Absence of OELs.....Wednesday | 5:00 p.m.–7:30 p.m.83

RT 240 Protecting Workers from Acute and Short-term Exposures to High Airborne ConcentrationThursday | 8:00 a.m.–10:30 a.m.88

NEW! SS002 Science Symposium: Cumulative Exposure Assessment: Integrating Occupational and Non-Occupational Exposures to Multiple Agents.....Tuesday | 2:00 p.m.–5:00 p.m.63

NEW! SS003 Science Symposium: Current Research Efforts Addressing Skin Exposure HazardsWednesday | 1:00 p.m.–4:00 p.m.80

General Practice

PO 107 LeadMonday | 2:00 p.m.–4:20 p.m.45

PO 117 Industrial Hygiene General Practice I.....Tuesday | 2:00 p.m.–4:40 p.m.61

PO 133 Industrial Hygiene General Practice IIThursday | 8:00 a.m.–11:20 a.m.89

RT 203 American Board of Industrial Hygiene ForumMonday | 10:30 a.m.–12:30 p.m.41

RT 232 New Frontiers in the Practice of Industrial Hygiene in the Oil and Gas Industry.....Wednesday | 1:00 p.m.–3:30 p.m.80

RT 236 Glen Williamson Forum: OSHA's Most Interesting Health Cases, 2007–2009 ..Wednesday | 1:00 p.m.–4:30 p.m.82

Green Track (New)

RT 212 Green Construction Practices: Integrating Occupational Safety and HealthMonday | 2:00 p.m.–5:30 p.m.48

RT 223 Why Green Chemistry MattersTuesday | 2:00 p.m.–6:00 p.m.65

RT 228 Unintended Consequences: Occupant Exposures in Green Buildings.....Wednesday | 10:00 a.m.–12:30 p.m.76

» Indices: Technical Program by Topic

H1N1 Track (New)

RT 205	Using H1N1 Influenza to Understand Infectious Disease Epidemiology and Control	Monday 10:30 a.m.–12:30 p.m.	41
RT 217	H1N1 and Pandemic Planning: The Role of Occupational Health Professionals	Tuesday 10:30 a.m.–1:00 p.m.	59
RT 231	Respirator Use During 2009 H1N1 Influenza Pandemic	Wednesday 1:00 p.m.–3:00 p.m.	79

Health Care

PO 105	Health-Care Industries, Part I: Engineering Controls, Disinfection Methods and Other Current Issues Associated with Infection Control	Monday 2:00 p.m.–4:00 p.m.	45
PO 116	Health-Care Industries, Part II: Antineoplastic Drugs, Chemical Exposures and Work Shift/Stress Issues	Tuesday 10:30 a.m.–12:30 p.m.	58
RT 217	H1N1 and Pandemic Planning: The Role of Occupational Health Professionals	Tuesday 10:30 a.m.–1:00 p.m.	59
RT 218	Health-Care Ergonomics: Safe Patient and Resident Handling	Tuesday 2:00 p.m.–5:00 p.m.	63
RT 241	Anatomy of a Hospital Infection Control Project	Thursday 8:00 a.m.–10:30 a.m.	88
RT 248	Respirator Program Needs and Experience in the Health-Care Setting	Thursday 1:00 p.m.–4:30 p.m.	93

Indoor Environmental Quality

PO 104	Current Research Topics in Microbial Issues	Monday 10:30 a.m.–12:30 p.m.	42
PO 111	After the Hurricane: Chinese Drywall and Indoor Environmental Quality Issues	Tuesday 10:30 a.m.–12:30 p.m.	56
PO 128	Case Studies in Indoor Environmental Quality	Wednesday 1:00 p.m.–4:00 p.m.	81
PO 131	Indoor Fungal and Bacterial Methods and Interpretation	Thursday 8:00 a.m.–10:00 a.m.	87
RT 211	Assessment and Control of Chinese Drywall Emissions	Monday 2:00 p.m.–5:00 p.m.	48
RT 228	Unintended Consequences: Occupant Exposures in Green Buildings	Wednesday 10:00 a.m.–12:30 p.m.	76
RT 229	Environmental Lead Federal Programs Update	Wednesday 1:00 p.m.–3:00 p.m.	79
RT 233	ASBESTOS UPDATE: Still a Hazard After All These Years	Wednesday 1:00 p.m.–3:30 p.m.	80
RT 241	Anatomy of a Hospital Infection Control Project	Thursday 8:00 a.m.–10:30 a.m.	88

Interactive Learning Track

Unsolved IH Mysteries Workshops	Monday–Wednesday Noon–1:30 p.m.	43
Luncheon Discussions — Students and Early Career Professionals	Monday 12:30 p.m.–1:30 p.m.	43
Luncheon Discussions — Implementing NORA Strategic Plans	Tuesday 12:30 p.m.–1:30 p.m.	60
Luncheon Discussions — Volunteer Group “Tech Talks”	Wednesday Noon–1:00 p.m.	77
NEW! Soap Box (Open Mic) Talks	Monday 2:30 p.m.–4:00 p.m.	49

International Issues

CR 308	The Panama Canal Expansion — Safety and Health Issues and Challenges	Tuesday 10:30 a.m.–11:30 a.m.	55
CR 313	Mining and Smelting Implications on Environmental and Health Risk in the Andes of Peru	Tuesday 3:00 p.m.–4:00 p.m.	66
PO 102	International Globalization	Monday 10:30 a.m.–12:30 p.m.	40
RT 204	Training/Certification Models for Global Occupational Hygiene Professionals	Monday 10:30 a.m.–12:30 p.m.	41
RT 208	GHS Implementation: Where Are We Today?	Monday 10:30 a.m.–1:00 p.m.	43
RT 232	New Frontiers in the Practice of Industrial Hygiene in the Oil and Gas Industry	Wednesday 1:00 p.m.–3:30 p.m.	80
RT 242	REACH Risk Assessment, Control and Communication Requirements within the Supply Chain	Thursday 8:00 a.m.–11:00 a.m.	89
RT 247	Nanotechnology: A Forum on Globalization	Thursday 1:00 p.m.–4:30 p.m.	92

Ionizing Radiation

PO 118	Ionizing and Nonionizing Radiation and Noise Case Studies	Tuesday 2:00 p.m.–4:40 p.m.	62
RT 227	Radiation Safety Program Issues and Answers	Wednesday 10:00 a.m.–12:30 p.m.	76

Lab Health and Safety

PO 101	Laboratory Health and Safety.....	Monday 10:30 a.m.–12:30 p.m.	39
RT 221	Unusual Hazards in Laboratories.....	Tuesday 2:00 p.m.–5:30 p.m.	64
RT 243	Laboratory Safety and Health: Laboratory Design Considerations.....	Thursday 8:00 a.m.–11:30 a.m.	89

Law, Regulations, Standards and Guidelines

Emerging Issues Session 2 — New AIHA® Initiatives: Guideline Foundation and Strategic Standards Strategy Development.....			
		Wednesday 1:00 p.m.–3:00 p.m.	79
CR 315	Environmentally Conscious Design.....	Tuesday 3:00 p.m.–4:00 p.m.	66
RT 249	The Myth of Contractual Immunity: Legal Risks on Multi-employer Job Sites.....	Thursday 1:00 p.m.–4:30 p.m.	93

Lectures

Jeffrey S. Lee Lecture.....	Monday 12:30 p.m.–1:30 p.m.	43	
Yant Award Lecture.....	Tuesday 12:30 p.m.–1:30 p.m.	61	
Cummings Award Lecture.....	Wednesday Noon–1:00 p.m.	78	
Stokinger Award Lecture.....	Thursday Noon–1:00 p.m.	90	
Tenth Annual Upton Sinclair Memorial Lecture for Outstanding EHS Investigative Reporting.....			
	Tuesday 10:30 a.m.–11:30 a.m.	55	

Management

NEW!	AIHA® Value Strategy Session on Methodologies.....	Monday 10:30 a.m.–12:30 p.m.	39
NEW!	AIHA® Value Strategy Session on Case Studies.....	Wednesday 10:00 a.m.–Noon	73
CR 302	Comparison of EHS Auditing Standards.....	Monday 10:30 a.m.–11:30 a.m.	39
CR 303	Manager of Safety Services.....	Monday 10:30 a.m.–11:30 a.m.	39
CR 305	Using Effective Safety Management Systems to Prevent Serious Injuries.....	Monday 2:00 p.m.–3:00 p.m.	44
CR 306	Auditing Environmental Claims and Assertions.....	Monday 2:00 p.m.–3:00 p.m.	44
CR 319	Safety Culture and Motivation.....	Wednesday 10:00 a.m.–11:00 a.m.	73
PO 134	Risk Assessment (Management).....	Thursday 1:00 p.m.–3:00 p.m.	91
RT 216	Ergonomics Management Systems Roundtable: Applications and Lessons.....	Tuesday 10:30 a.m.–1:00 p.m.	59

Mold

PO 104	Current Research Topics in Microbial Issues.....	Monday 10:30 a.m.–12:30 p.m.	42
PO 131	Indoor Fungal and Bacterial Methods and Interpretation.....	Thursday 8:00 a.m.–10:00 a.m.	87

Nanotechnology

PO 122	Nanotechnology.....	Wednesday 10:00 a.m.–Noon	73
RT 213	Ask the Expert: An Update of the NIOSH Nanotechnology Program.....	Tuesday 10:30 a.m.–12:30 p.m.	57
RT 247	Nanotechnology: A Forum on Globalization.....	Thursday 1:00 p.m.–4:30 p.m.	92

Noise

PO 103	Noise: Measure the Hazard, Then Implement and Evaluate Controls.....	Monday 10:30 a.m.–12:30 p.m.	40
PO 115	Noise Exposure and Scientific Assessment Techniques.....	Tuesday 10:30 a.m.–12:30 p.m.	57
PO 118	Ionizing and Nonionizing Radiation and Noise Case Studies.....	Tuesday 2:00 p.m.–4:40 p.m.	62
RT 246	Implementing a “Buy Quiet” Policy in Your Workplace.....	Thursday 1:00 p.m.–4:00 p.m.	92
NEW! SS001 Science Symposium: Advances in Science for Understanding, Managing and Controlling Noise Exposure.....			
		Monday 2:00 p.m.–5:00 p.m.	47

Nonionizing Radiation

PO 118	Ionizing and Nonionizing Radiation and Noise Case Studies.....	Tuesday 2:00 p.m.–4:40 p.m.	62
RT 245	Cell Phone Pants and Other Hot Topics in Nonionizing Radiation.....	Thursday 1:00 p.m.–3:00 p.m.	91

Occupational Epidemiology

PO 123	Current Topics in Occupational Health.....	Wednesday 10:00 a.m.–Noon	74
RT 205	Using H1N1 Influenza to Understand Infectious Disease Epidemiology and Control.....	Monday 10:30 a.m.–12:30 p.m.	41

» Indices: Technical Program by Topic

Occupational Medicine

PO 123	Current Topics in Occupational Health	Wednesday 10:00 a.m.–Noon	74
RT 218	Health-Care Ergonomics: Safe Patient and Resident Handling	Tuesday 2:00 p.m.–5:00 p.m.	63
RT 235	Worker Fatigue Roundtable	Wednesday 1:00 p.m.–4:30 p.m.	82

Protective Clothing and Equipment

PO 129	Personal Protective Clothing and Equipment	Wednesday 5:00 p.m.–7:00 p.m.	83
--------	--	---------------------------------	----

Real Time Detection Systems

Emerging Issues Session 1 — NIOSH-DREAM (Direct Reading Exposure Assessment Methods)			
		Monday 2:00 p.m.–4:00 p.m.	44
PO 113	Real-Time Detection	Tuesday 10:30 a.m.–12:30 p.m.	56
RT 225	Developments in Real-Time Detection Systems	Wednesday 10:00 a.m.–12:30 p.m.	75

Respiratory Protection

PO 110	Respiratory Protection	Monday 2:00 p.m.–6:00 p.m.	49
RT 231	Respirator Use During 2009 H1N1 Influenza Pandemic	Wednesday 1:00 p.m.–3:00 p.m.	79
RT 248	Respirator Program Needs and Experience in the Health-Care Setting	Thursday 1:00 p.m.–4:30 p.m.	93

Risk Assessment/Risk Management

PO 106	Risk Assessment (Management) Case Studies	Monday 2:00 p.m.–4:40 p.m.	46
PO 134	Risk Assessment (Management)	Thursday 1:00 p.m.–3:00 p.m.	91
RT 237	Health Hazard and Control Banding Strategies and Applications in the Absence of OELs	Wednesday 5:00 p.m.–7:30 p.m.	83

Safety

CR 302	Comparison of EHS Auditing Standards	Monday 10:30 a.m.–11:30 a.m.	39
CR 303	Manager of Safety Services	Monday 10:30 a.m.–11:30 a.m.	39
CR 305	Using Effective Safety Management Systems to Prevent Serious Injuries	Monday 2:00 p.m.–3:00 p.m.	44
CR 308	The Panama Canal Expansion — Safety and Health Issues and Challenges	Tuesday 10:30 a.m.–11:30 a.m.	55
CR 310	Combustible Dust: Quick and Dirty	Tuesday 10:30 a.m.–11:30 a.m.	55
CR 312	Zombie Walkers: Safety Initiative to Awaken Your Employees	Tuesday 3:00 p.m.–4:00 p.m.	66
CR 314	Soapbox Safety	Tuesday 3:00 p.m.–4:00 p.m.	66
CR 316	Transporting Dangerous Goods: Compliance Management	Wednesday 10:00 a.m.–11:00 a.m.	73
CR 317	Implementing Electrical Safety	Wednesday 10:00 a.m.–11:00 a.m.	73
CR 318	Minimizing the Risk of Worker Falls in Flatbed Trailer Applications	Wednesday 10:00 a.m.–11:00 a.m.	73
CR 319	Safety Culture and Motivation	Wednesday 10:00 a.m.–11:00 a.m.	73
CR 320	Preventing Slips, Trips and Falls	Wednesday 1:00 p.m.–2:00 p.m.	78
CR 321	Conducting Effective Safety Inspections	Wednesday 3:00 p.m.–4:00 p.m.	83
CR 323	Urban Construction: Hazards and the Protection of the Public	Thursday 8:00 a.m.–9:00 a.m.	87
CR 324	Maximize Your Efforts to Reduce Strain and Sprain Injuries	Thursday 8:00 a.m.–9:00 a.m.	87
CR 325	Electrical Safety	Thursday 1:00 p.m.–2:00 p.m.	90
CR 326	Safety beyond the Numbers	Thursday 1:00 p.m.–2:00 p.m.	91
PO 132	General Topics in Occupational Safety and Construction	Thursday 8:00 a.m.–11:00 a.m.	88
RT 234	Safety Culture in Construction: What Is It? How Can It Be Measured and Improved?	Wednesday 1:00 p.m.–4:00 p.m.	82
RT 239	A Comprehensive Risk Assessment Strategy for Addressing Machine Hazards—Don't Forget	Thursday 8:00 a.m.–10:00 a.m.	87

Sampling and Lab Analysis

PO 127	Development and Evaluation within the Realm of Industrial Hygiene Sampling and Analysis	Wednesday 1:00 p.m.–4:00 p.m.	81
RT 214	Beryllium Oxide and the Beryllium Proficiency Analytical Testing Program	Tuesday 10:30 a.m.–12:30 p.m.	58
RT 229	Environmental Lead Federal Programs Update	Wednesday 1:00 p.m.–3:00 p.m.	79
RT 238	IH Sampling Media: Caveat Emptor	Wednesday 5:00 p.m.–7:30 p.m.	84



Science Symposia (New)

NEW! SS001 Science Symposium: Advances in Science for Understanding, Managing and Controlling Noise ExposureMonday | 2:00 p.m.–5:00 p.m.47

NEW! SS002 Science Symposium: Cumulative Exposure Assessment: Integrating Occupational and Non-Occupational Exposures to Multiple AgentsTuesday | 2:00 p.m.–5:00 p.m.63

NEW! SS003 Science Symposium: Current Research Efforts Addressing Skin Exposure HazardsWednesday | 1:00 p.m.–4:00 p.m.80

Social Concerns

PO 114 Stewardship/Sustainability/GreenTuesday | 10:30 a.m.–12:30 p.m.57

PO 119 Hazards in the Community and Environment: Taking Industrial Hygiene into the HomeTuesday | 2:00 p.m.–5:00 p.m.63

RT 210 Environmental Justice and Occupational Health Disparities: Any Leading Pathways?.....Monday | 2:00 p.m.–4:30 p.m.46

RT 233 ASBESTOS UPDATE: Still a Hazard after All These YearsWednesday | 1:00 p.m.–3:30 p.m.80

RT 235 Worker Fatigue RoundtableWednesday | 1:00 p.m.–4:30 p.m.82

Stewardship and Sustainability

Cummings Award LectureWednesday | 12:00 p.m.–1:00 p.m.78

PO 114 Stewardship/Sustainability/GreenTuesday | 10:30 a.m.–12:30 p.m.57

RT 208 GHS Implementation: Where Are We Today?Monday | 10:30 a.m.–1:00 p.m.43

RT 220 Integrating Sustainability into Your Organization: Business Case StudiesTuesday | 2:00 p.m.–5:30 p.m.64

RT 223 Why Green Chemistry MattersTuesday | 2:00 p.m.–6:00 p.m.65

RT 242 REACH Risk Assessment, Control and Communication Requirements within the Supply ChainThursday | 8:00 a.m.–11:00 a.m.89

Student and Early Career Professionals

Luncheon Discussions — Students and Early Career ProfessionalsMonday | 12:30 p.m.–1:30 p.m.43

RT 209 I Graduated... Now What?Monday | 2:00 p.m.–4:30 p.m.46

RT 230 Perspectives on Preparation for the CIH ExamWednesday | 1:00 p.m.–3:00 p.m.79

Toxicology

PO 123 Current Topics in Occupational HealthWednesday | 10:00 a.m.–Noon74

RT 244 Benzene Exposures in the WorkplaceThursday | 8:00 a.m.–Noon90

Advertiser’s Index

3Mpage 2

ACGIH®page 32

AIHA®page 140

ALS Laboratory Grouppage 85

American Heart Associationpage 71

Ashtead Technologypage 7

Bullardpolybag insert

Bureau Veritaspage 19

Crowcon Detection Instruments.....polybag insert

Gasmet Technologies Inc.....page 29

Industrial Scientific.....page 1

Johns Hopkins Bloomberg School of Public Healthinside back cover

Larson Davis — A Division of PCB Piezotronics Inc.page 115

NEXTTEQ LLC.....front cover

NIOSHpage 97

NuAire, Inc.inside front cover

Occupational Health Dynamics.....page 6

PCIHpage 101

RAE Systems Inc.....page 3

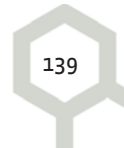
RJ Lee Group, Inc.page 67

Savannah River Nuclear Solutions, LLC.....page 120

Silvent North America.....polybag insert

SKC Inc.....back cover

TSI Inc.page 33

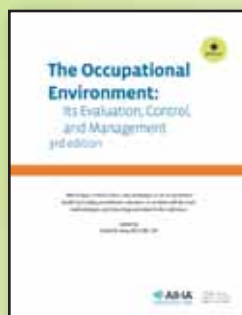


It's all happening at . . .

Booth #623, AIHA® InfoCentral!

Free Shipping and Easy Online Ordering for AIHA® Members

Check out the Newest AIHA® Publications:



The Occupational Environment: Its Evaluation, Control, and Management, 3rd edition
(Pre-order, Special Introductory Price)



Clandestine Indoor Marijuana Grow Operations — Recognition, Assessment, and Remediation Guidance



2010 ERPG/WEEL Handbook
2010 ERPG Update Set
2010 WEEL Update Set



ANSI/AIHA Z88.7-2010 Color Coding of Air-Purifying Respirator Canisters, Cartridges, and Filters



Strategy Book (Spanish Translation) La Estrategia para la Evaluación de la Exposición Ocupacional

... and other new titles

Special Buy One, Get One AIHce Deals:

- Buy *Toxicology Principles for the Industrial Hygienist*; get *Occupational Exposure Reconstruction Guideline* for **50% off**.
- Buy *Chemical Protective Clothing, 2nd edition*, get *Guideline for the Decontamination of Chemical Protective Clothing and Equipment* and/or *Guideline for the Development of Personal Protective equipment Programs for Small Business Owners* for **50% off**.
- Buy *Recognition, Evaluation and Control of Indoor Mold*, get *Assessment, Remediation, and Post-Remediation Verification of Mold in Buildings* for **50% off**.
- Buy ANY two ANSI/AIHA Standards, get *ANSI/AIHA Z9.7-2007 Recirculation of Air from Industrial Process Exhaust Systems* **FREE!**
- Buy any 2 publications in the CIH Review category, get the *IH Desk Reference Card* **FREE!**
- Buy *Clandestine Marijuana Grow Operations — Recognition, Assessment, and Remediation Guidance*, get *Clandestine Methamphetamine Laboratory Assessment and Remediation Guidance* for **50% off**.

Fun for Everyone!

- Make your mark on the AIHce Bits and Pieces Wall
- Tweet for a Treat
- AIHce2010 Facebook Fans, meet at the AIHA booth during the Expo Opening Reception on Monday
- Purchase a cool AIHA “spooner” mug

AIHA Staff will be available to answer questions on all AIHA Products and Services, Membership and Education.

Meet you at the
AIHA booth!



Spark your career...

Stop by booth #1714 to learn more about our online programs!

Earn your master's degree or certificate online.

The Department of Environmental Health Sciences offers a flexible part-time/online **Master's of Health Science in Occupational and Environmental Hygiene** and a graduate **Certificate in Environmental and Occupational Health**.

Get the training the workplace demands:

- Occupational Hygiene
- Environmental Risk Assessment
- Risk Management
- Safety



JOHNS HOPKINS
BLOOMBERG
SCHOOL of PUBLIC HEALTH

For more information, visit our website:
www.jhsph.edu/dept/ehs/programs/degree/mhs/oeh/online
or call 410-502-0742





AirChek[®] XR5000

Personal Sampling Pump

with Li-Ion Battery Power for Peak Performance

- Extended flow from 5 ml to 5 L/min
- ≥ 20-hour run times with Li-Ion battery
- Extended back pressure capabilities
- UL Listed for intrinsic safety (Li-Ion)
- Timed start and run options
- 1st RoHS compliant sample pump



SKC ROCKS the Rockies
AIHce Booth 1403

www.skcinc.com