

UMSL CHEMIST



Volume 26
Fall 2008

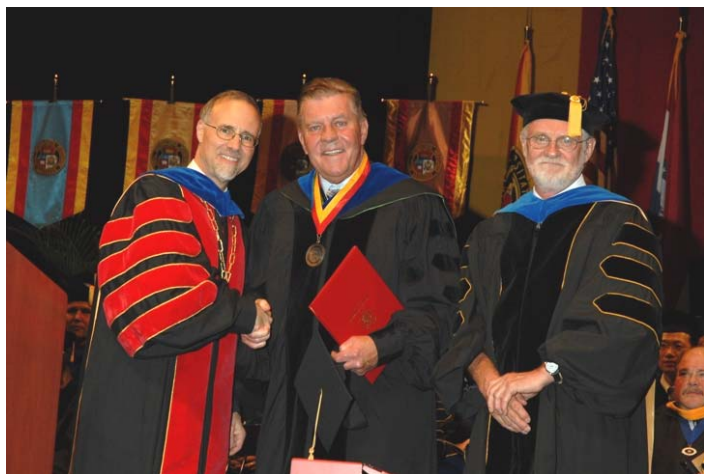
Department of Chemistry and Biochemistry
Lawrence Barton, Editor

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Chairman's Message (Christopher D. Spilling)

I am writing this year's message in a condo in Winter Park, Colorado. My family and I were lucky enough to take a skiing vacation over the Thanksgiving break, but like many of you, work is always with me in the form of a laptop and the internet. Last year I reported that we were busy searching for replacements for Lol Barton and Joyce Corey. This year I am



Charlie Armbruster receives the Chancellor's Medallion from Dr. George, as Dr. Barton, who introduced him, looks on

pleased to report that we were successful in this endeavor. In fall 2008, **Stephen Holmes** and **Alicia Beatty** joined us as associate professors of inorganic chemistry. Both Steve and Alicia hold prestigious National Science Foundation CAREER awards. Alicia, a department alumna (BS 1989, PhD Washington U 1994), joined us from Mississippi State University. Her research interests are in supramolecular chemistry. Stephen Holmes (PhD Illinois, Champaign-Urbana), who joined us from University of Kentucky, is interested in molecules with magnetic properties.



Dr. Spilling and Chancellor Tom George

We had also had large turnover in the technical staff over the last couple of years. However, we are now at full strength with the addition of **Bruce Burkeen** as the departmental machinist, **John Tubbesing** as electronics technician and **Joe Flunker** as scientific glassblower. The Department and the University, like many of you, have felt the problems with economy and we were lucky to complete all of hiring before the University wide hiring freeze was established. However, the machine shops of chemistry and physics were combined recently due to the retirement of physics machinist, Jim Sliefert. Planning for the new undergraduate science lab building and the renovation of Benton Hall is proceeding well. A new three story building will be built perpendicular to Benton Hall towards Natural Bridge Road and will house the undergraduate teaching labs for Chemistry, Physics and Biology. The chemistry labs will occupy one and one half floors with organic, inorganic and NMR on the ground floor and the storeroom, introductory chemistry/quant, physical and instrumental occupying the floor above. The biochemistry lab will be utilized by both chemistry and biology and will be located on the top floor. According to the current time line, groundbreaking should take place in mid April. The events this past summer honoring Charlie Armbruster were extremely successful. Charlie had a wonderful time and both he and I were delighted to see so many of many you at the reception. We have established a new scholarship in Charlie's name thanks to the generous donations of our alumni and friends. This scholarship will be used to encourage talented new students to study chemistry at UM-St. Louis. ■

Alumni Information

1960s

Thomas E. Dueber BS 1967 told us he had planned to go to UMSL for two years until it was made a 4 year college soon after he started here. He did not intend to major in Chemistry, but his adviser, Charlie Armbruster, said that chemistry would be useful in his biology and agriculture interests. He took more and more chemistry courses but probably the most important comment to him was when Charlie came into one of the labs while he was working on an experiment and told him that he would be very good at doing research. At the time he thought this was a fairly esoteric endeavor and he wondered how he could possibly come to that conclusion, but he has been doing research ever since. He obtained a MS degree with Professor Scott Searles in 1969 at UM-Columbia and then was drafted into the Army. The Army sent him to Dugway, Utah to work on nerve gas, but he was able to go to Salt Lake City and work at the University of Utah at the weekends. After the Army he continued working with Professor Peter Stang and was his first graduate student. Stang told the editor that Tom was the reason he got tenure at Utah! After receiving his PhD in Physical Organic Chemistry, Tom accepted a job at the DuPont Experimental Station in Wilmington DE to do new technology and product development. He is now a Research Fellow and has been working there the last 34 years on 24 different product developments in the areas of photosensitizers, photopolymers, ceramic dielectrics, adhesives for flexible circuits and new materials for embedded passives. Chemistry has had an impact in his family. His wife Cheri has a BS in Microbiology from the UM-Columbia and a MS in Molecular Biology from the University of Illinois, their son John received his PhD in Biochemistry from UCSF and is a Research Fellow at Berkeley, and one of their daughters Jen received a BS in Chemistry from the College of William and Mary. His brother **Mike Dueber** and his wife **Jeanene (Sylvester)** both received BS degrees in Chemistry from UMSL in 1972, and Mike has a PhD in Biochemistry from UCLA. Tom was at the commencement and reception where Charlie Armbruster was honored.

Jodie Duke BS 1967 went to Michigan for his PhD degree in biochemistry and then was drafted. He told us he is pleased that we are now a department of chemistry and biochemistry since the latter was his chosen field. Jodie has been at DuPont for many years and lives with his wife Elsa in Newark DE.

David Henton BS 1967 was disappointed not to be able to participate in recognizing Dr. Armbruster for all he has done for the University and especially the students. But his consulting activities precluded that. He also had to miss his 45th high school reunion in August. He retired from The Dow Chemical Company 4 years ago and started his own consulting company, working in the area of green chemistry and renewable resource based materials. He tells us he has less time now than when he was "working". Dave too was drafted out of graduate school at the University of Kansas but was able to return to complete his PhD degree there.

Lloyd P. Hill BS 1967 was also at the celebration in honor of Charlie Armbruster. Skip and his wife Diane played golf at Glen



Graduates from the 1960s with Charlie at his reception, from left: Don Kaesser, Doug Nuelle, Jim Jacob, Don Mestemacher, Gary Jacob, Dave Levitt, Lloyd Hill, Jim Reilly and Tom Dueber.

Echo Country Club with the Bartons in early October 2008.

Don Kaesser BS 1967 came to the Armbruster event in August and took some very nice photos. He asked me how is it that with two degrees in PSYCHOLOGY (one graduate, one undergraduate) from two universities and one undergraduate degree in CHEMISTRY from UMSL that you (sic) hard science guys are the only ones that stay in touch with its grads?

George Constantz BA biology 1969, but one of the many science students that used to hang around together here in the late 1960s, contacted us about the Armbruster event. He is a biologist and naturalist and founded Pine Cabin Run Ecological Laboratory, a nonprofit organization "dedicated to preserving Appalachian rivers through science and education, in Davis, WV. He received a PhD in zoology from Arizona State University. He has worked as a park naturalist, a teacher, a fish ecologist, a researcher, a writer, and coordinator of the West Virginia Watershed and Conservation and Management Program. He wrote the book *Hollows, Peepers, and Highlanders* in 1994.

Vernon Koziatek BS 1968 sent us a nice message on learning that we were honoring Dr. Armbruster. Since leaving UMSL in 1968 he has worked as a forensic chemist, food chemist, in a toxicology laboratory and now as a clinical chemist and has enjoyed all of those positions. He was drafted out of grad school at Indiana U, but was lucky enough to be sent to Ft. Gordon, GA where he worked his way into the Army Crime lab and served his two years there. He tells us that the BS in Chemistry was a big help and it assured no duty in Vietnam.

Raymond F. Novak BS 1968 holds a PhD in physical chemistry from Case-Western Reserve University and was Professor in the Departments of Anesthesia and Pharmacology at Northwestern University when he was honored with the Distinguished Alumni Award in 1988. Since then he became Director of the Center for Molecular Toxicology at Wayne State University. He is currently Director of the Institute for Environmental Health Sciences, Director of the Environmental Health Science Center for Molecular & Cellular Toxicology and Professor in the Department of Pharmacology at Wayne State. Dr. Novak was recently granted a joint appointment in the Department of Pediatrics, Children's Hospital of Michigan and was recently

appointed to the Board of Scientific Counselors, National Toxicology Program, National Institutes of Environmental Health Sciences. He is an Associate Editor of *Toxicological Sciences*. He and his wife Fran have been married nearly 40 years and have four daughters, all of whom have advanced degrees -- a graphics artist (MFA, Washington University, St. Louis); a community health and education specialist (M.P.H., Indiana University); a licensed attorney (J.D.; Michigan State University College of Law.); and a board certified veterinarian/virology scientist (D.V.M.; PhD., School of Veterinary Medicine, University of Florida).

Robert T. Roither BS 1968 is area manager for Anheuser Busch in Williamsburg VA. Bob was disappointed not to be able to attend the event for Dr. Armbruster

Steven G. Halterman BA biology 1969 and a classmate of George Constantz (see above) visited the department and spent some time with the editor a few years ago sent us this message which I reproduce verbatim. "George and I were biology majors in the mid 60's... we were classmates of Chuck Heil, Doug Nuelle, Debbie Dey (wow!), Frank Caputo, John Gagnani, and my wife of 40 years - Donna Guzy...to name a few... after we graduated George was drafted and I got a deferment to teach labs there at UMSL...I taught labs for the Babcocks, Strickberger, and Ron McLeod from Scotland... I never had the pleasure of taking Chemistry with you, but my friends that did spoke very highly of you... you were young, energetic, had a great sense of humor, and did a great job of explaining chemistry to a bunch of chemistry-challenged biologists. (Something tells me nothing has changed with you!) I did have Charlie (Dr. Armbruster to his face, but always Charlie to others) for intro chem (11) and Dave Henton (brilliant!) was my first lab instructor.... I also had Charlie for organic chemistry... our letter explains our feelings for Dr. A.-our feelings were shared by so many others!! Sorry that I cannot get to St Louis for the event...I am in Massachusetts, and cannot get away... I hope Dr. Armbruster enjoys himself... he is so deserving of all the accolades that he will receive!!" Steve is Deputy Regional Director of the bureau of Resource Protection for the Western region of Massachusetts.



1970s graduates from left, Rick Hoyt, Dorothy Greco, Bill McCarthy, Bob Dittrich, Pat Barton, Harold Messler, Mike Finkes, Pete Kleine, Dave Armbruster, Pat (Mauller) Armbruster, Jim Grib, Gary Henley, Bruce Ritts, Greg Wall and kneeling Bob Lamberg and Mike Dueber, with Charlie.

Gary S. Jacob BS 1969 for the past five years has been CEO, CSO of Callisto Pharmaceuticals Inc. in New York and recently became President and Acting CEO of Synergy Pharmaceuticals Inc. also in New York. He served as Chief Scientific Officer of Synergy Pharmaceuticals Inc. from 1999 to 2003 and from 1990 to 1998; he was a Monsanto Science Fellow, specializing in glycobiology. He held several positions with Monsanto in St. Louis including Director of Functional Genomics, Corporate Science & Technology, Director of Glycobiology, G.D. Searle Pharmaceuticals Inc. and from 1986 to 1990; he was seconded to Oxford University where he served as Manager of the G.D. Searle Glycobiology Group. In 1998 he was appointed Senior Vice President and Chief Scientific Officer at LgX Corporation in Summit NJ. Gary received his PhD. degree at the University of Wisconsin and did postdoctoral research at the IBM Watson Research Center.

Dave Levitt, a member of the 1969 class who went on to do graduate work at MIT sharing a room with Mike Young came to CWA event. Dave has a major tutoring operation helping Georgetown University and other students in organic chemistry in Washington DC.

Steven Mestemecher BA 1969 was in touch this past summer. He has been with DuPont for more than 35 years. He currently is at the Washington Works in Parkersburg, WV and last fall received one of the prestigious "DuPont Corporate Engineering Excellence Awards". He finds that combining chemistry with engineering has been key to his work and his success. He also told us that he is very impressed with Chancellor George and he sent his regards to Dr. Armbruster and also to Dr. Larsen who was a great mentor to him. Steve's brother Don and his wife, not alumni but students in the 1960s, were at the reception.

Lesley Tucker BS 1969, who is a physician with the Sisters of Mercy Health System in Washington MO, was disappointed to miss what he described as the wonderful and justly deserved event for Dr. Armbruster, but he was in Hawaii attending the wedding fest and being best man for one of his fellow doctors and good friends. He tells us they are down to two gastroenterologists serving 150,000 people and he is on call almost all the time, working 7 am to 10 pm at the hospital. He tells us that Dr Armbruster was and continues to be a source of inspiration in his quest to learn. His joy and enthusiasm for teaching still guides him each day in his own teaching, having directed the Continuing Medical Education programs at the hospital for over 25 years.

1970s

John R. Kolb BS 1970 continues to work with children in a local charter school near his home in Sonora CA. When we heard from him he had just begun the school year with the 6th graders; and the the 4th and 5th were to come in short order. He hopes they'll all get the science they otherwise wouldn't. After doing this for 8 years, he finds it amazing how many kids he recognizes and *vice versa* in his county.

Dennis W. Wester BS 1971 retired after 17+ years at the Pacific Northwest National Laboratory in Richland WA retired and took a position as Director, Applied Research at MDS Nordion in

Vancouver on Feb. 5 2008. He rented a small apartment not too far from work and his wife Vicki is staying in Richland until their son Adam graduates from Washington State University in June 2009. Reporting to the VP, Global Research and Development, his new position constitutes a leadership role as a senior resource and a member of the Applied Research senior management team. This position is responsible for chemistry and radiochemistry work with respect to new product development, process development, as well supporting product and process improvement primarily for the Radiotherapeutic, Radiopharmaceutical Services and Medical Isotope product lines.

Harold R. Messler BS 1970 is a member of the Chemistry Alumni Council and attended the celebrations arranged in honor of Charlie Armbruster. Harold received a prestigious St. Louis Academy of Science, "Science Educator's Award" in 2008. It was presented to him at the Awards Banquet at the Chase Park Plaza Hotel in April. He has been an enormous resource to young people, running programs for the St. Louis Science Center and the American Chemical Society, for students and teachers in areas schools and colleges, in giving talks to community groups, and in mentoring summer intern students. It was a notable occasion for UM-St. Louis since other colleagues were honored there too including current and



Harold Messler receiving the 2008 Science Educator's Award from the President of the St. Louis Academy of Science in April.

former faculty members.

Alan Sapia BS 1970 is now with *KV Pharmaceutical Co.* in St. Louis, having moved there from Chemir Analytical Laboratories, also in St. Louis and very close to the former at Dorsett and I-270.

Harry W. Orf BS 1971, who is Vice President for Scientific Operations and Professor of Chemistry at The Scripps Research Institute - Scripps Florida, was six months away from opening their 350,000 square foot campus in Jupiter, so he was very busy when he contacted us in late spring. The operation had about 270 staff on site now but there are plans to double that within 18 months once the new campus opens. He and his wife Karen were doing well. His son Darren is married and working for PWC in Detroit, his daughter Christina is a Forensic Psychologist, living near them and was to be married and their six-year old Nick had just graduated from kindergarten.

Michael Young BS 1971, we were shocked to hear, is battling pancreatic cancer. We heard this shortly after Mike discovered it, when he responded to our invitation to attend the event for Charlie Armbruster. The editor has spoken to him several times during the past few months and his spirits are high and most recently he has been responding very well to treatment. Harry Orf and Dennis Wester, classmates of Mike both at UMSL and St. Louis U High School, visited him on Aug. 3. Mike is a

Product/Process Development Manager at BASF Corporation in Charlotte, NC. He has a PhD degree from MIT where he worked with Barry Sharpless who was later awarded the Nobel Prize. After graduation in 1975, Mike went to GAF in Wyandotte, MI near Detroit. In 1978 it was purchased by BASF Wyandotte, and Mike spent 20 years with BASF in Rensselaer NY. He moved to Charlotte NC where he served as plant manager of the textiles and leather plant which closed in 2003. From 2003 – 2005 he was in Ludwigshafen, Germany, leading the technology group in new product development.

Sanford A. Asher BA 1971, who is Distinguished Professor of Chemistry at the University of Pittsburgh, won the 2008 "Spectroscopy Society of Pittsburgh Award". The Spectroscopy Society of Pittsburgh (SSP), a sponsor of the Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, is the sponsor of the annual Pittsburgh Spectroscopy Award. This award is for recognition of outstanding contributions in the field of applied spectroscopy and is presented at the annual Pittsburgh Conference.

Ann Nancy Reynhout (nee Mayhan) aka Nancy BS 1972 is now retired from Pfizer in Kalamazoo, MI. She worked at the manufacturing facility there for 32 years, and at retirement she was a laboratory manager in the Quality Control Department. She survived the mergers and takeovers from the original UpJohn, through Pharmacia to the current *Pfizer*. Her husband, Phil, has also just retired from Pfizer. He was a research chemist in the active pharmaceutical ingredient manufacturing area for over 30 years. They have one son, Scott, adopted from Korea in 1987, who was to be starting graduate school at the University of Cincinnati in fall 2008 majoring in Geology and doing his research in the Himalayas. Her twin brother, Bill Mayhan, has been an English instructor at UMSL for many years.

David Armbruster BS 1973, and his wife **Pat Armbruster** also BS 1973, were at the event for Dr. Armbruster. Dave is Scientific Affairs Manager, Global Marketing for Abbot Diagnostics Division of Abbot Laboratories near Chicago. Pat is a science teacher at Lake Zurich High School in Lake Zurich, IL.



1980s graduates David Siebel (Optometry), Barbara Brown, John C. Sommers, Mike Hauser, Jeannette Hencken, Shari Keith, Floris Homan, Peggy (Ponzar) Homan, Janet Wilking and Jim Wheatley.

Roger A. Reimann BS is Senior Environmental Scientist at Lafser and Associates Inc. in St. Louis.



Sandy Asher accepting the 2008 Spectroscopy Society of Pittsburgh Award.

Jim Szydłowski BA 1975 is Laboratory Manager at the American Bottoms Treatment Facility in Sauget Illinois.

James J. Grib BS 1976, MS 1982, who also received a BA in biology in 1976, has just informed us that he has taken a "package" from his employer, Anheuser Busch, and retires in December 2008. Jim was Senior Technical Manager in Corporate Quality Assurance and his responsibility included both brewing and micro QA. For 18 years he did international QA and traveled essentially all over the world. He went to Mallinckrodt following graduation in 1976 and in 1979 joined Anheuser Busch. He and his wife Colleen have four grown children. Jim has been very helpful recently as a member of the Chemistry Alumni Council.

James B. Troll BA 1976 is Head Chemist at SmithKline Beecham Clinical Laboratories in St. Louis.

Pauline Bellavance PhD 1978 is enjoying teaching physics and AP chemistry at St. Joseph's Catholic high School in Greenville, SC. Her husband Mike plans to retire next year and she will retire in 2 years or so. Older daughter Lisa, who had just turned 40 when we heard from Pauline, was expecting their fourth grandchild (3rd boy) anytime.

Michael Finkes BS 1973, MS 1978 is one of the leaders of the Chemistry Alumni Council. A member of the Governing Board of the Alumni Association, Mike often gives greetings from the Association to graduating seniors and other at commencement. He did that this year when Charlie Armbruster was the speaker and he also was the alumni speaker at the reception.

Kenneth O. Henderson BS 1973 is still active in the ASTM and he went with his wife Mary Ann last June to the ASTM D02

meeting in Vancouver. Last January he started his second term as ASTM Committee D02 Chairman. This is the committee on Petroleum Products and Lubricants. Biofuel testing and specification issues have made the last year very interesting. At the meeting it was announced that they were going to award Ken the "Sydney D. Andrews Scroll of Achievement" at the December 08. As a part of his ASTM activities, in early June he went to Warsaw, Poland for the Subcommittee meeting on Aviation Fuels. He is Vice President, Technology for the Cannon Instrument Company in State College, PA.

Greg Przygoda BS 1973 who is a quality engineer at Boeing keeps in touch with us. He recently returned from the UK. His work takes him to Hull (Brough) and Preston (Samlesbury) about twice a year - both BAE System sites. Once in a great while, he visits Runcorn near Liverpool and Hamble (Southampton area).

John M. Crump BS 1974 is a general surgeon in critical care at the Baptist Medical Center in Jacksonville, FL. We were shocked to hear that Jack's wife Ginger died recently. She was only 50 years old and lost a battle with cancer on November 24. They have two children, Will, 14, and Carly, 12. Jack has an MD degree from the University of Missouri-Columbia and as an undergraduate here worked with the editor in his lab.

Ronald Suchara BA 1974, a Technical Sales Representative-St. Louis Consumable Products Varian Inc., enjoyed seeing Charlie Armbruster in August at Commencement. His youngest daughter was one of the graduates that day, however, he unfortunately had to miss the reception that followed as his wife who also attended was recovering from recent hip surgery and they had to leave



May 2008 graduates, from left, Christina Vanpreter, Uzair Mansuri, Jozo Barac, Teresa Bandrowsky, Kara Kinzel, Sean Whittemore, Matthew Lenze, Adele Pacquette, Scott Hastie, Joe Kolf and Pete Chang.

after the commencement.

Janet (Dobbins) Place BA 1975 was disappointed to miss the seminar by Roberta Farrell. She had been in St. Louis in September, because her mother passed away. Unfortunately, she had no time to visit friends since she was busy with arrangements and cleaning out the family home.

A. Greg Wall BA 1974 has been Technical Director of Cyanta Drug Development Services in St. Louis since September 2008.

Roberta L. Farrell BS 1975 visited the department on Oct 24 to present the seminar "Science in Antarctica: Studying the Historic Huts of the Heroic Era of Antarctic Exploration: To the Ice and back again, an UMSL Alumna's Holidays" She received a PhD in biochemistry from the University of Illinois, Urbana, in 1980 and did postdoctoral research at the University of Chicago and MIT prior to an appointment, first as Associate Director of Research - Industrial Enzymes with Repligen Corporation in Cambridge, Massachusetts, in 1984 and then as Executive Vice President & Chief Operating Officer Sandoz Chemicals Biotech Research Corporation and Repligen Sandoz Research Corporation, a position she held from 1987-1996. From 1995 to 1996 she spent a sabbatical leave at PAPRO, Forest Research Institute in Rotorua, New Zealand and since 1996 she has been Professor of Biological Sciences at the University of Waikato Hamilton, New Zealand. She is a Fellow of the Royal Society, New Zealand and also a Fellow of the International Academy of Wood Science. In late December we heard that she is in the Queen's 2009 New Year's honors list and she will receive the *Companion of the New Zealand Order of Merit* for her service to biochemical research!

Rick Hoyt BS 1975 was promoted to Vice President, Commercial Operation of Active Pharmaceutical Ingredients at Covidien in St. Louis. Rick is a member of the Chemistry Alumni Council.

Robert Frease BS 1976 is who lives in Clinton, MO, is working at Arm and Hammer and teaching at Rockhurst University in Kansas City. Bob recently joined up with **Bill McCarthy** BS 1975 and **Rich Wisneski** BS 1986 on a biking trip along the Katy Trail.



1990s graduates Lashawn (Minor) Colquitt, Kim Gorman, Steve Rooney, Dr. Robert Goerss and Mark Holland (both biology '97) and Martin Hayes

Clarice Rieser BA 1977 and her husband Richard still live in Hallsville in northern Boone County. She is semi-retired from the State of Missouri, where she was working as an Environmental Public Health Specialist until August, 2001. Technically, she is still an EPHS without an assignment. Richard continues to work at the VA hospital in Columbia, MO.

H. Peter Kleine BS 1978, MS 1982 is Associate Director, Discovery Synthesis Services in Discovery Medicinal Chemistry at Pfizer, Inc., in St. Louis. Pete is also a member of the

Chemistry Alumni Council and recently became the person responsible for the St Louis Chemical Science and Technology Award for the St. Louis Section of the ACS.

Timothy T. Wenzel BS 1978 is a Research Leader at *Dow Chemical Co.* in Midland MI. He gave the "Twenty first Distinguished Alumni Lecture" last May.

William E. VanArsdale BA 1979, PhD 1984 was in touch recently. He is now retired from Rohm and Haas and consulting. His spouse, Laurie, still works for Rohm and Haas in the Biocides business, and she is an ex-NCAA Div I tennis player, so they try to compete with each other as much as possible. He enjoys his 4 grandchildren, all of whom now reside in Texas, whenever he gets a chance to see them. He is busier than he wants to be. He does Emergency Response training work and it is physically demanding, since they carry a 54 ft. 18-wheeler from site to site filled with chemical tank truck, railcar and chlorine cylinder mock-ups and as a result he has lost ~10 lbs from the truck loading/off-loading and is in very good physical condition because of it.

1980s

Vincent H. Chang MS 1980 sent us greetings recently. He is Director, Quality Services Pacific Asia, Africa and Japan for the global Pharmaceutical operations of Abbot Laboratories in Abbott Park, IL.

Randy F. Johnston BS 1980 who has been Chair of the Chemistry Department at Union University in Jackson, Tennessee for 11 years was mentioned in the November 17 issue of *Chemistry and Engineering News*. He is faculty advisor to the ACS student affiliates chapter and they were honored with a 2007-2008 Outstanding Student Affiliate Chapter awards.

Charles R. Theirheimer BS 1980, MS 1984, took "early retirement" from Hewlett-Packard in September 2005 after nearly 19 years. He has worked at Cascade Microtech Inc. a specialty electronics firm in the Portland area for the last two years. He could not convince his family to leave Corvallis so he has an apartment in Beaverton, OR and works four 10 hour days per week. Like much of his work at HP, he generally functions as a chemical process engineer and develops fabrication processes for Cascade's products. The only chemistry connection is to the polymeric nature of many of the materials they use and investigate.

Joan Twillman BA 1981 attended the St. Louis Academy of Science Awards Banquet when Harold Messler was presented with the Science Educator Award.

Gregory P. Noelken, BS 1981, who is the Chemistry Computing Facility Manager at Washington University, attended the reception for Charlie Armbruster in August.

Gregg J. Lumetta, BA 1982, PhD. 1987, who is at the Pacific Northwest National Laboratory, in Richland, WA. is chair of the Division of Industrial and Engineering Chemistry of the ACS. He and the editor met briefly at the ACS meeting in New Orleans when Greg received an award on behalf of the division,

Scott Meierotto BS 1982 is a Chemical Engineer with the Laclede Gas Company in St. Louis.

Dr. John Wightman BA 1983 is education director of the Department of Emergency Medicine at Wright State University in Kettering, Ohio, and a colonel in the United States Air Force.

Donald G. Hesse BS 1984, PhD 1991 has agreed to present the "Twenty second Annual Distinguished Alumni Lecture" on May 4, 2009. Don is Vice-President of Information Technology at the St. Louis Post-Dispatch and has been with the paper for 11 years. He and Cyndi have three children. Samantha, whom Don always featured in his slides when giving presentations at the ACS Career Day, is in her third year at UM-Columbia, Andrew is a junior at Vianney High School and Anna is in 6th grade at St. Peter's School in Kirkwood. Hobbies: home repair and coaching Andrew's (formerly) and now Anna's basketball, softball and volleyball teams and playing tennis and softball himself. There are 5 Hesses on his softball team: Don, his son Andrew, his 2 brothers and one nephew.

Bill BA 1983, PhD 1989 and **Dawn** BA 1983, PhD 1988 **Shiang** continue to work in Shanghai for Dow Chemical Co. Their oldest son loves living in China while the younger one wants to go back to the US Dawn and Bill really like living there even with more responsibilities and longer hours. They are slated to be repatriated mid 2009 but that will depend on how quickly their local successors develop. They certainly seem to be enjoying themselves as indicated by a message they sent me about a trip to a very traditional Chinese wedding, a trip to the Tianmu Shan mountains and, of course, the Olympic Games.

Barbara (Willis) Brown BA 1984 who is a Doctor of Optometry and a graduate of the School of Optometry was admitted as a Fellow of the American Academy of Optometry quite recently. Barb has been very active and helpful in our establishing the Chemistry Alumni Council, along with **Mike Finkes**.

Rajiv M. Banavali PhD. 1985 is a member of the Dean's Advisory Board in the College of Arts and Sciences. The Bartons, Rajiv and his wife Marysusan had dinner in Pittsburgh, when the former were in that city for the spring ACS meeting. Both Banavalis work for Rohm and Haas.

William L. Neumann PhD. 1988 who was at Covidien in St. Louis in Biomedical Optics Discovery Research moved and is now Assistant Professor in the Department of Pharmaceutical Sciences at Southern Illinois University Edwardsville. It is a new department with and he was having a lot of fun already. His lab is in the bioincubator facility. When we heard from him, Bill and his wife Jeanette, were about to leave for China where they were to adopt a second daughter Lily in Fuzhou which apparently is right across from Taiwan so he was considering contacting **Ko- Chung Lin** (PhD 1988) if he had time. Bill and Jeanette already have one daughter, Sarah.

James R. Wheatley BS 1989 tells us that things are going well and he has re-connected with **Bill McCarthy** and **Rich Wisneski** since returning to Mallinckrodt, and they bicycle a lot together. His work here is in R&D, mostly HPLC method



At the Murray Banquet, Joyce Corey, 12th Robert W. Murray Lecturer Philip P. Power, Janet Wilking and Stephen Holmes.

development, and purification of crude samples with preparative HPLC, and a couple of projects on the side. He has a family now, with 2 children (3 and 8) and one 15 year old step daughter, so he is quite busy.

1990s

Christopher S. Mallory BS 1991 is now living in Ringoes, New Jersey. He formerly was with Pfizer in Kalamazoo MI.

Mark Bono BA 1993 after graduating UMSL with a teaching certification taught for 6 years in New Mexico. Then he moved to Bellingham, Washington where he lived on a sailboat and took a two year self-financed sabbatical from teaching before accepting a position to teach in Watts for Green Dot Public Schools. This did not work out well due to problems including lack of equipment, religious sentiments (biology), facilities, etc. He says he loves teaching but could not find his niche as an actual teacher. He then considered returning to graduate school. He researched different masters programs, but his love of everything water-related and his continued interest in environmentally sustainable national policies led him directly to hydrology even more so than geology. Thus he is now planning to pursue a masters degree in hydrology at New Mexico Tech and we wish him well

Diane L. (Oliver) Maher BS 1993, MS 1998 has been at Monsanto now for several years. She is doing Glyphosate (Roundup) residue analysis as well as managing the residue lab. She has been acting as study director for residue field trials the last couple of years. She formerly worked with Melinda McCann BS 1993. Outside of work, she has pursued photography as a hobby. She makes Pt/Pd contact prints of images, mostly landscapes though she is trying to branch out into portraiture. The Pt/Pd process was mostly used during the 30 or so years prior to WWI and has been making a comeback (along with other old photographic processes) the last few years.

Sean D Dingman BS 1994 who received a PhD in the group of Bill Buhro at Washington University is with SAF-C-Hitech, a unit of Sigma-Aldrich in St. Louis as a Market Segment Manager. Sean is active in the Chemistry Alumni Council

wherein he has been leading the development of an e-mail based networking system for alumni. Sean is also teaching Instrumental Analysis in the department in the evening.

Hong Fang PhD. 1995 was in touch with us earlier this year to update her address she and Weida Tong occupy with their daughter Lillian in Little Rock. Hong is Senior Technical Specialist for the FDA's National Center for Toxicological Research in Jefferson, AR. She says they are very busy working in bioinformatics and Weida's group has grown to more than 15. Lillian is in high school now and is still playing piano, however, recently she has had to quit dance because of their schedule

Yihua Liao MS 1996 lives in Westwood, MA and enjoys reading the UMSL CHEMIST. At the moment she is staying at home with her three daughters, Jessica (5), Allison (2) and Isabella (7 month old). She left Novartis after she had Allison and hopes to be able to go back soon when they settle into a routine and have help for the girls.

James M. Openlander BA 1994 was at the event for Charlie Armbruster. He tells us he is doing well and still working for GHX (Global Healthcare Exchange) managing several different procurement products/solutions. He has been working from home for the past 4 years so that is a real nice benefit.

Michael D. Groaning BA 1995, MS 1997 who had been in Basel with Roche has moved back to the States and is now with Endocyte, Inc., located at the Purdue Research Park in West Lafayette, Ind.



Brian Grimmond and Yana Levchinsky-Grimmond Xmas 2008.

Siu Wa (Sam) Au-Yeung BA 1996 appreciates being part of the alumni family and being kept informed for the news about UMSL Chemistry. He was in China this summer to visit his wife's parents who live in Chengdu, Sichuan, the area hit by the earthquakes.

Eric Bruton BS 1997, PhD 2003 was in the department recently telling us about his most recent successful work. Eric is a Technical Lead at Crosslink in St. Louis. Among other projects, he has been working on some successful technology for flexible lighting for military soft-walled shelters which has just found commercial application. *SuperFlex*TM panels are semi-permanently attached to the tent ceilings. They are powered by a

standard AC source to produce white light. Because Crosslink SuperFlex is extremely durable and can be crushed without malfunction, the shelters can be collapsed and packed quickly. Crosslink SuperFlex eliminates the additional setup and teardown troops must currently perform. This application is currently under development with the U.S. Army Soldier Systems Center in Natick, Massachusetts.

Yanina Levchinsky-Grimmond BS 1997, MS 2000, keeps in touch with us and was in the department in May but was unable to attend the Commencement etc., when Charlie Armbruster was honored. She and **Brian Grimmond** (PhD 2000) were remodeling their home in upstate NY when we last heard from them. We understand Brian is a golfer now and Yana has taken up kayaking in a nearby lake. They were planning to go to the south of France and then to Scotland in September.

Hossein Shabbany PhD 1998, who had been with the Fleming Co., is now with Cyanta Drug Development Services in St. Louis



Charlie Armbruster with Jamie Openlander BA 1994

Kevin Trankler, BS 1998, PhD. 2004, was Director - Technical Services for Chemir Analytical Services in St. Louis but he recently became a Senior Research Chemist in R & D with Novus International, Inc. in St. Charles. He is now much closer to home in Defiance MO and he tells us he also spends 50% of his time at the bench doing synthetic organic chemistry, which he likes. He also is a member of the newly formed Chemistry Alumni Council steering committee. His wife **Amy (Anchelee) Trankler**, PhD 2003 gave birth to their second child Nicholas Kanaphat Trankler on September 1, 2008. He is the brother of Isabella who was born in March 2007.

2000s

Malcolm Arendse PhD 2000 who was with the University of the Western Cape, left academia in April 2003 and joined Anglo Platinum Research Centre as a project leader conducting research into the available options for increasing the production of platinum group metals (PGM). This involved the solvent extraction of platinum, palladium and iridium. In October 2005, his Research Centre merged with Anglo American Research laboratories to form a new research entity called Anglo Research which deals Anglo American operations including coal, base

metals and platinum. He is now Senior Research Scientist and has worked on different projects ranging from PGM speciation by chromatography to ruthenium distillation. His oldest son Lindsay (13) is going to high school next year and the youngest, Kyle (7) is in grade 2. They are both doing well in academics and excelling in sports like athletics, swimming and soccer. His wife, Juanita has been working in the insurance industry for the past five years as a disability claims consultant where she is applying her occupational therapy knowledge and skills.

Aaron Burns BS 2000 is completing his fourth year in the PhD. program at the University of Minnesota with Tom Hoye. He regretted not being able to attend the events associated with Charlie Armbruster receiving the Chancellor's Medallion. He attributes Charlie for his becoming an organic chemist. He will be looking for postdoctoral positions with the intent of pursuing an independent academic career. He originally went to Berkeley and then lived in New York City for a while before returning to graduate school in MN where his wife Rachel grew up. They have two children, James (4.5) and Anna (1).

Axia Sun MS 2000 has been with Takeda San Diego since fall 2006. She is holds a Scientist position and has responsibilities to provide bioanalytical services and pharmacokinetic analysis for the drug discovery activities at the company.



Jim Clark BS 2004 celebrating with colleagues after a tough day at work in Bangkok, Thailand where he now lives and teaches.

Shiyue Fang PhD 2001 who is on the faculty at Michigan Technological University keeps in touch with us. In 2008, his research group published five papers (including one from work he did at Purdue as a postdoc), and several more manuscripts are under preparation. He obtained additional funding from Michigan Universities Commercialization Initiatives to support a postdoc for another year. Currently, he has four graduate students, one undergraduate student and one postdoc, and another graduate student is expected to join him in spring 2009.

Matthew Lanham BA 2001 is a Business Analyst at Sigma-Aldrich in St. Louis.

Viktoriya (Sedelokova) Gruden BS 2002, MS 2005 who had been with Sigma Aldrich in St. Louis, is now with KV Pharmaceutical. Her husband Mario Gruden, BS 2003, is with

Sigma-Aldrich.

Joe Ocheskey BS 2000, MS 2003 is currently living in Delaware working for a small CRO called Adesis. He is part of the 56th Stryker Brigade of the Pennsylvania National Guard as a First Lieutenant and was preparing to go to Iraq when he contacted us. He also spends some time each week as a volunteer firefighter for Wilmington Manor Volunteer Firefighters.

Linyong Mao PhD. 2002 continues his work as a Postdoctoral Fellow in Computational Biology and Bioinformatics at Iowa State University and is currently seeking an independent academic position. He sent us a nice picture with his family this Christmas

Amie M. Beerman BS 2002, MS 2004, continues in chemical sales with *Jost Chemical* in St. Louis. Amie was one of the first to join our Alumni Networking system through LinkedIn.

Rachel .Hercules BA2002, MS 2006 is now with Con Agra Foods in St. Louis. Rachel informed us of the untimely death of **Frank Dover** BS 2003, MS 2008 who had been with KV Pharmaceutical and was with Sigma-Aldrich in St. Louis.

Quinzhen Wang, PhD 2002 was in town in summer for a party in honor of Joyce Corey's retirement at Janet Wilking's home. He continues working in San Jose, developing labeling dyes and the business is doing well. His wife is an UMSL student and loves the institution – he is very glad about this.

Erich Topp BA 2003 is apparently on a soccer team which played against a team on which our chair Chris Spilling plays last year. We believe Erich is employed at Covidien in St. Louis.

Matthew Dunn BA 2003 is now with Chemir Analytical Services in St. Louis. Matt was at the event for Charlie Armbruster.

Padma Nair PhD 2003, who had been doing postdoctoral research with Dr. Victor Hruby at the University of Arizona, started as a faculty member at Pima Community College in Tucson this fall. She and her husband Anil had their second child, a son Ranjit in April. They already had one son Pranav. Anil, who was a postdoc here with former colleague Bill Welsh, has been promoted as Lead Research Investigator at Sanofi-Aventis. We heard from her recently that she is doing very well at Pima Community College.

James Clark BS 2004 tells us he didn't fare too well in the job market after graduation and as he describes it only was able to find boring rote wet lab work on temporary assignments so in January 2005 he sold all his belongings and bought a one-way ticket to Thailand. He had been there once before on vacation and enjoyed it thoroughly. He knew finding work teaching English would be easy but he also heard that he could possibly find work teaching science. He fell into a great job at a large private bilingual school called Thew Phai Ngarm (too-pie-ngarm). He taught everything and anything in the beginning, but found his true calling teaching middle school science. He is also the

science coordinator for the school and takes care of the labs and help all the other science teachers plan their courses. When he contacted us it was a holiday "Teachers' Day" and the previous evening he went out with other staff members to an Irish Bar for the Trivia Contest and half price pints of Guinness.

Lori Bowen PhD 2005 with Dr. Dupureur gave birth to twins (one each) in May in her home state of Oklahoma.

Joseph A. Lupo BS 2004 has been a development chemist for 3 years with Molycorp in Las Vegas. He tells us he is working on very sensitive technology and we note he was co-author of a patent recently.

Michael J. Petetit BS 2005 is now a graduate student in social; psychology at Bucknell University in Lewisburg, Pennsylvania as a Master's degree candidate. He feels very fortunate to attend Bucknell. The program usually accepts only two students a year and is financing his education and living expenses. He has completed data collection and analysis for two studies with his mentor that should hopefully see publication before the end of the year. The working title for his thesis is "Female Mate Choice Priorities as a Function of Natural and Artificial Hormone Profile".

Eunice (Yoonyoung) Chung BS 2006 has been a Senior Analytical Technician at Covidien/Tyco Healthcare-Mallinckrodt in Hazelwood, MO since June 2006.

Joshua Lang BS 2006 is with Covidien in St. Louis, according to **Hanna Smith**, BS 2006

Papapida Pornsuriyasak PhD 2006 with Dr. Demchenko is currently with Merck Inc. (Thailand). She had been doing postdoctoral research with him prior to returning to Thailand.

Janice Wildrick BA 2006, who is doing a MS degree with Dr. Shelly Minter at Saint Louis University, was very helpful in providing support for the conference "Boron in the Americas" held at Saint Louis University in June.

Hannah J. Smith BS 2006 works at Monsanto with **Suzanne Baszis** BS 1977. The editor and Sue had not met for many years and the three met at the St. Louis Section ACS Science Café in October 2008 where Hal Harris was speaker

Shenicka Fondren BA 2007 is at Covidien in St. Louis. Shenicka got her job through a temp agency in September 2007 and has been a regular employee since January 2008 in the production area. She informed us that **Jennifer N. Desotel**, BS 2007 also works there.

Leslie (Manofsky) Mueller BA 2007, who is married to Mark Mueller, BS computer science 2006, worked for six months following graduation at Celsis Labs as a data reviewer. She had her second son in November 2007 (Eric Daniel Mueller). She is currently a stay-at-home mom but is casually studying formulation chemistry in preparation for starting a cosmetics business.

Chris Vaughn BS 2006 is with Celsis Labs and had been doing

data review but he is now an HPLC analyst.

Colin White PhD 2007 is currently a postdoctoral fellow in the laboratory of Professor Michael Doyle at the University of Maryland. He had been teaching introductory and inorganic chemistry in the department during the 2007-2008 academic year.

Pallavi Badkar PhD 2007 who is working at Sigma-Aldrich recently had a baby girl.

Nicole Lubanowski BSBB 2008 is with Assaypro in St. Charles MO. She worked in Dr. Demchenko's research lab when she an undergraduate and is now in the MS program in Biochemistry and Biotechnology.



Drs Spilling and Corey at the party at Janet Wilking's house held to honor Joyce on her retirement Wes Harris is on the left and Pat Barton and Jane Miller are on the right

Jozo Barac BS 2008 is now with Monsanto in St. Louis.

Kara Kinzel BS 2008 is working at IQ Synthesis in St. Louis which is owned by Chemir Analytical Services.

Adele Pacquette BS 2008 is currently working at Covidien at the Hazelwood location as an analytical chemist in a lab which supports the production of active pharmaceutical ingredients. She tells us she is planning to start graduate school in the fall.

Christina Van Preter BS 2008 is a Chemist III at Vi-Jon in their quality control lab in St. Louis. She works with the analytical testing (LC, GC, IR, and other bench work) of soaps and other beauty products such as germ-x and bubble baths. Not all that exciting she says but still good work.

Saibal Bandyopadhyay PhD 2008 with Dr. Spilling is doing postdoctoral research at Ohio State University with Dr. Dennis Bong. He is especially happy to be there since his wife is a graduate student at OSU. His lab work is going well although he feels a little pressured. He was assigned to a phosphatidyl serine synthesis project which he completed in 3 months. Now he is learning and enjoying some basic biochemistry work involving total synthesis of new molecules along with the application of

those molecules in basic biochemistry.



Department participants in the 2008 Undergraduate Research Symposium held on campus in spring 2008. Adele Pacquette, center right holds the check for the outstanding paper

Dr. James T. Smoot PhD 2008 with Dr. Demchenko, who did his work part time while working at Reliable Pharmaceutical Co, has recently joined Tate & Lyle in Decatur, IL.

Archana R. Parameswar PhD 2008 also with Dr. Demchenko is continuing as a post-doctoral associate in his lab.

Greg Papadakos PhD 2008 graduated this past summer from the Dupureur lab and is currently serving in the Greek Army.

Laura Adelsberger Williams MS 2009, who did research with Mike Nichols, is currently working towards a teaching certificate in secondary education while teaching math and science in the Fort Zumwalt School District.

Aileen F. G. Bongat PhD 2009 with Alexei Demchenko, has joined the NIH as a post-doctoral associate.

Pete Chang BS 2009 is with Dell as an IT specialist.

Fuqian Xie PhD 2009 with Professor Dupureur recently began a postdoctoral position at Washington University School of Medicine.

The Chemistry Alumni Council

This project had been on the mind of the editor for several years. There didn't seem to be much interest in forming a chapter of the Alumni Association and the old Industrial Advisory Council which he had organized when he was department chair had lapsed due to member attrition, job changes and retirements, so he began planning an Advisory Council composed solely of alumni. He enlisted the help of **Barbara (Willis) Brown** BA 1984 and **Michael J. Finkes** BS 1973, MS 1978, and several planning meetings were held during 2006. They decided to identify supportive alumni from essentially all aspects of employment in St. Louis. The editor selected them and tried to be as representative as possible. Those alums whom we asked and who agreed to help us, including to Barb and Mike are

Barbara Brown (BA 1984) is Manager, Student & Special Services, College of Optometry/Optometrists at UM-St. Louis.

Sean Dingman (BS 1994) is Market Segment Manager at Sigma Aldrich Fine Chemicals Hitech

Bob Dittrich (BS 1976) is Research Chemist at Nestle Purina Pet Care

Michael Finkes (BS 1973, MS 1978) is Quality Assurance Specialist with Monsanto Regulatory Quality Assurance

Kim Gorman, (BA 1993) is President of Paternity Testing Corporation in Columbia, MO

James Grib (BS 1976, MS 1982) was Senior Manager at Anheuser-Busch Companies, Inc until his very recent retirement

Jeanette Hencken (BA 1985) is Chemistry & Forensic Science Teacher at Webster Groves School District.

Floris Homan (BS 1985, PhD 1989) is Senior Director, Analytical Research and Development at KV Pharmaceutical



Michael Finkes, Renee and Sean Dingman at the Murray Banquet.

Rick Hoyt, (BS 1976) is Vice President Business Development at Covidien

H. Peter Kleine, (BS 1978, MS 1982) is Research Scientist at Pfizer

Harold Messler, (BS 1970) is Laboratory Manager, St. Louis Metropolitan Police Department.

Russell Moutray, (BS 1978, MS 1989) is Analytical Chemist with Spectrum Brands Inc., in St. Louis.

Bruce Ritts BS 1979, (MS 1983) is Lead Scientist at STERIS Corporation

Kevin Trankler, (BS 1998, PhD 2003) is Senior Research Chemist at Novus International, Inc.

Janet Wilking (BA 1985) is Assistant Professor of Chemistry, UM-St. Louis

The group has done an excellent job and has been most supportive. In fact our work has gone much better than the editor expected. If we missed out someone who would like to participate, please let us know. We meet every couple of months and have three subcommittees. One deals with events, another with alumni networking and the third technical assistance. The first did a splendid job in helping encourage alums to attend the event associated with the honoring of Charlie Armbruster, the second is trying to extend the address list, to build lists of alums at the various employers of chemists and develop a method of successful alumni networking and the last is still feeling its way. It will focus on helping provide information about jobs to alumni, and also to develop means for access to instrumentation both in the department and in industrial and other laboratories.

Please join the UMSL Chemistry Alumni Group on LinkedIn ([www. LinkedIn.com](http://www.linkedin.com)).

This is an excellent way to network with other alumni and to make contacts with former classmates. It will be valuable for professional activities too. If you are already on LinkedIn, our group URL is <http://www.linkedin.com/e/gis/865237>. If you are not a member of LinkedIn, you will be asked to join. It's easy and membership is free at the basic level. Once you are signed in to LinkedIn, you can follow the url above and send a request to join. If you have any questions about the group or LinkedIn please send a message to the group manager, Sean Dingman (1994) at Dingmans@umsl.edu. There is also a UMSL Alumni Network through LinkedIn that you may join as well. We look forward to seeing you on LinkedIn.

Norman R. (Ted) Windsor 1930-2008

Ted Windsor passed away on January 14, 2008. The following, written by the editor, was circulated on campus, summarized in the Post Dispatch and read at the funeral:

"Ted Windsor passed away on Monday, Jan. 15, 2008, after a brave struggle with lung cancer. He retired from the University of Missouri-St. Louis shortly after his diagnosis in June. Ted joined the staff of the university in September 1971 as an electronics technician. He was later promoted to senior electronics technician. He was born in St. Louis and served in the US Air Force during the Korean War, as a trainee and electronics technician, serving much of his time in Nome, Alaska, as a radio operator. He spoke often and fondly of his time in Nome and subscribed to the newspaper the *Nome Nugget*, one of which was delivered just after he died. He spent 13 years with McDonnell-Douglas as an electronics specialist and then four years as a systems technician at Monsanto prior to joining UM-St. Louis. At UM-St. Louis, his major role was in instrument design and construction, but essentially he was the "go-to" guy for most of the faculty members and students when they needed technical assistance. Dr. Lawrence Barton, who served as department chair and essentially his supervisor for 18 years, says: "Ted Windsor was one of the most affable and cooperative colleagues I have ever encountered. As department chair, hosting visitors by showing them around the department, I would invariably stop at the machine shop where Ted was located. As we entered the room, before I could introduce him properly, he would interject that he was the "general flunky" in the department. That was spoken in jest, but it had a ring of truth

in that there was nothing Ted Windsor would not turn his hand to in order to help the chemistry department."

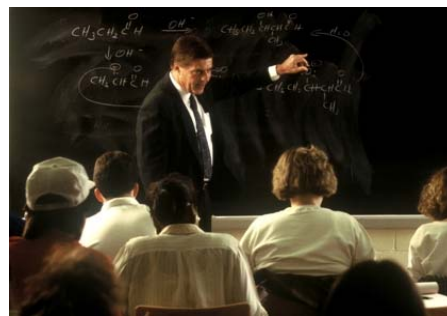
He published technical articles with faculty colleagues, but mostly he did all the machining, lathe work and instrument construction that involved building things. Eventually he had most of the tools necessary for this, but in the past he was a master improviser and using this skill, and many of his personal tools from home, he would be able to complete any job he was asked to perform. What made him different is that he did everything so enthusiastically. Typically he would apologize if he could not start the job immediately. He never seemed to have a backlog of assignments, because he simply got on with it and completed the job as soon as possible.

Ted stayed on well past normal retirement age. His iron-horse work ethic endeared him to his colleagues in the department. Many years ago, he attended workshops on chemical balance maintenance and from then on, he did it routinely. He was an expert on maintaining vacuum pumps and resurrecting old ones. He maintained the department inventory and in many respects helped to maintain historical perspective concerning instrumentation, etc. Former colleague Dave Larsen pointed out once in a letter of support for Ted for an award that "there is no job in the department that is beneath him. He was the heavy lifter, the picture hanger, the keeper of the department inventory, the operator of the computer-assisted milling machine, the photographer, the slide maker, etc. etc." Ted was honored with an American Chemical Society St. Louis Section's Chemical Technicians Award in 2000 and the Chancellor's Award for Staff Excellence in 2002.

Ted Windsor was loved by all with whom he interacted and he is sorely missed by his former colleagues in the chemistry department and on campus.

Charlie Armbruster receives the Chancellor's Medallion.

The speaker at the College of Arts and Sciences Commencement in the Touhill Performing Arts Center on August 2, 2008 was **Dr. Charles W. Armbruster**, the founder of the department, who chaired the department from 1963 - 1975 and taught mostly organic and introductory chemistry with distinction until 1998. In addition Charlie was presented with the Chancellor's Medallion. Commencement was followed by a most successful



Charlie Armbruster teaching in 1998

reception in the third-floor rotunda of the Millennium Student Center. About 130 individuals were in attendance including about 90 alumni. Among the alumni were those from every decade including the years 1967, 1969-79,

1981-89, 1991, 1993- 94, 1996- 99, 2002- 03 and 2007. Photographs may be view by using the following URL: <http://www.umsl.edu/chemistry/images/CWA/CWA.htm>

Graduates, Dec. 2007 through Dec. 2008

DECEMBER 2007

Shaun M. Chaskelson, BSBB	Timothy j. Conkle, BSBB
Frank J. Dover, MS	Hillary J. Goode, MS
Julie L. Leuchtmann, BSBB	N. A. Lubanowski, BSBB
Lan T. Nguyen, BSBB	John Schmitz, BS
Daniel M. Staffey, BSBB	Benjamin L. Thornton, BA
P. Umnahanant, PhD	

MAY 2008

S. Bandyopadhyay PhD	Jozo Barac, BS
Teresa Bandrowsky, BS	Craig Bruton BA
Marjorie A. Case, MS	Stephen Costin, MS
Scott Hasty, BS	Sophon Kaeothip, MS
Kara Kinzel, BS	Matthew Lenze, BS
Raj K. Malla, MS	Laurel K. Mydock, MS
Uzair M. Y. Mansuri, BA	Adele Pacquette, BS
Christian Paeng, BS	Jeremy Ridenour, BA
Jim Smoot PhD	Kyle D. Toti, MS
Christina Vanpreter, BS	Sean Whittemore, BS
Khalid K. Alam, BSBB	Andrew J. Hardwick, MSBB
Victoria Ashton, BSBB	Jovile Balaseviciute, BSBB
Eric C. Bretsnyder, BSBB	I. Darwech, BSBB
Mariam M. Mahmoud, BSBB	Rachel A. Moser, BSBB
Sam D. Nguyen, BSBB	Rachel L. Nunley, BSBB
Yara L. Ouegbu, BSBB	Charles R. Sims, BSBB
Amanda L. Tawfall, BSBB	David M. Wilson, BSBB

AUGUST 2008

James B. Carroll, BS	Pete Chang, BS
Joseph Kolf, BS	Greg Papadakos, PhD
Archana Parameswar PhD	Ngamjit Praingam, PhD
Nongnuch Sutivisedsak PhD	Arthur Wilde, BS
Fuqian Xie PhD	

DECEMBER 2008

Mary R. Anderson, BA	Aileen Bongat, PhD
Raymond Cothran, MS	Jasmina Nikolic, MS
Holly Pope, BSBB	

BB is the degree BS in Biotechnology and Biochemistry.

The Chemistry Club

It has been an exciting year for the **UMSL Chemistry Club**. The ACS Student Affiliate group was recognized by the national society with a Certificate of Achievement and continues to be very active on campus. The Chem. Club in fall 2008 hosted 120 middle school students at UMSL for a chemistry demonstration and tour. The demo was organized and implemented completely by the student club members. In addition, the Chem. Club continues to organize Student-Faculty Lunches, National Chemistry Week events, and the annual Welcome Hot Dog BBQ on the Science Complex back patio. Among graduating officers were **Adele Pacquette** BS (Vice-President) and now at Covidien (Mallinckrodt) in St. Louis and **J.B. Carroll** BS (Treasurer) who is now in the graduate program working towards his PhD degree

with Janet Wilking. Mike Nichols continues to do a splendid job as faculty advisor.

New Faculty Members

Two inorganic chemists were added to the ranks of the faculty this past year as replacements for Joyce Corey and Lawrence Barton.

Alicia M. Beatty comes from a faculty position at Mississippi State University. Many of you will know Alicia as a 1989 BS graduate of the department when she received the Alan F. Berndt



Outstanding Senior Award. She went to Washington University and did a PhD degree with John Bleeke in organotransition metal chemistry and that was followed by a stint as Director of the x-Ray Diffraction Facility there. She then did postdoctoral research with Christer B. Aakeröy at Kansas State University for two years where she became

interested in supramolecular and material science. She then took the position as Research Associate Professor at Notre Dame University where she was in charge of the X-ray Diffraction Facility in the Chemistry Department. She joined Mississippi State University in 2003 as assistant professor of inorganic chemistry and joined our department this past fall as Associate Professor of Chemistry. She has about 100 publications and holds an NSF Career Award. The goal of her research is to create new, useful solid or polymeric materials through use of organic, inorganic and supramolecular synthesis especially using techniques developed through crystal engineering.

Stephen Holmes was on the faculty at the University of Kentucky before he joined us for the fall semester 2008. He received his B.S. degree from Southwest Texas State University in San Marcos TX in 1992 where he did research in the bioinorganic chemistry of Vanadium with Carl J. Carrano and



his PhD from the University of Illinois at Urbana-Champaign in 1999 where he worked with Greg Girolami on transition metal based ferromagnetic materials. He was a Postdoctoral Scholar at Cornell University from 1999-2001 with Peter T. Wolczanski where he did some organometallic synthesis. He served on the faculty at the University of Kentucky where he established

a research program in magnetic materials, photoresponsive materials and molecule-based devices. Some of his work has been cited extensively. He is currently an NSF CAREER Awardee (2007-2012).

The Faculty

Eike Bauer is now in his third year and his research group is established and they are seeing good results. He currently has four graduate students and one undergraduate (truly international, USA, India, Russia, Germany) and they have published their first results in (*J. Organomet. Chem.; Advanced Synthesis & Catalysis; Inorg. Chim. Acta, Current Org. Chem.*). He was recently invited to give a talk at the Missouri Organic Day in April 2009. As a little "side" project, he and Rudi Winter have a small archaeology project in collaboration with the Anthropology Department at UMSL and the St. Louis Art Museum. The museum bought from a dealer a small Aztec mask made of stone, which is covered with turquoise mosaic. Possibly used for funerary rituals, it would be one of the rare examples of a stone mask from that time that is decorated with mosaic -- if it is authentic. There is doubt that the mask was actually manufactured in antiquity by Aztecs; it could be either a fake or the mosaics are a "modern" modification of an old mask. To study this they will analyze (by GC and GC/MS) the glue used to put the mosaic pieces on the mask. If it were ancient, it should be pine resin, whereas more modern glues are often protein-based. The project is part of UMSL undergraduate Jon Webb's thesis, supervised by Dr. Michael Ohnorsorgen, assistant professor of archaeology in the anthropology department. Eike is a bachelor and happily awaiting his second nephew to be born soon to his sister. He looks forward to seeing his family in Germany over the Xmas holidays. He is also happy to have found departmental colleagues who share his passion for heavy metal music. He, together with Steve Holmes and Keith Stine attended concerts from Metallica and Mtoerhead and they find it inspires their research!

Alicia M. Beatty graduated from UM-St. Louis and is delighted to return as a faculty member. Her academic career has completed a circle: She is going to teach many of the courses she took here as an undergraduate, and she already has two undergraduate students signed up to do research in her laboratory in Spring 09. Her research has evolved from organometallic synthesis to organic and inorganic crystal engineering, and now, as a member of the Center for Nanoscience she will also cultivate new research in materials science. She lives in the south side of St. Louis with her "children", Lucy (a Shih-Tzu) and Callie (a calico cat), and escapes from chemistry by reading fiction. She is looking forward to returning to outdoor activities such as hiking and canoeing, which were well-nigh impossible in rural Kansas and Mississippi.

James S. Chickos tells us he has neither complaints nor any adventurous trips abroad or breathtaking bicycle treks to report although he did manage one bike trip this fall to Delaware with the guys he regularly bikes with each week. They call themselves the Kingsbury Bicycle and Bagel group and the logo on their T-shirts is a bicycle with two bagels for tires -- one of which has a big bite in it for obvious reasons. And he did spend some time on South Padre Island where he did some salt water fishing. He is now the longest serving faculty member in the department, who is not formally retired, but he keeps himself healthy by spinning in the gym and also playing racquetball

against younger colleagues. He also continues to publish research articles at a very steady rate. Son Aaron is finishing his third year of law school at UMKC, daughter Sarah is a patent lawyer in DC and her office is on Connecticut Avenue overlooking the Capitol Building and the White House - a perfect place to view the festivities associated with the inauguration of Barack Obama. Daughter Mary has been active as a substitute teacher this year, works at the St Louis symphony, and plays in the Philharmonic Orchestra.

Valerian T. D'Souza has taken on a large teaching responsibility and reduced his research effort. He is still looking into some collaborative effort with some Indian scientists and when the right project and persons avail themselves, he will increase his research effort to a level that is appropriate to the opportunity. Vally is helpful with the Web page and brochures, etc., and he and the editor work together on many of these activities. He attended The International Society for the Study of Subtle Energies and Energy Medicine (ISSSEEM) conference in Boulder this summer and traveled to Switzerland to visit family members and spent some time at The Federation of Damanhur in Italy. It is a spiritual community based on research and action which claims to be "a laboratory for future of humanity". Expansion of his personal horizon and consciousness seems to be the main theme of his personal pursuit these days.

Alexei Demchenko, who teaches organic chemistry and does research in synthetic carbohydrate chemistry, had published 16 articles this year when we went to press. In addition, Professor Demchenko edited "Handbook of Chemical Glycosylation" that was published by Wiley in 2008. He has been serving on the Executive Committee of the Carbohydrate Chemistry Division of the ACS and on the Editorial Advisory Board of Carbohydrate Research (Elsevier). He has become a panel member for Science Foundation of Ireland. In 2008, his research program was supported by grants from NSF, the NIH and a new grant was awarded by the American Heart Association. Currently, his group contains a post-doctoral fellow **Archana Parameswar** PhD 2008, and six graduate students.



Congressman Lacey Clay with Jimmy Liu, Chris Spilling, George Gokel and others when he visited the Center for NanoScience.

Cynthia Dupureur spoke at two regional ACS meetings in 2008. She returned to Columbus, OH, where she did her PhD work, to speak at a symposium honoring the retirement of her

PhD advisor, Prof. Ming-Daw Tsai, from the Ohio State University and in October, made her first trip to Nebraska (state #43!) to speak at a symposium at the Midwest Regional meeting. For its annual summer "Hooky Day," the Dupureur Group toured Onondaga Cave and picnicked in the park near the Meramec River. Gratefully, the group is much better at frisbee than canoeing. In October, Charulata Prasannan and Dr. Dupureur attended the Gibbs Conference on Biothermodynamics held in Carbondale, IL, while Supratik Dutta went to Little Rock to give his first talk at the Southwest Regional ACS meeting. Dr. Dupureur continues as chair of graduate recruiting and admissions and asks that you encourage promising students to apply to our graduate programs.



Hal Harris playing tennis at a tournament in Tulsa, OK.

Thomas F. George is privileged to be a faculty member in the department. He says the faculty, students, staff and programs are truly outstanding, and we have tremendous supporters from our departmental alums and other friends. He is excited about the upcoming new building and renovation for our science complex. While the financial climate in the state and nationwide/worldwide is challenging, he is optimistic about our future, which builds on an outstanding base thanks to everyone associated with our department. In his spare time (whatever that is), he is maintaining a research program in laser-materials/chemical physics. A recent direction in which he has embarked is laser-cancer therapy. Specifically, he and his collaborators are exploring laser-induced explosion of absorbing nanoparticles in selective nanophotothermolysis of cancer, which is realized through fast overheating of a strongly-absorbing target during the time of a short laser pulse when the influence of heat diffusion is minimal. On the basis of simple energy balance, they can determine the threshold laser fluence for thermal explosion of different gold nanoparticles. Explosion of the nanoparticles may be accompanied by optical plasma, generation of shock waves with supersonic expansion, and particle fragmentation with high kinetic energy of fragments, all of which can contribute to the killing of cancer cells. In September 2008, he presented an invited seminar on this work at the Washington University School of Medicine with a collaborator from Rose-Hulman Institute of Technology.

George W. Gokel seems to be very busy these days considering his travel schedule. During the past year, George presented a number of lectures outside the University including a plenary lecture at the International Symposium on Supramolecular

Chemistry held in Las Vegas and the Brewster Lecture at the University of Kansas in Lawrence. He gave a lecture in the course "Current Topics in Nanomedicine" at the Washington University School of Medicine and also presented a lecture in the Michael Johnson Science Seminar Series at Maryville University, here in St. Louis. He also gave lectures at University of New Orleans and at Tulane University. Dr. Gokel also testified as an expert in Federal Courts at two trials that involved pharmaceutical and nutritional products. He now has taken on a UM-St. Louis graduate student, having brought quite a number of them from Washington University when he joined us more than two years ago. One of his recent doctoral students, Lei You, has moved as a post doctoral fellow to the University of Texas to work with Eric Anslyn. Another doctoral graduate, Elizabeth Elliott, has accepted employment with Crosslink in Springfield, Missouri. He taught organic chemistry last spring and also moved into the laboratory formerly occupied by the editor. He chaired the long range planning committee for the department which came up with some suggestions for quite sweeping changes in our approach to the sub disciplines of chemistry. Unfortunately, the shortage of funds may preclude an early implementation of some of the plans.

Harold H. Harris was the first speaker of what is hoped will be a series of "Science Cafes" sponsored by the local ACS Section when he presented "Science for Future Presidents" at the Schlafly Bottleworks restaurant/bar in Maplewood in October just before the election. An excellent turnout of chemistry professionals and a few other citizens may suggest that departmental seminars would be better if beer and good food were served. When the weather was decent, Hal had been commuting by bicycle several days a week from his home in Creve Coeur. Recently, a freak accident (in peaceful Bel Nor) landed him on his face and in the emergency room and dentist's office for a day. Fortunately, nothing was broken and he is as foolish as ever. He plans to try the December 14 time trial on the new Highway 40 before it opens to car traffic. He hopes not to find speed bumps (the cause of his downfall) on the interstate. Hal has also been involved with a project that provides professional development to science teachers in the Bayless School district this year who are trying to cope with the special problems of teaching science to a population of students whose first language is not English.

Wesley R. Harris and his wife Marion attended the National ACS meeting in New Orleans last April. Wes saw Dr. **Yahia Hamada** PhD 1999, one of his former PhD students, who is on the faculty at Le Moyne Owen College in Memphis. Yahia is heavily involved in undergraduate research and was attending the meeting with several undergraduate students. A few months ago Wes had lunch with former PhD student Dr. **Zhepeng Wang**, PhD 2000. Dr. Wang is a staff scientist at the Washington University Medical School, working in the lab of Dr. Linda Sandel in the Department of Orthopaedic Surgery. Zhepeng and his family are doing well. The biggest news from his current research group is that Rashmi Sharma returned to India over the Christmas break, not just to visit family, but also to get married.

Stephen Holmes has settled into the department. He occupies the research lab once referred to as the inorganic chemistry bull-

pen next door to Wes Harris Lab (R306 & 308). He currently has 2 graduate students working and two postdoctoral fellows. Of these students two graduate students (Uma Mallik and Jeff Withers) and postdoctoral fellow (Yuanzhu Zhang) traveled with him from the University of Kentucky. He has also recently hired second postdoctoral fellow. He currently resides in Greendale with his three dogs (Trotsky, Luiba, and Emma) while his wife Keeta continues her Instructional Technology directorship position at Centre College and runs their household in Danville, KY. Steve enjoys live music and often cohorts with Eike and Keith at heavy metal shows. He also enjoys astronomy and assists with monthly telescope viewing outings with Janet Wilking's husband physics professor Bruce and maintains an African cichlid aquarium (fish tank) in his office.

Jingyue (Jimmy) Liu spent a busy year building the brand name of the Center for Nanoscience (CNS) so this section includes material about the Center. With Chancellor George and Ms. Kendra Perry (Director of Government and Business Relations) he discussed the research programs of the Center on KWMU's *St. Louis on the Air* program and responded to callers' questions on the impact of nanotechnology. He gave several talks at international conferences showcasing the CNS at UM-St. Louis. He gave seminars at universities in China, Korea and the US on his research in nanoscience and the visions and strategies of the CNS in efforts to attract talented graduate students to the departments of Chemistry & Biochemistry and Physics & Astronomy. Collaboration with local companies is one of the main goals of the CNS and to this end he has spent much time giving talks and visiting them to disseminate the knowledge and capability of CNS. Inviting industrial leaders to present at the joint monthly CNS/Chemistry/Physics colloquium has been an exciting development for students. On a personal touch, he has been developing research programs in alternative energy (e.g., nanocatalysts for hydrogen production and for fuel cells), biosensors based on nanostructured metal oxides and nanomedicine (drug delivery and diagnostics) and spending time at Oak Ridge National Laboratory (ORNL) to access their multimillion dollar equipment. His most recent achievement is the planned acquisition of two important pieces of instrumentation for the CNS in 2009. One is a state-of-the-art powder X-ray diffraction/small-angle X-ray scattering instrument with position sensitive detectors, high-temperature stage and capillary probes obtained through funding from UM Research Board and from his individual startup funds. The other is the confocal laser scanning microscope to be purchased in 2009, funded by the Missouri Life Sciences Research Board. Professor Sam Wang, Biology is the leading PI on this proposal which includes several CNS members (including Jimmy Liu) as co-PIs on this proposal. Both the XRD/SAXS and the confocal LSM will be housed in and operated by CNS.

Rensheng Luo runs the NMR Lab and notes that more and more of or alumni in industry are using our facilities. In 2008 he published 3 papers, directed the research of senior undergraduate Audrey Carpenter and attended the 49th Experimental Nuclear Magnetic Resonance Conference at Asilomar, California in March. In his spare time, he volunteers as the Director of parents' activity in the St Louis Modern Chinese School (SLMCS). The primary mission of the SLMCS is to provide a nurturing avenue for students of all ages and ethnic backgrounds

to learn the Chinese language and share Chinese culture. There are 400 students this year. He is proud that his daughter Dee got another chance to go to Washington DC for the National History Competition in June and finally got the Bronze prize. This year there are about 500,000 national students joined this competition. To recognize this accomplishment, she was awarded the 2008 Missouri Governor's Humanities Award.

Michael R. Nichols continues to work on the self-assembly biophysics of the Alzheimer's amyloid-beta peptide and its biological activity. Current PhD students include Deepa Ajit, Nikkilina Crouse, Geeta Paranjape, and Maria Udan. Undergraduates in the lab this past year were Jill Touchette and Matheen Mohabbatt. Both presented their research at the ACS St. Louis Section Undergraduate Research Symposium as well as the UMSL Undergraduate Research Symposium. Conferences attended by lab members included FASEB Neural-Immune Summer Conference, the Society for Neuroscience (Washington DC) and the ACS Midwest Regional (Kearney, NE).

James J. O'Brien had nothing to give us this time so this is short. He has been teaching physical chemistry recently and others have taken over the Instrumental Analysis lectures. His daughter Christine, we believe, is now at the University of Illinois and Emily is a junior at *Incarinate Word Academy*. Jim also provided us with photographs for inclusion in this volume.



Faculty colleagues with Charlie Armbruster at the reception honoring him, from left H. Harris, Winter, Garin, Spilling, Stine, Wilking, Chickos, Barton and Henson (Physics).

Nigam P. Rath has been very busy running the X-ray diffraction laboratory. With several new users the x-ray facility is trying to collect as many data sets as possible. Major efforts are underway to add a diffractometer to meet the demand on data collection time. We are trying to upgrade the old area detector to the next generation larger, more sensitive detector. On the personal side, his daughter, Niharika Rath, has started college.

Christopher D. Spilling continues as Chair of the Department. In addition, he served on the University Senate and the Search Committees for the Vice Chancellor for University Development and for the Dean of the College of Arts and Science. His NIH funded (and other) research continues to go well. He co-authored three articles in 2008. He graduated his 12th and 13th PhD students, **Saibal Bandyopadhyay** and **Nongnuch**

Sutivisedsak. Saibal is currently a postdoctoral associate with Dennis Bong at the Ohio State University and Nuch is working for the USDA in Peoria, IL. His current research group consists of four graduate students and the whole group attended the southwest regional meeting of the ACS in Little Rock Arkansas. The Spilling family is well. Andrew (17) is a senior at Chaminade College Prep, Robert (15) is a sophomore at the Fulton School in St. Albans and William (10) is 5th grade at St. Ann's, Normandy. Andrew has been admitted to Embry Riddle Aeronautical University with an NROTC scholarship. However, he has applied to the US Naval Academy and hoping to receive an appointment soon. Some of you reading this will remember when Andrew was born, early in Chris' tenure at UMSL. In fact he had to cut short a trip to the ACS Central Regional Meeting in 1991 to be with his wife Kathy when she went into labor.

Keith Stine completed a very important year. He served as Chair of the Saint Louis Section of the ACS and as a key member of the campus re-accreditation team. He also was promoted to the rank of full Professor in the department. During 2008, together with his group and collaborators he published a total of seven papers in a unexpectedly wide variety of journals with papers appearing in *Journal of Agricultural and Food Chemistry*, *Thin Solid Films*, *The Analyst*, *Biochimica et Biophysica Acta*, *Journal of Organic Chemistry*, *Journal of Membrane Science*, and *European Journal of Pharmaceutical Sciences*. His group presently consists of two graduate students. During summer of 2008, he hosted high school students Neena Parikh and Rachel Zeiss in his lab as a part of the STARS program, and Neena later

won an award for her research paper. His research remains



Keith Stine in his research laboratory.

focused on studies of model membrane systems and surface modification of nanostructures for life science related applications, at present with a focus on nanoporous gold.

Janet Braddock-Wilking now has a research group composed of a postdoc, four graduate and one undergraduate student. Her second PhD student, Ngamjit Praingam graduated in May 2008. During the year she presented a poster at the 41st Silicon Symposium in San Francisco, CA in April, gave an invited talk at the 15th International Symposium on Organosilicon Chemistry in Jeju, Korea in June and gave invited lectures Tokyo Institute of Technology, Southern Illinois University at Edwardsville, University of Western Ontario and McMaster University in Canada. Her family took a trip to Honduras in June 2008. Son Alex is in 10th grade and just got his driving permit and Kevin is now in 7th grade. Janet accompanied him and 5 other scouts to the Chemistry Merit Badge Clinic at Jost Chemical, sponsored

and arranged by the St. Louis Section of the ACS. Kevin's picture appeared on the cover of the *Chemical Bond*.

Chung F. Wong told us that it was a year for the junior members of Chung's lab to shine as well. High-school student Marshal Huang worked in the lab as part of the Students and Teachers As Research Scientists (STARS) program and had received the Solutia Award for Excellence in Research for his paper "Computational Analysis of Magnesium-ATP Interactions in Protein Kinases". Undergraduate Manish Agarwal also co-authored a paper published in the *Journal of Chemical Physics*."

Zhi Xu continues to work on his new technology, "Ultrasensitive Transmission Spectrometer". He has expended his research into the field of non-invasive optical blood glucose detection.

Emeritus Faculty Members

Lawrence Barton is in the second year of a phased retirement although he hopes it will likely be several years before he gives up his departmental activities. He taught the senior level inorganic chemistry course in the fall 2008 semester. In addition he has been busy with alumni activities including of course writing this tome, organizing the events associated with the honoring of Dr Armbruster and the Chemistry Alumni Council, the Murray Lecture and the Alumni Lecture. Her is also heavily engaged in undergraduate advising and serves on the departmental undergraduate committee. He attends each National ACS meeting, serving on the committee on Committees and also as a Local Section Councilor. He and Pat spent February in Fort Myers, FL., golfing, watching birds and generally relaxing. He played golf more this past year than ever before – his handicap started at 16, rose to 21, dropped to 15 and ended at 19 – not a model of consistency!

Joyce Y. Corey taught her last formal class in December 07 and "officially" retired at the end of February 08 but the hours she spends in her office each week are barely different from before retirement. She is updating a review that was published in early 1999 in *Chemical Reviews*. She attended the 41st Organosilicon Meeting in San Francisco last April where she chaired one of the sessions. Quite remarkably, she and Janet Wilking had no travel misadventures and they were also were able to meet with **Quinzheng Wang**, PhD 2002, for dinner in Chinatown. The next Organosilicon meeting will be held in New Jersey and she expects to go and then in 2010 it will be in St. Louis and will be organized by Janet Wilking with a little help from her and Peter Gaspar (Washington U). She still interacts with the graduate students and after a long drought we now have 7 PhD. students in the Inorganic Division. On the personal front, she continues to go to Maine for four weeks every in July. She enjoys looking at the water and making sure that the tide comes in and out. She adopted two kittens from a feral mother and they have certainly brought some entertainment into the household. They managed to disappear after about 10 hours and it took several days to find where they were hiding - under the dishwasher in a spot she couldn't reach. She managed to get them out and had to block their entrance with a can of tomatoes. She eventually made peace with each of them and vice-versa but they still rule the roost and they have an incredible amount of energy. Because of their

respective characters and different personalities she named them Hissy and Pissy.

David L. Garin is in his third year as President of the UMSL Retiree's Association. The Chancellor recently asked him if he was subject to term limits. **Sean Dingman** BS 1994 was at the Murray banquet and Garin reminded him of the poem he and **Lori (Metz) Polette** BA 1994 sent him after they completed organic lab, which included:

*Fear no more the UV's glare
Nor the NMR's monstrous globs
Or Herb's blank and infinite stare.
As he cowers from Herb's beckoning sobs.*

*3 unknowns, discover we must
Unscramble the riddle, or turn to dust*

The Herb so immortalized was none other than Teaching Assistant **Herb Kaiser** PhD 1996..



Betty Eshbaugh, long serving secretary in the department and her former boss Charlie Armbruster

Jane A. Miller lives with her son Bill in University City. She has been working with the Wednesday Club, a women's study group, for several years and recently lectured to them on the women Nobel Prize winners from St. Louis, Gerti Cori and Rita Levi-Montalcin. She also works with the Lifelong Learning Institute at Washington University which grew out of the Elderhostel activities there. In that she did a series on women Nobel Prize winners and others on Evolution, Chemistry and the history of chemistry. She regularly sees Joyce Corey and former students **Joan Twillman**, BA 1980 **Jeanette Hencken** BA 1984 and **Liz Peterson** (BA Biology 1980).

Rudolph E. K. Winter continues to be a permanent fixture in the department, primarily helping run the Mass Spectrometry Facility and collaborating with colleagues in their research. He punctuates this with time spent with his five grandchildren, some of the time in St. Louis and some of it in Florida where three of them live with daughter Elizabeth and her family. This year we were worried because he had surgery to replace a heart valve but he is back again as good as new.

New Staff Members

Joe Flunker joined the department last fall as Scientific Glass Blower replacing the late Ken Owens. Joe had previously been at

Washington University and came with the strong recommendation of Ken Owens.

Bruce Burkeen joins the staff as Senior Engineering Technician. Bruce is the replacement for Ted Windsor. Bruce has worked at Mallinckrodt Inc. and also at McDonnell-Douglas/Boeing as a tool and die maker, a machinist and in instrumentation construction.

John Tubbesing joined the staff recently as Senior Electronics Technician, as a replacement for Mark Regina who resigned last fall. John joined us from the SSM System where had been since 1985, originally working at Cardinal Glennan Hospital. He holds an associate's degree from the St. Louis Community College in biomedical engineering and a bachelor's degree in electronic technology from Washington University College.

Former Staff Members

Betty Eshbaugh who ran the department office from 1964 – 1996 was here for the reception in honor of Charlie Armbruster. She splits her year between her home in Ferguson and one in Pharr, Texas, 3 hours south of San Antonio on the Rio Grande. She tells us she keeps fit by dancing 2.5 hours a day! Her daughter Lelo is a lawyer and is working for the FDA in suburban Washington, DC. Her son Eric, Betty's grandson, is now 14.

Lisa Hoguet lives with her family in Wentzville and continues to work part time in Hazelwood.

Randa Scheider was in touch with us and we were shocked to learn that she has been very ill and underwent surgery to remove tumor which started in her colon. She is trying to keep her spirits up as she approaches the next stage of treatment which may involve more surgery and certainly chemotherapy.

The Robert W. Murray Lectureship

This departmental function continues to be the major event of the visiting speaker program and it enters its eleventh year in 2008. The speaker in March 2008, the 11th Annual Robert W. Murray



Lecture, was **Dr. William R. Roush**, Executive Director of Medicinal Chemistry at Scripps Florida, who spoke on *Recent Studies in Organic Synthesis: Applications of the Double Allylboration Reaction in the Synthesis of Natural Products* Scripps Florida is where Dr. Harry W. Orf BS 1971 is Vice President for Scientific Operations and Professor of Chemistry. This year we changed the schedule and the 12th Annual Lecture was given by **Dr. Philip P. Power**, Professor of Chemistry the University of

California-Davis, on December 5. He spoke on *Direct Hydrogenation of Main Group Compounds* and a photograph of Professor Power appears on page 7.

Scholarships and Fellowships

The Lawrence Barton Scholarship: This Scholarship is designed primarily for junior chemistry majors who are first generation college students and who have some financial need. The endowment provided a stipend of \$1,500 and the 2008-2009 recipient was **Holly Schiebel**.

The M. Thomas Jones Memorial Fund: This Fellowship is the only endowment that recognizes performance by graduate students. It was initially funded through contributions from family, friends and colleagues of Dr. Jones and recently his widow Patricia Jones has made substantial contributions to allow us initially to endow it and to improve it. Currently it is used to fund an annual award for the top graduate student seminar in each semester. The graduate students vote on this award and in 2008 the award went to **Laurel K. Mydock, Saibal Bandtopadhyay** and **Archana R. Parameswar**.



Dr Spilling and 2008 Jack Coombs Awardee Rashmi Sharma

The Barbara W. Brown Fellowship for Women in Chemistry: This Fellowship is designated for women students over the age of 24 and **Barbara (Willis) Brown** (BA 1984) established it. The 2007-2008 fellowship went to **Audrey Carpenter**. Again, this is the only fund that is dedicated to the support of women students and you can designate your contribution to this fund if you wish.

The Eric G. Brunngraber Undergraduate Research Fellowship: This Fellowship, which has existed since the late 1980s but was recently endowed by the family of the late Dr. Eric G. Brunngraber, supports undergraduate research. If you are interested in supporting this important aspect of the department's activities, you may designate your contributions to this fund. For 2007 the fellowship went to **Matthew Stockel**.

The William and Erma Cooke Memorial Scholarship: This, the major endowed award in the Department, is designed primarily for sophomores. Dorothy and Al Greco endowed it in honor of Dorothy's parents William and Erma Cooke. **Dorothy (Cooke) Greco** received her BS degree in chemistry and **Alfred O. Greco** graduated with a degree in biology, both in 1971 and both went on to become now

physicians. The Fellowship had provided support for two students annually now since 1992. In 2008 fellowships went to **Nathan Birhanu, Nichole Curvey** and **Merci Kiiru**.

Other Departmental Student Awards

Undergraduate

The award for the **Outstanding Student in Introductory Chemistry** went to **Claire Holtwick** who received a certificate and the Handbook of Chemistry and Physics from the Chemical Rubber Company. The **Award to the Outstanding Student in Sophomore Chemistry** went to **Nathan Birhanu** and the **American Chemical Society Award for Analytical Chemistry** went to **Joe Kolf** and **James B. Carroll** who received a certificate and a one-year subscription to *Analytical Chemistry*. The **American Chemical Society-St. Louis Section's Outstanding Junior Award** went to **Todd Crawford**. The award was presented at the annual Awards Night during the ACS St. Louis Section's Chemical Progress Week. **Adele L. Pacquette** received the **Alan F. Berndt Outstanding Senior Award** and the **American Institute of Chemists-Student Award Certificate**. The 2008-09 Undergraduate **Chemistry Aid to Education Awards** were given to **Audrey Carpenter, Nichole Curvy, Matt Keim, Todd Crawford, Nathan Birhanu, Mercy Kiiru, Holly Scheibel** and **Ryan Uding**. Finally a **Certificate of Commendation for Outstanding Service** went to **James B. Carroll**.

Graduate

The 2007-08 **Graduate Student Research Award** went to **Laurel Mydock** and the 2007-08 **Graduate Teaching Assistant Award in Memory of Jack Coombs** was awarded to **Rashmi Sharma**. **Kyle Toti** was the *Outstanding MS student*. **Aileen Bongat** and **Maria Udan** were first and third respectively in the **Graduate School Fair Research Poster Competition** and a **Graduate School Dissertation Fellowship** was awarded to **Maria Udan**.

Distinguished Alumni Lecture

The 21th *Annual Distinguished Alumni Lecture* was presented by **Dr. Timothy T. Wenzel** who is a Research Leader at Dow Chemical Co. in Midland MI. He received a BS in chemistry



Drs Barton and Wenzel

here in 1978 and then did a PhD degree at Cornell University with Professor Mel Goldstein followed by postdoctoral work with Professor Robert Bergman at UC-Berkeley. He spent several years at Union Carbide in

Charleston WV which became a subsidiary of the Dow Chemical Co. in 1999. His recent research has involved novel approaches to olefin polymerization referred to in the literature as "chain shuttling polymerization". Some of his work was published in

Science and featured in *C&E News*. The lecture, "New Polymers from Old Monomers" was held on April 30 in Benton Hall following a 30 minute awards program. A reception followed in the Alumni Center.

Editor's Column (Lawrence Barton)

Although I am continuing my version of the history of the department, this time covering 1970 – 1975, I begin with a few general comments. This has been a good year for the department. We are up to strength with 17 plus faculty members, the number we had between 1970 through the millennium and most indications of success for the department are good. We could always raise more external grant funding, but that goes for almost all chemistry departments! The highlight of the year was the celebrations surrounding the honoring of Charlie Armbruster. The turnout for the reception and Commencement was outstanding. It certainly is fitting that we honor this fellow who made such an impact on the department and the institution. I am also very pleased with the response to our appeal for contributions to the Charles W. Armbruster Scholarship Fund. The response thus far has brought in just over \$30K which allows an annual distribution of only \$1.5K. As perhaps you know, I have very rarely solicited contributions and when I have the response has been excellent. In this case, I cannot think of a more worthwhile tribute to Charlie than this, so I hope that those of you who have not contributed will please reconsider. No matter how small a contribution you make, to be a part of this effort will make you feel proud of our heritage. Something else I am very pleased about is the work and interest of those who make up the Chemistry Alumni Council. For me this has been and continues to be a most rewarding activity. Back to the history:



2008 Outstanding Junior Todd Crawford and 2008 Outstanding Senior Adele Pacquette

The end of the 1960s was hectic on the UMSL campus as well as across the nation. Major civil disobedience activities followed the assassination of Dr. Martin Luther King and accompanied the 1968 Democratic National Convention but nothing seemed to stir the US university campus community like the slaying of four undergraduate students who were protesting the unlawful "Cambodian Incursion" at Kent State University.

At UMSL, campus reaction was strong and most formal classes were not held although many faculty members met their classes and held discussions. Four faculty members on campus were docked a day's pay for canceling classes completely. Some colleagues, including the editor, formed a group called the "Concerned Faculty", to provide a forum for the discussion of such issues.

At the end of the 1960s jobs in chemistry, especially in academia, were very scarce. I had been recruited in 1969 by the British government in their efforts to reverse the "brain drain", and in 1970 I accepted a position with the British Scientific Civil Service. I was persuaded to make it a "leave of absence" and I returned for the fall 1971 semester. Just before I left we added Hal Harris and Ken Barnett to the faculty. We had met them both at the ACS/CIC meeting in Toronto. Hal was an experimental and theoretical chemical dynamicist who came from a postdoctoral fellowship at the University of California-Irvine and Ken, a transition metal inorganic chemist, came from a position with Shell Development Co. in Emeryville, CA.

The position of Scientific Glassblower, previously held by Robert Cabaniss as a part-time appointment was made permanent in 1970 and Bob left his full-time position at what was then McDonnell-Douglas to be our full-time glassblower. Also around the same time Bill Garrison was hired as Electronics Technician to replace Dick Stanley who had held the position for a couple of years. In the fall of 1971 Ted Windsor joined the department with the title Electronics Technician but he also did machining and other work as mentioned on page 12. Of course the stalwart of the non-academic staff during the early years was Jack L. Coombs who served as Stockroom Manager from 1965 until 1977 and who passed away in 1989. Jack had been hired by Charlie Armbruster and was invaluable as Charlie and his early colleagues first set up the laboratories and the stockroom in the department.

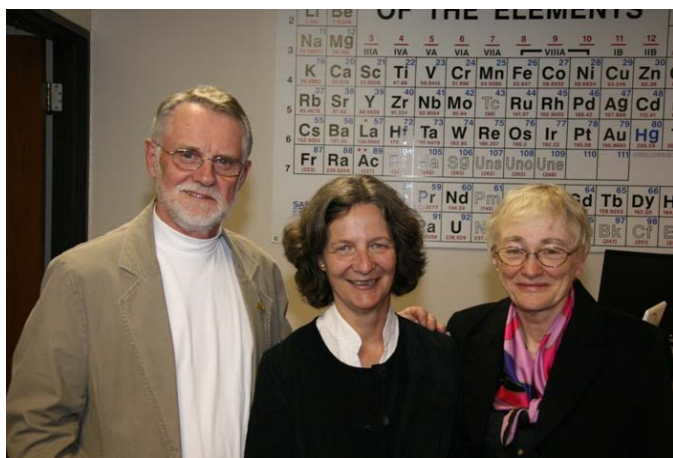
Also during the years 1969 - 70, male students were in jeopardy of being drafted and sent to Vietnam and a lottery system was established. Those with low numbers either were drafted or joined the National Guard and eventually were called upon to serve. Among the alumni from those years whom the editor had in class and with whom he is still in regular contact are Dennis Wester, Harry Orf, John Kolb, Dorothy Greco, Mike Young, Harold Messler, among others. Colleague Marcel Halberstadt left to go into industry at the end of 1971 and was replaced temporarily by John Gutweiler and later by Bob Penn. Gutweiler and Barry Kalman were regular part-timers in the department then and John is still with us – now on "a full-time" basis. Bob Penn came in fall 1972 from Texas-Austin where he was a postdoc, having done postdoctoral work in Wales, UK. His PhD degree was with Robert Curl at Rice who would later share the Nobel Prize for his work on buckyballs.

Instrumentation in the department was substantially improved around the end of the 1960s. We had purchased an AIE MS-12 mass spectrometer in 1969 after the editor and Eric Block had visited several vendors and when Tom Jones and Gene Corey were hired we had added a Varian E-12 ESR spectrometer and a Nonius X-ray diffractometer. Later on in the early 1970s we bought our first user-friendly NMR spectrometer, the Varian T-

60 NMR, which was later supplemented by two others as surplus from Monsanto.

Graduate work began in the department in the early 1970s. The PhD program was initiated in 1971 along with one in psychology and the MS program was initiated in 1974. We admitted two doctoral students, David Beach from SIU-Carbondale and Tara Jain from Bombay, India. The next year we admitted four students, Pauline Bellavance, Bill Paton, Farhad Ranjbar and Y-C Chan who soon left, followed by Donna (Alway) Friedman, Jang-Szu Su and Razia Hameed in 1973. The first Masters students were admitted in 1974 and included Mike Finkes, David Laurence, Sue Metz, Larry Kaempfe, and Loretta Halcher.

The early 1970s was a time when several campus buildings were completed including J.C. Penney, Lucas Hall, Mark Twain, the Social Science/Business Education Building and Tower and the University Center Buildings. The swimming pool was demolished against the wishes of many students and faculty and their families. This and the old club house had been part of the original Bellerive Country Club upon which the campus was built. The editor served on a committee to try to "save" the swimming pool and he also purchased a pencil sketch of the old administration building, which was the club house, again in an effort to save it. The sketch still hangs in his office! Benton Hall has been a work in progress ever since it was contracted as the first new building on the campus. The labs originally occupied by biology and physics became chemistry labs. The chemistry stockroom moved to the second floor and as other units moved out of Benton Hall, we expanded our activities to fill the space. Those years characterized by large classes and even in chemistry the graduating classes were large. Between 1970 and 1975 we averaged 26 BA/BS graduates which was a large number relative to institutions of a similar size across the nation.



Drs Barton and Corey with Dr Roberta Farrell BS 1975, who spoke in October (see page 6)

The first sabbatical leave by a chemistry faculty member occurred during this period took place in this period when Dave Larsen spent the 1971-72 academic year at the University of Kent at Canterbury in the department of physics with Dr. John H. Strange. The following year Dave Garin spent the 1972-73 academic year at Columbia University in New York with Professor Nick Turro. Following these, several colleagues spent six months or a year on another campus conducting research, usually in a new or related field of study to the one in which they

were already involved.



Recent graduates Aileen Bongat (PhD 2009) and Colin White (PhD 2007) at Joyce Corey's retirement party.

The first book to be published by chemistry faculty members appeared in the early 1970s when Jim Chickos, Dave Garin and Bob Rouse collaborated on *Chemistry: Its Role in Society*, published by D. C. Heath in 1973. The department had developed a new course, Chemistry 10, Chemistry and Society, in response to the relevance in education movement in order to attempt to attract more students to the non-majors' course.

A major perturbation to the relative calm in the University in the early 1970s was something called Role and Scope. This was an effort by then UM-system President C. Bryce Ratchford to refine the missions of the four campuses. The final recommendation was that the Rolla and St. Louis campuses would focus on graduate work in the physical sciences in addition to being comprehensive in scope and the Columbia and Kansas City Campuses would focus on the biological and health sciences. In cooperation with UMKC, UMSL would also focus on the social sciences while Columbia and Kansas City would focus on the arts and humanities. This is an oversimplification of the plan and some specialized activities such as the school of journalism in Columbia and the pharmacy school in Kansas City would be unique. The plan was eventually dropped but it certainly gave hope to the St. Louis campus which was program-starved at the time that this latter problem's visibility had been enhanced. The only tangible result of the role and Scope activities was the establishment of the Medical School in Kansas City and the enhancement of the biological sciences there.

The major development in the department at the end of this five-year period was that Charlie Armbruster, who had established the Chemistry Department, along with the Physics and Biology Departments would be s as chair by the senior member of the department Bob Murray. Bob would serve for five years as chair but that chapter of this history will have to wait until next year!■

Contributors 2008

Below we list the individuals, chemistry alumni and friends who made contributions to the department this past year. The list is very impressive and we are most grateful for your support. The list includes both general contributions and also those to specific

funds including the Brunngraber Scholarship, the Armbruster Scholarship Fund, the Lawrence Barton Scholarship, the Barbara W. Brown Scholarship for Women in Chemistry, the M. Thomas Jones Memorial Fund and the Robert W. Murray Lectureship. If we missed out your name, we apologize and hope you understand that we are fallible. Recent gifts will be listed next year.

CONTRIBUTIONS FROM ALUMNI AND FRIENDS 2008

Abbott Laboratories Fund
 Dennis M. and Marta K. Anglim
 Anheuser-Busch Foundation
 Applera Corporation
 David A. and Patricia J. Armbruster
 Siu W. Au-Yeung
 Robert S. and Joan L. Bader
 Rajiv M. and Marysusan Banavali
 Lawrence and Patricia J. Barton
 Rhea S. Baxter
 Dorothea M. Bean
 Phyllis R. Bennet
 Abbott Laboratories Fund
 Todd R. Boehlow
 Rodney and Mary Brannen
 Barbara W. Brown
 Eric H. and Ann M. Brunngraber
 Edward H. Brunngraber and Jacqueline R. Szmuszkovicz
 Roger W. and Claudia J. Buchanan
 John J. and Katherine J. Chaber
 Vincent H. Chang
 Yong Chen and Tizhen Zhou
 Covidien
 Kevin R. Criscione
 Anthony D. and Carol L. Daus
 Dennis M. and Elizabeth A. Delfert
 Michael B. and Donna K. Dietrich
 Robert L. and Margaret C. Dittrich
 John and Jennifer L. Doucette
 Charles M. and Snita Drain
 Frank C. Eddleman
 Kathleen A. Fallis
 Linda and Michael Finkes
 David L. Garin and Margaret Hermes
 Gateway Spine LLC
 GlaxoSmithKline Foundation
 Robert G. Goerss
 James J. and Colleen K. Grib
 Brian J. Grimmond and Yanina Levchinsky-Grimmond
 Harold H. and Mary E. Harris
 Michael A. and Lynn M. Hauser
 Martin E. Hayes and Antoinette N. Morris
 Lance G. and Carol J. Hellwig
 Donald G. and Cynthia M. Hesse
 Daniel A. and Lisa M. Hoguet
 Raymond and Virginia L. Houserman

Thomas F. and Pamela M. Jenkins
 Judith M. Johnson
 Patricia L. Jones
 John R. and Judith D. Kolb
 John S. Kozlowski
 Scott A. Long and Nichole A. Ballard-Long
 Rensheng Luo
 William Z. McCarthy
 Stephen L. and Jane M. McCarthy
 Michael C. Merriman
 Steven A. and Joyce E. Mestemacher
 Monsanto Fund
 Sharon J. Moran
 Robert W. and Claire K. Murray
 Gregory P. and Phyllis C. Noelken
 Douglas G. Nuelle
 Harry W. and Karen Orf
 Paternity Testing Corporation
 Dennis R. and Donna Patterson
 Lawrence E. Payette
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 Bruce E. and Vicki M. Ritts
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 David B. and Laura Seibel
 William R. and Dawn L. Shiang
 Sigma-Aldrich Foundation
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 Boeing Company
 Pfizer Foundation
 Kevin A. Trankler and Anchalee Thanavaro
 John R. Tubbesing
 Mr. Charles L. Thierheimer Jr
 Leslie E. and W. A. Tucker
 William E. and Laurie L. VanArsdale
 Angelo W. Vangel
 Nathan and Sandra A. Wagner
 James C. and Mary K. Warmbrodt
 Mark D. and Carol Ann Wilfong
 Bruce A. and Janet B. Wilking
 Eric E. and Karen L. Wright
 Hong Yong

Acknowledgments.

I wish to thank to **Patricia J. Barton**, BA 1978 for proofreading and to **Drs. Eike Bauer, Jim O'Brien** and **Janet Wilking** for taking many of the photographs, to others for providing photographs, to **Vally D'Souza** for help with the formatting, and to the Graphics and Printing and Services Office for being so cooperative and helpful over the years.

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