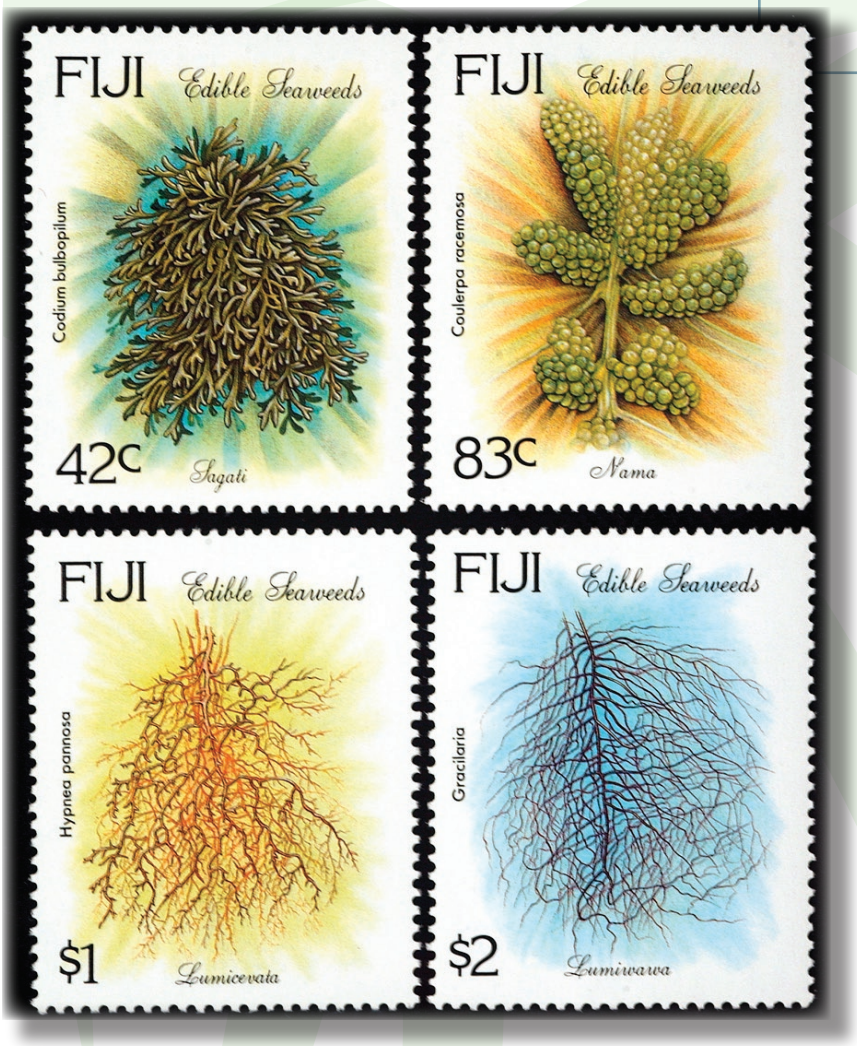
PHYCOLOGICAL NEWSLETTER

A PUBLICATION OF THE PHYCOLOGICAL SOCIETY OF AMERICA

SUMMER
FALL 2007

VOLUME 43
1
NUMBER 2



Editors:

Juan Lopez-Bautista
Department of Biological Sciences
University of Alabama
Tuscaloosa, AL 35487
jlopez@ua.edu

Alison Sherwood
Department of Botany
University of Hawaii
Honolulu, HI 96822
asherwoo@hawaii.edu

Postage stamps depicting algae by M. J. Wynne
(see notice p. 19)

INSIDE THIS ISSUE:

Dear PSA members,

This is the second digital issue of the PSA newsletter! Remember that you no longer will be receiving paper copies of the newsletter. Electronic versions allow for faster delivery to your email inbox, color imaging, and hyperlinks to related material (all for a much lower cost to the Society!). In this PDF version you will find email addresses and website links. Just click on an e-mail address and your dedicated e-mail software will start a new message. Similarly, when you click on a website link, your browser will load and take you to the website. Also, remember to update to the latest free version of Adobe Reader (www.adobe.com)

Juan Lopez-Bautista, Editor
Alison Sherwood, Co-Editor

AWARDS AND NOMINATIONS

Gene Stoermer at 2007 North American Diatom Symposium held at the University of Michigan Biological Station, Pellston, Michigan.

2007 PSA Award of Excellence
Eugene F. Stoermer

Dr. Eugene F. Stoermer of the University of Michigan, Ann Arbor, was this year's recipient of the PSA's Award of Excellence. This award was established to recognize phycologists who have demonstrated sustained scholarly contributions in, and impact on, the field of phycology over their careers. Gene surely meets these criteria.

Eugene Stoermer received a McHenry Fellowship and worked with noted diatom phycologist Ruth Patrick at the Academy of Natural Sciences in Philadelphia. He received his PhD degree with Dr. John Dodd at Iowa State University. Following his degree in 1963, he was the recipient of an NIH Post-Doctoral Research Fellowship and continued his work in phycology at Iowa State prior to obtaining a position as Research Algologist at the University of Michigan, Great Lakes Research Division in 1965. He is now Professor Emeritus in the School of Natural Resources and Environment at the University of Michigan.

His primary contribution to the discipline of phycology has come during his 40 years as a Research Scientist in diatom systematics and ecology at the University of Michigan. He has over 100 published papers, book chapters and reports on the subject. He is the world's foremost authority on freshwater diatom communities of the region and has published additional research on large lakes of the world including Great Slave Lake in the NW Territories of Canda, Lake Baikal in Russia, and Lake Hovsgol in Mongolia. His expertise and collaboration with others led to new species identifications and increased our understanding of morphological variation within species and the phylogenetic relationships among species. He was awarded the Botanical Society of America's Darbaker Prize for meritorious work in the study of microscopic algae.

Dr. Stoermer has served the PSA as an Associate Editor (1978-1980) and as a member of their Editorial Board from 1985 to 1987. He is a past Vice-President (1987) and President (1988-1989) of the Society. Perhaps most importantly, Gene has been a major force in encouraging and helping several generations of phycologists. He has been an inspirational leader and a colleague of whom we can all be proud.

Gene was unable to attend the PSA meetings in Rhode Island because he was attending his mother-in-law's 100th birthday celebration in Florida, and so his former student Ed Theriot accepted the honor on his behalf. Then in early September Ed passed on the Award to Gene at the time of the North American Diatom Symposium held at the University of Michigan's Biological Station on Douglas Lake in northern Michigan.

2007 PROVASOLI AWARD WINNERS

2007 Provasoli Award winners: Matthew Johnson and Diane K. Stoecker

The Luigi Provasoli Award for the outstanding paper published in the Journal of Phycology during 2006 was presented to Matthew Johnson, Torstein Tengs, David Oldfach, and Diane K. Stoecker for their paper "Sequestration, performance, and functional control of Cryptophyte plastids in the ciliate *Myrionecta rubra* (Ciliophora)" [*J. Phycol.* 42:1235-1246]. The authors are all from the University of Maryland, except for Tengs, who is from the National Veterinary Institute in Norway.

Congratulations for a great effort!

2007 BOLD AND PSA POSTER AWARD WINNERS

Dr. Kirsten Müller of the University of Waterloo is pleased to announce that the Bold Award winner was Brent Bellinger (Significance of diatom EPS in food webs of Colne estuary biofilms: tracking 13C through lipids and polysaccharides tells the story) from Soil and Water Science Dept., University of Florida and Dept. of Biological Sciences, Michigan Technological University. Honorable mention was Jessica Muhlin (Across space and over time: processes that influence population genetic structure of *Fucus vesiculosus* L. in the Northwestern Atlantic) from School of Marine Sciences, University of Maine (see picture below [photo P. Kugrens]).

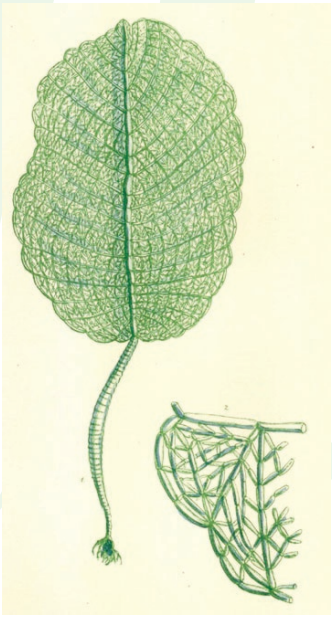
2007 Bold Award participants (from left to right): Takashi Hamaji, Charlotte Reid, J. Nana Annan, Hayley Skelton, Jessica Muhlin, Hilary McManus, John Hall, and Morten Smith.

SUMMER
FALL 2007

volume 43
4
Number 2

2007 PSA Poster Award participants (from left to right): Susan Clayden, Jingjie Yu, Haj A. Allali, Kyle Glenn, and Ryan Fikes

For the Poster Award (see picture above [photo P. Kugrens]), the winner was Syou Kato (Analyses of the ubiquitous species *Chara braunii* (Charles) in Japan based on morphology, chloroplast and nuclear DNA sequences) from Biological Sciences, University of Tokyo. Honorable mention was Susan Clayden (Red algal rogue Acrochaetes: *Rhodochorton membranceum* and *R. subimmersum* are allied to the Palmariales) Dept. of Biology, University of New Brunswick



CALL FOR NOMINATIONS!
2008 PSA Award of Excellence

The Award Committee is soliciting nominations for one or more Awards of Excellence. The PSA Award of Excellence honors scientists for a record of sustained scholarly activity, including teaching and service, who have had a major impact on the field of phycology. The Award is a career achievement award for a living phycologist. See previous awardees at http://www.psaalgae.org/soc/excel.shtm.

Nomination packages should include a single nominating letter from a PSA member highlighting the reasons for the nomination, and a complete CV for the candidate (including information relating to teaching and service). There should be two additional letters of support to complete the nomination package. All nomination packages received in the last two years will be considered for the 2008 award. Nominations will be welcomed for all fields of research/teaching on algae and also should highlight the candidate's service to PSA and/or other phycological societies. Inquires and/or materials should be emailed to Morgan Vis (vis-chia@ohio.edu), Chair, PSA Award of Excellence Committee, Department of Environmental & Plant Biology, Porter Hall Rm.

315, Ohio University, Athens, OH 45701. In order to receive full consideration for the Award that will be made at the 2008 annual meeting of the PSA, the complete nomination package must be received by January 15, 2008.

2007 Emerging Public Policy Leader Award

The American Institute of Biological Sciences, a Washington, D.C.-based scientific association dedicated to advancing biological research and education for the benefit of society, named **Amber Szoboszlai**, a Marine Sciences graduate student at the Moss Landing Marine Labs and California State University, as a recipient of its 2007 Emerging Public Policy Leader Award. Since 2003, AIBS has presented the Emerging Public Policy Leader Award (EPPLA) to promising biology graduate students with demonstrated leadership skills and an interest in science policy.

Prior to graduate school at the Moss Landing Marine Labs, Szoboszlai earned an undergraduate degree from Hampshire College in 1998. Her Master's research uses field experiments to examine how some species of algae growing in the intertidal zone may modify environmental conditions to promote the settlement and growth of the juvenile stages of another co-existing algal species. Szoboszlai received a Grant in Aid of Research and the Hoshaw Award from the Phycological Society of America for this work in 2006. She is beginning her Ph.D. research in marine ecology at the University of California, Davis.

Sarah Wright, a doctoral candidate in Botany at the University of Wisconsin, was also awarded a 2007 EPPLA. Wright was the recipient of a 2006 National Science Foundation Graduate Research Fellowship and is engaged in a number of national and state science education and outreach activities.

More information about Sarah Wright can be found at http://www.aibs.org

"AIBS is committed to improving the public understanding of science and communicating its value to society," said executive director, Richard O'Grady. "We are pleased to recognize Amber Szoboszlai and Sarah Wright for exemplifying this commitment through their work."

Holly Menninger, Ph.D.
American Institute of Biological Sciences

COURSES

Summer course: Marine Algae at Friday Harbor Labs
Session A: June 9 - July 12, 2008
5 weeks: M-F 8-5; S 8-12
Biology 539 (9 credits)
Dr. Bob Waaland and Dr. Tom Mumford

This course explores marine algae with emphasis on their role in marine ecosystems. The course will have several key components.

1. Investigating seaweed diversity and the practical skills essential for identification of these organisms will be examined through field forays and laboratory studies of seaweed-dominated cool temperate water communities accessible in the San Juan Archipelago and on the exposed outer coast of Vancouver Island. We will include at least two dredging trips for the deeper marine flora using the R/V Centennial.

2. The functional role of seaweeds in marine ecosystems will be examined through discussion, laboratory and field methods emphasizing the role of seaweeds as primary producers in coastal marine communities, their functional morphology and their interactions with other members of the marine community (e.g., role in food webs and as habitat). Lab and field exercises will include introduction to selected analytical gear (e.g., dissolved oxygen meters, nutrient analysis, and simple data loggers for temperature and light).

3. Quantitative analysis of the distributions and abundances of seaweed populations will be investigated with a combination of lectures and field and lab exercises. Empha-

sis will be placed on study designs, sampling procedures, methods of data analysis, and data interpretation. Practical applications such as the design of monitoring programs at multiple scales will be addressed; prior statistical knowledge is not a prerequisite.

4. Methods for cultivation of seaweeds will be investigated for use at laboratory to commercial scale as a tool to elucidate algal life histories, growth patterns and rates, physiological responses, ecosystem mesocosm experiments, and for production of food and chemicals.

This is a course appropriate for marine biologists, botanists and oceanographers with interests in marine biodiversity, conservation biology, and coastal ecology. Graduate students and advanced undergraduates students (juniors, seniors) and international students are encouraged to apply.

For additional information and a link to application instructions, information on fees, housing and financial aid information:
http://depts.washington.edu/fhl/student-Classlist2008.html#SumA-2

and /or contact
jrw@u.washington.edu
tom.mumford@dnr.wa.gov

Friday Harbor Labs has an excellent scholarship program for students participating in the course. Students are also eligible for the Croasdale Fellowships offered by the Phycological Society.

FRESHWATER ALGAE COURSE 2008

Where and when? Kindrogan Field Centre, Enochdhu, Blairgowrie, Perthshire, Scotland, Friday, 30 May – Friday, 6 June, 2008. This is the 13th year that the course has been offered.

http://www.field-studies-council.org/kindrogan/

Immediately following the Freshwater Algae course, the Algal Culture Collections meeting will take place at the Dunstaffnage Marine Laboratory, Oban, Argyll / West Highlands, Scotland, 8-11 June, 2008. You might like to consider combining both the course and the meeting in your travel plans.

What is the course about? The course takes full advantage of the excellent range of aquatic and terrestrial habitats in this beautiful area of Highland Perthshire to provide a sound introduction to the recognition, identification and ecology of freshwater algae. Emphasis will be placed on the use of the microscope and taxonomic keys (print and electronic) for the identification to generic and species level and their ecological importance.

Who are the participants? The course is open to individuals with different backgrounds ranging from beginners to those who would like to refresh their knowledge of particular groups of algae or experience collecting in a different region of the world.

What is the full cost of the course? The course costs £455 per person (approx €665 or $924), which includes accommodation, all meals (please notify the Centre if you have any special dietary needs) and tuition. This is excellent value for money and costs significantly less than other freshwater algal courses on offer.

Who are the course tutors? The course tutors, Dr Eileen Cox and Prof Elliot Shubert, have taught this course for the past twelve years and they have a wide-ranging expertise on freshwater algae.

Is there support for students? Yes, support for a student stipend is available from:
The British Phycological Society:
http://www.brphycsoc.org/funding.lasso

The deadlines for applications are: 30 September, 1 December, 1 March and 1 June. The sooner you apply, the better are your chances are of receiving a stipend.

Graduate students who are members of the Phycological Society of America are eligible for financial support to attend a phycology course at a field station from the Hannah T. Croasdale Fellowship:

http://www.psaalgae.org/student/stugrants.html

The deadline for applications is 1 March 2008.

Where can I find more information? For detailed information about the Kindrogan Field Centre:

http://www.field-studies-council.org/kindrogan/

A URL for the booking form will be available by the end of October 2007. A non-refundable deposit of £50 (approx €73 or $102) is required (credit cards are accepted). If you have any other queries, please contact:

e.shubert@nhm.ac.uk
Prof Elliot Shubert
Department of Botany
The Natural History Museum
Cromwell Road
London SW7 5BD, UK
Tel 020 7942-5606 (UK)
Tel +44 207 942-5606 (international)
Fax 020 7942-5529 (UK)
Fax +44 207 942-5529 (international)

The 9th Advanced Phytoplankton Course: Taxonomy and Systematics

At the Stazione Zoologica "A. Dohrn",
Napoli, Italy
from 5 to 26 April 2008

The Course aims at providing an updated background for the morphology, taxonomy, classification and phylogeny of the most important marine phytoplankton groups. It will consist of theoretical and practical sessions, with the examination of a broad collection of fixed, live and slide material.

Topics of the Course will include:
- methods and criteria for species identification
- methods of molecular and morphological phylogeny
- overview of specialized literature
- toxic and potentially toxic species
- general and specific aspects of phytoplankton biodiversity and biogeography

Who can apply: The Course will be open to 20 students. Criteria for selection of participants will include their previous experience in phytoplankton taxonomy (min. 4 years), possible role as trainers in their respective countries and involvement in ecological research and monitoring programmes.

Application forms and details are available at

www.szn.it/apc9/

Applications must arrive by e-mail to

APC9@szn.it

by October 15th 2007. Acceptance will be notified by December 1st 2007.

PHYCOLOGICAL TRAILBLAZER

No. 27: Jules Brunel

Jules Brunel (1905-1986) is remembered as an important researcher on both the freshwater and marine algal flora of Canada, in particular, that of the province of Quebec. But he is also to be remembered as one of the founding members of the Phycological Society of America (Parker, 1981) as well as serving as the Society's President in 1949. Brunel was born in Montreal, Canada, on April 12th, 1905. His father passed away in October of the same year. In 1916 he entered Longueuil College, which was a boarding school run by the teaching order Brothers of the Christian Schools. It was here in his last two years that he was first exposed to botany and to the teachings of the influential Montreal botanist Brother Marie-Victorin. Less than two weeks after graduating from the College in June of 1921 (and ranked first in his class), Brunel started the next phase of his education, at the University of Montreal. Here his training in botany was greatly accelerated thanks to his working as a secretary and research assistant in the laboratory under the direction of Brother Marie-Victorin. The Brother recognized Brunel's love for accurate language and writing. Starting in 1922, Brunel began contributing poems and short texts popularizing science, especially botany, to "Le Devoir", a Montreal newspaper, and also for CBC radio programs.

Brunel supplemented his courses in the sciences with additional courses in literature and philosophy. The first degree was earned in 1925, and this was followed with supplemental courses in botany, zoology, and geology/mineralogy, still at the University of Montreal. 1930 was an eventful year for Brunel. A degree in natural sciences was earned in May. In June he married (he and his wife would eventually have 7 children), and the months of July and August of 1930 were spent at the Marine Biological Laboratory in Woods Hole, MA, where he took the algae course taught by Wm. Randolph Taylor. Brunel returned to the University of Montreal to become a part-time lecturer in phycology, mycology, and cryptogamic botany. Five years later he was promoted to the rank of Associate Professor, and in 1943 he earned the rank of "titular pulpit of cryptogamy". In 1950 he was named full professor.

Fig. 1. Jules Brunel. Near Stockholm, 1950. (Taken by W. R. Taylor.)

Brunel became deputy director of the Botanical Institute founded by Brother Marie-Victorin, and he also served as associate editor of the series "Contributions of the Botanical Institute". He was also involved in helping produce Marie-Victorin's (1935, 1964) *Flore laurentienne*, contributing the write-up of the genus *Crataegus*,

which included 45 species of hawthorns. After Brother Marie-Victorin's premature death in 1944, Brunel succeeded him as Director of the Institute and served in that position to 1955. All of this time Brunel kept occupied with his responsibilities of teaching and in carrying out his own research projects. His Masters students included André Cardinal, Martine Villalard [Bohnsack], and Louise Venne.

In 1948 in Boston, attending a meeting of the AAAS at the Copley Hotel, Jules Brunel was one of the eleven phycologists who signed a document leading to the founding of the Phycological Society of America. He was the only Canadian with that distinction. In 1957 Brunel was the recipient of a prestigious fellowship from the John Simon Guggenheim Memorial Foundation, thus a "Guggenheim Fellow". This fellowship allowed him to sample and study algae of the boundary waters between Canada and the USA, from Quebec westward to the Pacific coast.

Jules Brunel's phycological research was impressive. He spent two summers (1952, 1953) conducting intensive fieldwork at the Mont-Tremblant Biological Station in Mont Tremblant Provincial Park, where he was able to identify a total of 389 algal species from various lakes in the park. Over the years he published on the results of his investigations on desmids and diatoms. Then the direction of his research became oriented toward marine phytoplankton, and so for the summers of 1954 and 1955 he conducted research on the unicellular marine algae of the Baie des Chaleurs. Ninety-two species were recognized. He worked out of the Station de Biologie marine de Grande-Rivière on the Gaspé peninsula, receiving help from his wife and a daughter. Research over those two summers resulted in his *magnum opus,* "Le phytoplancton de la baie des Chaleurs" (1962). For this publication Brunel was awarded the top prize in a literary and scientific competition in Quebec in 1963. A second printing of his treatment of the phytoplankton appeared in 1970.

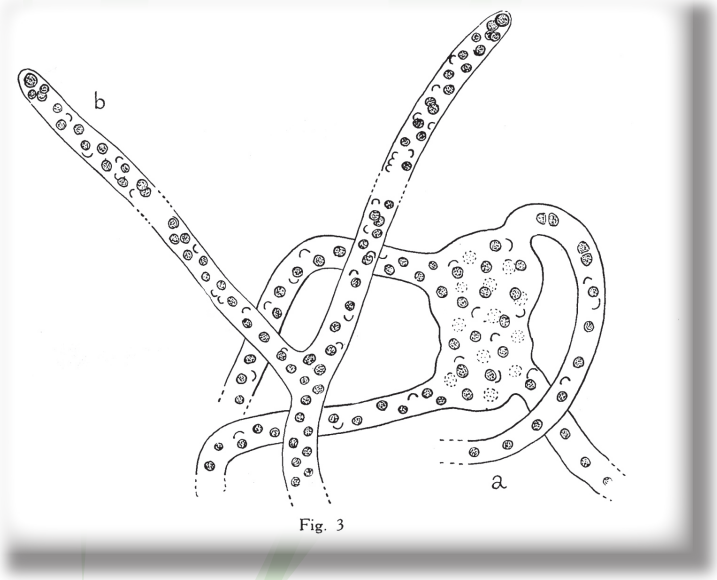


Fig. 2. *Schizochlamys delicatula* West var. *filamentosa* Brunel var. nov. [from Brunel (1932), fig. 3]. [*Schizochlamydella delicatula* (G.S. West) Korshikov]

Brunel also had an interest in history. In 1944 he contributed a thoughtful account of the historical stages in the development of the study of algae in North America. He regarded as major figures in marine phycology the following persons: Bachelot de la Pylaie, William Henry Harvey, William Gilson Farlow, Frank Shipley Collins, William Albert Setchell, and William Randolph Taylor. For their counterparts in the study of freshwater phycology Brunel recounted the achievements of Jacob Whitman Bailey, Horatio Charles Wood, Jr., Francis Wolle, and Gilbert Morgan Smith.

Brunel passed down to his next generation his deep interest in aquatic biology. His son Pierre pursued his own direction, namely, ecology of the marine zoobenthos and systematics of marine amphipods. Pierre became a professor in the Department of Biological Sciences at the University of Montreal and a colleague of his father. Pierre recalls how on a scheduled cruise for plankton sampling in Baie des Chaleurs in 1955, Jules to sample phytoplankton and Pierre to sample zooplankton, both father and son simultaneously experienced serious sea-

sickness for several hours while the boat engine was being repaired.

After more than a half-century devoted to research and the teaching of botany, Dr. Brunel took his retirement in 1981. He passed away in Montreal on March 9th, 1986 at the age of 81. Recognizing Brunel's admirably curated and documented phycological collection, authorities at the University of Montreal funded its digitization (in a File Maker Pro data bank), under the supervision of his son Pierre and with the help of Michel Poulin. The Institut québécois de la biodiversité (IQBIO) was founded in 2004 by several naturalists in Quebec led by Pierre, with the long-term goal of establishing a provincial museum of natural history, something that Jules Brunel would be pleased to see materialize.

Brunel, J. 1932. Études sur la flore algologique du Québec. I. Contributions de l'Institut Botanique de l'Université de Montréal No. 22. 19 pp.

_____. 1937a. Notes sur la découverte du *Tuomeya fluviatilis* dans le Canada oriental. Contributions de l'Institut botanique de l'Université de Montréal No. 29: 77-79.

_____. 1937b. Observations sur le *Sphaerella lacustris* (Girod) Wittrock. Contributions de l'Institut botanique de l'Université de Montréal No. 29: 71-75.

_____. 1937c. Qu'est-ce que le *Spirulina vaginata* de Kaiser? Contributions de l'Institut botanique de l'Université de Montréal No. 29: 107-109.

_____. 1944a. Les grandes étapes de l'algologie américaine. Contributions de l'Institut botanique de l'Université de Montréal No. 52.32 pp. [Reprinted from Revue trimestrielle canadienne vol. 30.]

_____. 1944b. Le Frère Marie-Victorin. Revue canadienne de Biologie 3: 379-387.

_____. 1947. *Vaucheria schleicheri* in North America. Contributions from the Gray Herbarium of Harvard University 155: 63-70.

_____. 1949a. The rediscovery of the desmid *Pleurotaenium spinulosum*, with description of a new variety from Madagascar. Contributions de l'Institut botanique de l'Université de Montréal No.64: 3-19.

_____. 1949b. *Achroonema spiroideum* Skuja 1948, of the Trichobacteriales, discovered simultaneously in Sweden and in Canada. Contributions de l'Institut botanique de l'Université de Montréal No. 64: 21-27.

_____. 1951. Antibiosis from Pasteur to Fleming. Journal of the History of Medicine and Allied Sciences 6: 287-301. Yale University, New Haven (Reprinted in: Contributions de l'Institut Botanique de l'Université de Montreal. No. 67).

_____. 1954. Est-ce un record? Une cellule *d'Oedogonium* portant 21 calottes. Naturaliste canadien 81: 101-102.

_____. 1956. Addition du *Stephanodiscus binderanus* à la flore diatomique de l'Amérique du Nord. Naturaliste canadien 83: 89-95.

_____. 1959. Le *Trentepohlia arborum* dans le Québec (Chlorophycées-Chaetophorales-Trentepohliacées). Naturaliste canadien 86(10): 193-198.

_____. 1962. Le phytoplancton de la baie des Chaleurs. Contributions du ministère de la Chasse et des Pêcheries, Québec, No. 91. 365 pp. (Reprinted and sold by the Presses de l'Université de Montréal, Montréal, 1962 and 1970).

_____. 1966. Normalisation de la terminologie des soies dans le genre *Chaetoceros*. Naturaliste canadien 93: 849-860.

_____. 1973. Orientation of setae in the genus Chaetoceros, in regard to the apical axis. J. Marine Biol. Assoc. India 14: 315-327.

_____, G. W. Prescott, & L. H. Tiffany (eds.). 1950. The culturing of algae, a symposium. New York City, N. Y. December [27-28] 1949. Phycological Society of America. Charles F. Kettering Foundation, New York. vii + 114 pp.

Brunel, P. 1959. Le zooplankton de la baie des Chaleurs en 1955: distribution horizontale quantitative et correlations hydroclimatiques. Contr. Département des Pêcheries, Québec 73: 1-65.

_____. 1986. Jules Brunel, scientifique, botaniste et phycologue, 1905-1986. In Vivo (Bulletin de l'Association de Biologistes du Québec 6(4): 10-11.

Marie-Victorin, Frère. 1935. Flore laurentienne. Illustrée par Frère Alexandre. Imprimerie de la Salle, Montréal. 917 pp.

_____. 1964. Flore laurentienne. 2nd ed. Illustrée par Frère Alexandre. Les Presses de l'Université de Montréal, Montréal. 925 pp.

Parker, B.C. 1981. Phycologia triginta quinque. J. Phycol. 17: 360-371.

Plinski, M., & J. Brunel. 1977. Deux Cyanophytes nouvelles pour la flore de l'Amérique du Nord. Naturaliste canadien 104: 401-403.

Stafleu, F. A. 1986. Jules Brunel (1905-1986). Taxon 35: 935. [Obit.]

I wish to thank Dr. Pierre Brunel for providing me with some information and insights about his father.

Michael J. Wynne
University of Michigan, Ann Arbor

BOOKS

NEW BOOK!

Kristiansen, J. & Preisig, H.R. 2007

Chrysophyte and Haptophyte Algae
2nd part: Synurophyceae

- In: Büdel, B., Gärtner, G., Krienitz, L., Preisig, H.R. & Schagerl, M. (eds): Süsswasserflora von Mitteleuropa (Freshwater Flora of Central Europe), vol. 1/2, 2nd edition. Spektrum Akademischer Verlag c/o Elsevier GmbH, Munich. 252 pp., 690 figs, ISBN: 978-3-8274-1701-5, PRICE: 64.00 EURO/US $87.67

For more information click here:
http://www.springer.com/chl/home/generic/search/results?SGWID=2-40109-22-173758005-0

NEW BOOK IN A SERIES!

Cellular Origins, Life in Extreme Habitats and Astrobiology Series

Click here
http://www.springer.com/series/5775
to see all the volumes printed.

The last volume in this series is Algae and Cyanobacteria in Extreme Environments (Vol. 11), which cover several aspects of extremophilic algae, and it will be out by the time you read this newsletter.

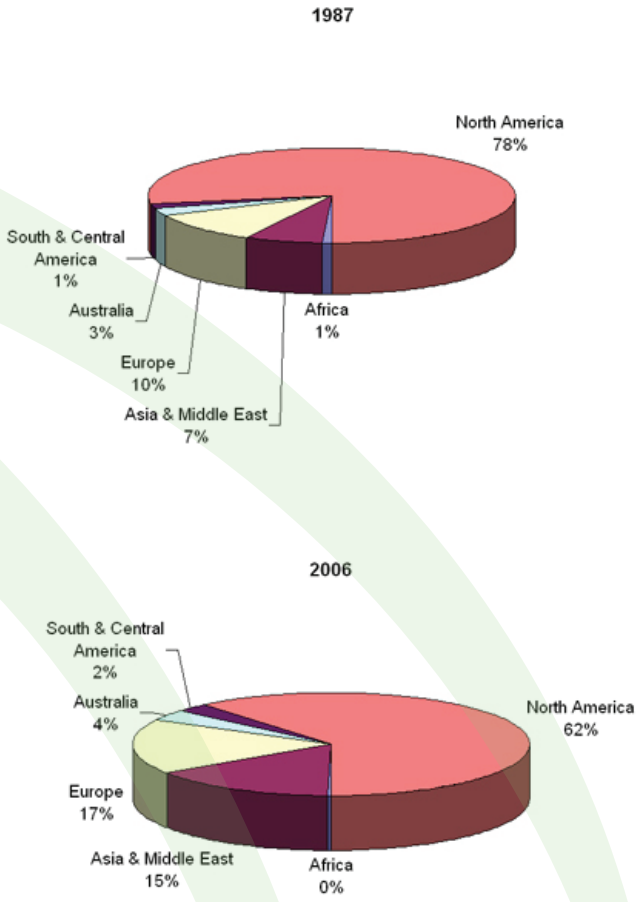
Other books in preparation are:
1) RED ALGAE IN GENOMIC AGE
2) COOPERATION AND STRESS IN BIOLOGY: THE ROLE OF MUTUALISTIC INTERACTIONS
3) PLANT-ANIMAL INTERACTION

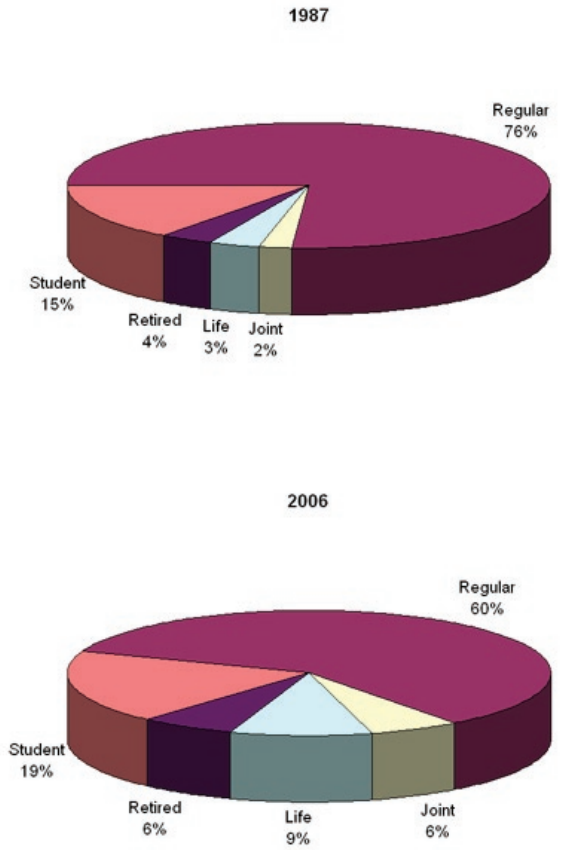
Joseph Seckbach
Editor in Chief

Trentepohlia, stained glass by E. Wiggins 2005

BUSINESS MEETING NOTICES

Comparisons of the makeup of the PSA (both geographically and by membership category) and how it has changed over the past twenty years, reveal some interesting features. What was once a society dominated by North Americans, is now much better represented by phycologists from Europe, Asia and the Middle East.





Similarly, the previously most-common regular membership has yielded somewhat to a tripling (percentage-wise) of life and joint memberships, and significant increases in both student and retired members. So the face of the PSA is evolving.

John La Claire
Membership Director 2005-2007

Due to an unforseen delay in completing the 2007 ballot, it will not be possible to implement the two new membership categories (for post-docs and high school teachers/students) that were approved by the Executive Committee earlier this year. These categories require Bylaws changes that must be first approved by the PSA membership. Consequently, the Executive Committee has passed a motion to maintain the existing membership categories for 2008, at the 2007 dues levels.

John La Claire
Membership Director 2005-2007

OBITUARY NOTICES

Nancy M. Adams, 1981
(1926-2007)

We note the passing of Nancy M. Adams, pre-eminent New Zealand botanist and botanical artist. Nancy Adams was educated at the Wellington Girls' College and then at Victoria University, where she studied zoology and botany. At the young age of 16 she was hired by the Director of the botany division of the Department of Scientific and Industrial Research (DSIR) because she was able to identify all the plants within view of his office window. Although the Director had hired her because of her knowledge of trees, World War II was going on, and the import of agar from Japan had been cut off. So Nancy's first job was to help Dr. Lucy Moore of the DSIR, Wellington, in locating harvestable stands of the agarophyte *Pterocladia lucida* (Moore, 1944, 1945). Adams' attention over the years turned more and more toward the marine algae of New Zealand, even if she still maintained broad interests in all plant groups in New Zealand. In 1959 she was hired by the National Museum (now Te Papa Tongarewa) as assistant curator of botany, and she also was curator of algae, until her retirement in 1987.

Adams' knack was not only her innate skills with water-colors but her realization that there was a need to satisfy the interests of a broader clientele with beautiful, but accurate, renditions of plants, including trees, shrubs, alpine plants, and marine algae. At times she provided the illustrations for guidebooks and catalogues, and other times she co-wrote the books that she also illustrated. Such works as *Trees and Shrubs of New Zealand* and *New Zealand Alpine Plants* are among her highly regarded titles. Her books are treasured in many New Zealand homes. Her major work came after her retirement, namely, the award-winning *Seaweeds of New Zealand. An Illustrated Guide* (1994), in which a total of 600 species were described and 441 species were illustrated. Unfortunately, this work is no longer in print. She also published monographic treatments of *Polysiphonia* and *Plocamium* and many checklists (several with her colleague and friend Wendy Nelson). She also collaborated with Robin South and Cameron Hay.

Nancy received many honors for her artistic contributions and was awarded the Queen's Service Order in 1989 and a CBE for services to botany in 1995. She is also remembered with two generic names of New Zealand red algae, *Nancythalia* (Millar & Nelson, 2002) and *Adamsiella* L.E. Phillips et W.A. Nelson (Phillips, 2002). Despite her international reputation, Nancy had a self-effacing, almost shy

disposition. In 1981 after the ASPAB meetings in Christchurch, when a Qantas strike stranded Paul Gabrielson and the writer in Wellington, Nancy kindly allowed us to pitch our tent in her backyard for several nights and to join her and her "Mum" each evening for dinner, usually a roast of lamb with her home-made mint sauce. We talked algae around her dinner table, and we were forever grateful for her good company.

Adams, N. M. 1965. Mountain flowers of New Zealand. A. H. & A. W. Read, Wellington, New Zealand. 32 pp.

_____. 1972. The marine algae of the Wellington area. A list of species. Records of the Dominion Museum [Wellington] 8: 43-98.

_____. 1983. Checklist of marine algae possibly naturalised in New Zealand. New Zealand J. Bot. 21: 1-2.

_____. 1988. The first illustrations of New Zealand plants: the Banks and Solander proofs held in New Zealand. Natl Mus. New Zealand Records 3(9): 93-99.

_____. 1991. The New Zealand species of *Polysiphonia* Greville. New Zealand J. Bot. 29: 411-427.

_____. 1994. Seaweeds of New Zealand. An Illustrated Guide. Canterbury University Press, Christchurch. 360 pp., 116 pls.

_____, E. Conway & R. E. Norris. 1974. The marine algae of Stewart Island - a list of species. Records of the Dominion Museum [Wellington] 8: 185-245 + [one map].

_____ & W. A. Nelson. 1985. Marine algae of the Three Kings Islands. Natl Mus. New Zealand Misc. Series 13. 29 pp.

Hay, C. H., N. M. Adams, & M. J. Parsons. 1985. Marine algae of the subantarctic islands of New Zealand. Natl Mus. New Zealand Misc. Series 11. 70 pp.

Mark, A. F. & N. M. Adams. 1986. New Zealand alpine plants. 2nd revision. A. H. & A. W, Read, Wellington, New Zealand. 262 pp.

Millar, A.J.K. and W. A. Nelson. 2002. *Nancythalia humilis* gen. et sp. nov. and *Abroteia suborbiculare* (Delesseriaceae, Rhodophyta) from New Zealand. Phycologia 41: 245-253.

Moore, L. B. 1944. New Zealand seaweed for agar-manufacture. New Zealand J. Sci & Techn. 25: 183-209.

_____. 1945. The genus *Pterocladia* in New Zealand. Trans. R. Soc. New Zealand 74: 332-342.

Nelson, W. A. & N. M. Adams. 1983. A taxonomic revision of the families Chordariaceae and Chordariopsidaceae (Phaeophyta) in New Zealand. New Zealand J. Bot. 21: 77-92.

_____ & _____. 1984. The marine algae of the Kermadec Islands - a list of species. Natl Mus. New Zealand Misc. Series 10: 29 pp.

_____ & _____. 1987. Marine algae of the Bay of Islands area. Natl Mus. New Zealand Misc. Series 16. 47 pp.

_____ & _____. 1990. A new species of *Porphyra* (Bangiales, Rhodophyta) from the Three Kings Islands, northern New Zealand. Botanica Marina 33: 3-7.

_____ & _____. 1993. *Nesophila hoggardii* gen. et sp. nov. (Rhizophyllidaceae, Rhodophyta) from offshore islands of northern New Zealand. Mus. New Zealand Records 1(1): 1-7.

_____, _____, & J. M. Fox. 1992. Marine algae of the northern South Island. Natl Mus. New Zealand Misc. Series 26. 79 pp.

_____, _____ & C. H. Hay. 1991. Marine algae of the Chatham Islands. Natl Mus. New Zealand Misc. Series 23. 58 pp.

_____, L. E. Phillips & N. M. Adams. 1998. Algal type material and historical phycological collections in the Herbarium of the Museum of New Zealand Te Papa Tongarewa. Tuhinga 10: 63-85.

Nelson, W. A., E. Villouta, K. F. Neill, G. C. Williams, N. M. Adams & R. Slivsgaard. 2002. Marine algae of Fiordland, New Zealand. Tuhinga 13: 117-152.

Phillips, L.E. 2002b. Taxonomy of *Adamsiella* L.E. Phillips et W.A. Nelson, gen. nov. and *Epiglossum* Kützing. J. Phycol. 38: 209-229.

Poole, A. L. & N. M. Adams. 1994. Trees and shrubs of New Zealand. Revised edition. Manaaki Whenua Press, Lincoln, New Zealand. 256 pp.

South, G. R. & N. M. Adams. 1976a. *Erythrocladia foliiformis* sp. nov. (Rhodophyta, Erythropeltidaceae) from New Zealand. J. R. Soc. New Zealand 6: 399-405.

_____ & _____. 1976b. Marine algae of the Kaikoura coast. Natl Mus. New Zealand Misc. Series 1: 1-67 (+4).

_____ & _____. 1979. A revision of the genus *Plocamium* Lamouroux (Rhodophyta, Gigartinales) in New Zealand. Phycologia 18: 120-132.

M. J. Wynne

Imre Friedmann
(at the Internatl Bot. Congress in Montreal, 1959 [W. R. Taylor])
(1921-2007)

Versatile phycologist, astrobiologist, distinguished member of our Society and recipient of its "Award of Excellence" in 2002, Prof. E. Imre Friedmann passed away at the age of 85 on June 11 of this year. Friedmann's long career demonstrated a great breadth of interests and accomplishments. Born in Budapest, Hungary, 20 December, 1921, he suffered under the anti-Jewish laws of that period and was not permitted to enter the University. In the closing years of World War II he was forced into a labor camp in the Carpathian Mountains and near the end of the War had to hide from first the Germans and then the Russians. Most of his extended family perished in the Holocaust. He always knew that he wanted to become a biologist and a teacher. His drive is what sustained him. He was able to make his escape in 1949.

Friedmann earned the degree of Ph.D. in 1951 at the University of Vienna. His initial employment was as a faculty member of The Hebrew University in Jerusalem, where he worked his way up through the ranks from Instructor to Associate Professor. He next emigrated to Canada and held the position of Associate Professor at Queen's University in Kingston, Ontario, for a year (1967-1968), whereupon he moved to Florida State University, Tallahassee, where he would spend the majority of his professional career. He was promoted to Full Professor and was named Director of the Polar Desert Research Center. In 1991 he was honored with the Robert O. Lawson Distinguished Professorship. Postdoctoral fellowships allowed him to conduct research at the University of Manchester in England, the University of Uppsala in Sweden, the Zoological Station in Naples, the University of Vienna, and the University of Würzburg, Germany.

Several major fronts of research were pursued by Imre. An early line of work was the life history and sex determination in algae, especially the green alga *Prasiola stipitata*. The results of these studies entered many textbooks. Some of this work was done in Manchester, England, with Irene Manton, and other aspects were completed back in Israel. He was able to determine that the timing of meiosis is under the control of a combination of tidal periodicity and photoperiodism. He also studied sex determination in *Padina*, discovering that the mechanism in *P. pavonica* was not the same as that in *P. gymnospora* (Ramon & Friedmann, 1966).

This avenue of research led to the study of the mechanism of gamete fusion, first in *Prasiola*, where he observed the fusion of the sperm and egg using both light- and electron-microscopy. In fact, he was an early proponent of electronic microscopy, both TEM and SEM. He extended such studies to gamete fusion in *Chlamydomonas*, in which he discovered the presence of a "fertilization tubule". He employed cinemicrography to make observations on the gamete fusion in *Fucus*. This innovative work brought him well deserved notice.

Another area of research was the siphonous marine green algae, including the genera P*enicillus, Halimeda,* and *Caulerpa*, the fine structure and the development of these organisms, including the process of biomineralization.

Friedmann had an abiding interest in Cyanobacteria, going back to his being mentored by Lothar Geitler in Vienna. He turned out both basic taxonomic studies, such as his description of the new genus *Geitleria*, and papers addressing broader questions (Friedmann & Borowitzka, 1982). His 1989 paper on heteropolarity in unicellular Cyanobacteria, using cell polarity in *Cyanocystis (Dermocarpa) violacea* as an example, repudiated the claim by bacteriologists that polarity was not a valid taxonomic criterion, thus questioning the entire Geitlerian taxonomy.

When he started his position in Israel in 1951, he searched in vain for algae in the Negev Desert. Then a geologist colleague brought to him some desert limestone

with green coloration embedded in the rock. It proved not to be a copper compound, but using the microscope, Imre found a community of organisms lying a millimeter below the surface. He coined the term "cryptoendolithic" to describe the Cyanobacteria, green algae, lichens, fungi, and other microorganisms adapted to surviving in a microscopic niche, burrowing into rock. He was later to find this same world of endolithic microorganisms existing in the frigid desert terrains of Antarctica (Friedmann, 1982). Several papers (some co-authored with J. Nienow, Tschermak-Woess, and R. Ocampo) explored the thermal regimes of this community, their biodiversity, their physiology and adaptations, and the steep light attenuation that they are subjected to. Eventually, Friedmann was to spend 17 seasons in Antarctica. This interest in the cryptoendolithic organisms led Friedmann to extend his studies to various deserts in the world, including the Atacama of Chile and the Gobi of Mongolia.

The discovery of a small Martian meteorite [ALH 84001] in Antarctica in 1984 would send Friedmann's research direction in another direction (into space). This meteorite was determined to have landed in Antarctica about 13,000 years ago. Tests revealed the presence of magnetite crystals that could have been produced only by living organisms (Friedmann et al., 2001). According to Friedmann and colleagues, the magnetotactic bacteria could not have existed in the Antarctic in the time since the meteorite landed because those bacteria live in mud, a habitat no longer present there. Friedmann went on to speculate that life must have been present on the Red Planet some 3.5 billion years ago but subsequently went extinct. This notion that life first existed on Mars allowed Imre to suggest the possibility that life had originally come to Earth from Mars. Much of his research on "exobiology" and "astrobiology" was supported by grants from NASA. Upon his retirement from FSU, he and his wife Rosalie moved to California where he became associated with the NASA Ames Research Center, Moffett Field. Friedmann's focus on life forms in extreme habitats was innovative and creative.

Imre Friedmann's wife and fellow microbiologist, Rosalie Ocampo-Friedmann, died in 2005. He is survived by their three children.

Darling, R.B., E. I. Friedmann, & P. A. Broady. 1987. *Heterococcus endolithicus* sp. nov. (Xanthophyceae) and other terrestrial *Heterococcus* species from Antarctica: morphological changes during life history and response to temperature. J. Phycol. 23: 598-607.

Friedmann, I. 1955. *Geitleria calcarea* n. gen. et n. sp. A new atmophytic lime-incrusting blue-green alga. Botaniska Notiser 108: 439-445.

_____. 1955. On *Cladophora kerkennae* Hamel and *Cl. echinus* (Bias.) Kütz. Bull Res. Council Israel 5D: 59-64.

_____. 1956. Beiträge zu Morphologie und Formwechsel der atmophytischen Bangioidee *Phragmonema sordidum* Zopf. Österr. Bot. Zeit. 103: 613-633.

_____ 1959. Structure, life-history, and sex determination of *Prasiola stipitata* Suhr. Ann. Bot., New Ser. 23: 571-594, 4 pls.

_____. 1961. *Chroococcidiopsis kashaii* sp. n. and the genus *Chroococcidiopsis* (Studies on cave algae from Israel III). Österr Bot. Zeit. 108: 354-367.

_____. 1961. Cinematography of spermatozoids and fertilization in Fucales. Bull. Res. Council. Israel 10D: 73-83.

_____. 1962. Cell membrane fusion and the fertilisation mechanism in plants and animals. Science 136: 711-712.

_____. 1962. The ecology of the atmophytic nitrate-alga *Chroococcidiopsis kashaii* Friedmann. Studies on cave algae from Israel. IV. Ark Fur Mikro. 42: 42-45.

_____. 1964. Ecological aspects of the occurrence of meiosis in *Prasiola stipitata* Suhr. Proc. Internatl Seaweed Symp. 4: 186-190.

_____. 1965. A new *Chlorosarcinopsis* from the Negev desert. J. Phycol. 1: 185-191.

_____. 1969. Geographic and environmental factors controlling life history and morphology in *Prasiola stipitata* Suhr. Österr. Bot. Zeit. 116: 203-225.

_____. 1971. Light and scanning electron microscopy of the endolithic desert algal habitat. Phycologia 10: 411-428.

_____. 1972. Ecology of lithophytic algal habitats in Middle Eastern and North American deserts. Eco-Physiological Foundation of Ecosystem Productivity in Arid Zone : 182-185.

_____. 1972. Light and scanning electron microscopy of the endolithic desert algal habitat. Phycologia 10: 411-428.

_____. 1977. Microorganisms in Antarctic desert rocks from dry valleys and Dufek Massif. Antarctic J. U. S. 12: 26-30.

_____. 1979. The genus *Geitleria* (Cyanophyceae or Cyanobacteria): distribution of *G. calcarea* and *G. floridana* n. sp. Plant Systematics & Evol. 130: 169-178.

_____. 1982. Endolithic microorganisms in the Antarctic cold desert. Science 215: 1045-1053.

_____. 1982 Cyanophycota. In: Synopsis and classification of living organisms (S. P. Parker, ed.) Vol. 1. McGraw-Hill, New York, pp. 45-52.

_____ (editor). 1993. Antarctic Microbiology. Wiley-Liss, NY. 634 pp.

_____. 1994. Permafrost as microbial habitat. In: D. A. Gilichinsky (ed.): Viable Microorganisms in Permafrost. Russian Academy of Sciences, Pushchino, Russia, pp. 21-26.

_____ & L. J. Borowitzka. 1982. The symposium on taxonomic concepts in blue-green algae: towards a compromise with the bacteriological Code? Taxon 31: 673-683.

_____, A. L. Colwin, & L. H. Colwin. 1968. Fine-structural aspects of fertilization in *Chlamydomonas reinhardii*. J. Cell. Sci. 3: 115-128, [7 pls.].

_____, & M. Galun. 1974. Desert algae, lichens, and fungi. In: Desert Biology II. (G. W. Brown, J. Eds), pp. 165-212. London: Academic Press.

_____, M. Hua, & R. Ocampo-Friedmann. 1988. Cryptoendolithic lichen and cyanobacterial communities of the Ross Desert, Antarctica. Polarforschung 58: 251-259.

_____, L. Kappen, M. A. Meyer, and J. A. Nienow. 1993. Long-term productivity in the cryptoendolithic microbial community of the Ross Desert, Antarctica. Microbial Ecology 25:51-69.

_____, & A. M. Koriem. 1989. Life on Mars: how it disappeared (if it was ever there). Adv. Space Res. 9(6): 167-172.
_____, Y. Lipkin, & R. Ocampo-Paus. 1967. Desert algae of the Negev (Israel). Phycologia 6: 185-200.
_____, & I. Manton, I. 1960. Gametes, fertilization and zygote development in *Prasiola stipitata* Suhr. I. Light Microscopy. Nova Hedwigia 1: 443-462, 13 pls.
_____, & R. Ocampo. 1976. Endolithic blue-green algae in the dry valleys: primary producers in the Antarctic desert ecosystem. Science 193: 1247-1249.
_____, & R. Ocampo-Paus. 1966. *Breacteacoccus minor* (Chodat) Petrova var. *desertorum* n. var., a remarkable alga from the Negev.. Nova Hedw. 10: 481-494, 9 pls.
_____, & W. C. Roth. 1977. Development of the siphonous green alga *Penicillus* and the *Espera* state. J. Linn. Soc. London, Bot. 74: 189-214.
_____, _____, J. B. Turner, & R.S. McEwen. 1972. Calcium oxalate crystals in the aragonite-producing green alga *Penicillus* and related genera. Science 177: 891-893.
_____, & R. Weed. 1987. Microbial trace-fossil formation, biogenous and abiotic weathering in the Antarctic cold desert. Science 236:703-705.
_____, J. Wierzchos, C. Ascaso, & M. Winklhofer. 2001. Chains of magnetite crystals in the meteorite ALH84001: evidence of biological origin. Proc. Nat'l Acad. Sci. (USA) 98: 2176-2181.
Grilli-Caiola, M., D. Billi and E. I. Friedmann. 1996. Effect of desiccation on envelopes of the cyanobacterium *Chroococcidiopsis* sp. (Chroococcales). Eur. J. Phycol. 31: 97-105.
Hua, M.S., E. I. Friedmann, R. Ocampo-Friedmann, & S. B. Campbell. 1989. Heteropolarity, in unicellular cyanobacteria: structure and development of *Cyanocystis violacea*. Pl. Syst. Evol. 164: 17-26.
Lipkin, Y., & I. Friedmann. 1967. Persistent juvenile stage of *Caulerpa racemosa* (Forskål) Agardh in the eastern Mediterranean. Pubbl. Stazione Zool. Napoli 35: 243-249.
McKay, C. P., E. I. Friedmann, R. A. Wharton, and W. L. Davis. 1992. History of water on Mars: a biological perspective. Adv. Space Res. 12: 231-238.
_____, M. R. Mellon, & E. I. Friedmann. 1998. Soil temperatures and stability of ice-cemented ground in the McMurdo Dry Valleys, Antarctica. Antarct. Science 10:31-38.
Nienow, J. A., C. P. McKay & E. I. Friedmann. 1988. The cryptoendolithic microbial environment in the Ross Desert of Antarctica: mathematical models of the thermal regime. Microb. Ecol. 16: 253-270.
Ramon, E., & I. Friedmann. 1966. The gametophyte of *Padina* in the Mediterranean. Proc. Internatl Seaweed Symp. 5: 183-196.
Roth, W. C., & E. I. Friedmann. 1980. Taxonomic significance of nucleus-microbody associations, segregated nucleoli and other nuclear features in siphonous green algae. J. Phycol. 16: 449-464.
_____, & _____. 1987. Ultrastructure of the siphonous green algae *Avrainvillea* and *Cladocephalus*. Phycologia 26: 70-81.
Shi, T, R. H. Reeves, D. A. Gilichinsky, and E. I. Friedmann. 1997. Characterization of viable bacteria from Siberian permafrost by 16S rDNA sequencing. Microbial Ecology 33:169-179.
Tschermak-Woess, E., & E. I. Friedmann. 1984. *Hemichloris antarctica*, gen. et sp. nov. (Chlorococcales, Chlorophyta), a cryptoendolithic alga from Antarctica. Phycologia 23: 443-454.
Turner, J. B., & E. I. Friedmann. 1974. Fine structure of capitular filaments in the coenocytic green alga *Penicillus*. J. Phycol. 10: 125-134.

M. J. Wynne

Volume 43
17
Number 2

JOB OPPORTUNITIES

Post-Doctoral Researcher
Stevens Institute of Technology

Position available to investigate the algal culturing techniques for biomass production. Applicants should have an earned PhD in phycology or plant biology with experience in photobioreactor design and algal culturing techniques. Experience in algae biomass production and laboratory set up is a plus. This full-time fiscal year position is for 1 year (possible renewal up to 3 years contingent upon funding and satisfactory performance), at an annual salary above $35,000. Interested applicants should send via Email to zhenqi.zhu@stevens.edu a cover letter and detailed *curriculum vitae* with the names and email addresses of three references to: Prof. Zhenqi Zhu, Dept. of Mechanical Engineering, Stevens Institute of Technology, Castle Point on Hudson, Hoboken, NJ 07030, Phone:201-216-5582. FAX: 201-216-8315. Stevens Institute of Technology is an equal opportunity, affirmative action employer and provides reasonable accommodations to persons with disabilities.

Laboratory Research Specialist
The University of Alabama

The Steven Johnson Molecular Systematics Laboratory (MSL) at The University of Alabama (Tuscaloosa, AL) is searching for a laboratory research specialist for day-to-day supervision and maintenance of equipment (3100 and 310 Automated DNA sequencers), as well as additional laboratory equipment; ensures that the MSL is current with all Environmental Health and Safety protocols; and trains faculty, staff, and students in molecular biology techniques routinely used in the MSL. This is a regular full-time position, required minimum qualifications include a Master degree in Biological Sciences or a relevant field and 3 years of relevant work experience or a Ph.D. in Biological Sciences or relevant field. Please contact Dr. Phillip Harris at pharris@bama.ua.edu for more information.

PAST AND UPCOMING EVENTS

PSA 2007 in Providence, Rhode Island

The 61th Annual Meeting of the Phycological Society of America was held from 5 through 9 August 2007 in Providence, Rhode Island and was hosted by local organizer Glen Thursby. The International Society of Protistologists met in conjunction with PSA at the Crowne Plaza Hotel in the Providence suburb, Warwick.

The meeting began with a joint PSA and ISOP symposium on protistan symbiosis coordinated by Charles Delwiche and Wayne Coats. Speakers included Dr. Delwiche, Matthew Johnson, Giulio Petroni, Bas Ibelings, Mary Alice Coffroth, and Brian Leander. The meeting also featured the relatively new PSA Plenary/Mini-symposium invited speaker format. Elizabeth Gantt headlined a session on physiological and structural advantages of chloroplast evolution that included mini-symposium talks by Wolfgang Loeffelhardt and Jared Worful. Max Hommersand was the plenary speaker in a session on phylogenetics, systematics and biogeography of macroalgae with mini-symposium speakers Heroen Verbruggen and Stefano Draisma. John Raven headlined a session on energetic and elemental stoichiometries in phytoplankton: ecology and evolution with a mini-symposium talk by Zoe Finkel.

In addition to the invited program, the meeting featured 15 outstanding Bold Award talks spread over the first two days. Overall, over 250 participants were treated to over 130 oral presentations and over 70 posters. The meeting concluded with an intertidal field trip lead by Brian Wysor and Carol Thornber.

SEPC 2007

The 29th Annual Southeastern Phycological Colloquy is a small, informal meeting which emphasizes student participation and student-faculty interaction. The location will be at Dauphin Island Sea Lab, Dauphin Island, AL, during 26-28 October 2007. Contributed paper and poster sessions are planned for a full day of Saturday, October 27. Presentations on all aspects of the biology of algae, seagrasses, and other aquatic plants are welcome. Please visit this website for more information

http://www.uab.edu/uabbio/sepc/

Organizers: Juan Lopez-Bautista, University of Alabama, jlopez@ua.edu, and Chuck Amsler, University of Alabama at Birmingham, amsler@uab.edu

PSA 2008

The 2008 Annual Meeting will be held at Loyola University in New Orleans, Louisiana and is being hosted by Dr. James Wee (Loyola University). The meeting dates are 27-30 July with an opening mixer on the evening of 26 July and optional field trips either preceding or following the meeting.

Continuing with the new meeting format begun in 2006, PSA will again sponsor Plenary talks and associated mini-symposia with participants identified by the Plenary speakers. Contributed papers related to the mini-symposia topics will be solicited and scheduled in "featured contributed talk" sessions immediately following each mini-symposium. The three Plenary Speakers are: Dr. Bill Barclay (Martek Biosciences Corporation) who will headline a session on algal biotechnology and give an address on biofuels from microalgae, Dr. Karen Steidinger (Fish and Wildlife Research Institute) who will headline a session on harmful algal blooms, and Dr. John W. Day (Louisiana State University) who will speak on coastal and wetland ecosystems especially with respect to the effects and implications of the hurricanes.

PSA 2009

The 2009 Annual Meeting will be held jointly with the American Society of Plant Biologists (ASPB) in Honolulu, Hawaii. The dates will be 18-22 July and the PSA local representative is Alison Sherwood (University of Hawaii).

10th Symposium on Aquatic Microbial Ecology

The Organizing Committee is pleased to announce that the 10th Symposium on Aquatic Microbial Ecology (SAME10) will take place from 2nd to 7th September 2007 at Universidade do Algarve, Faro, Portugal. All information including program as well as registration and abstract submission is available on the official same10 website:

http://www.ualg.pt/fcma/same10/

Please note that the deadline for early registration is April 30th and call for abstracts ends on June 1st 2007. Meeting Attendance Grants for young scientists can be obtained from FEMS at the following website

http://www.fems-microbiology.org/website/nl/page64.asp

where application forms can be downloaded and sent directly to FEMS Central Office (application deadline April 1st !)

Dr. Helena M. Galvão

ALGAL PHILATELY

POSTAGE STAMPS DEPICTING ALGAE

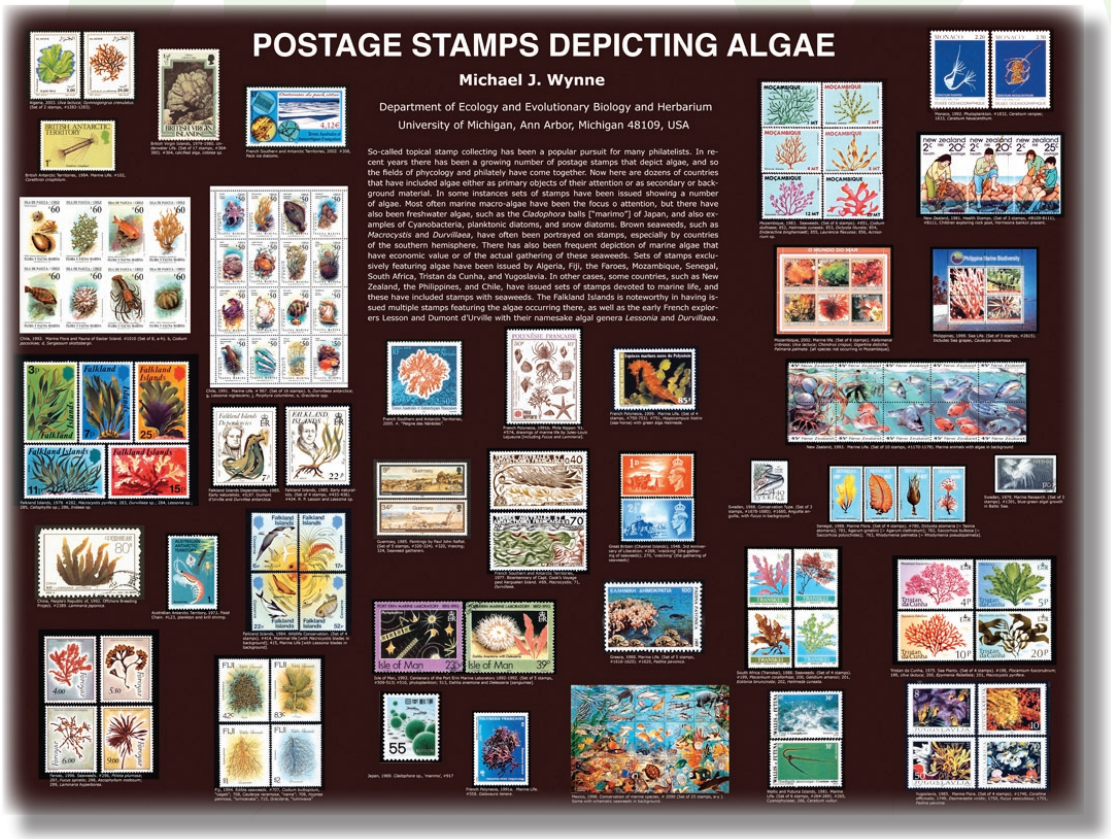
I was pleasantly surprised at the enthusiastic response to my poster at the recent PSA meetings in Warwick, Rhode Island. A number of attendees asked me if it would be possible to obtain a copy of the poster. After discussing it with journal editor Bob Sheath, I arranged with his editorial assistant Heather Brashear to post the complete file on the Journal's FTP site.

The poster file "Wynne's stamp poster" can be downloaded from their directory folder. But because of security reasons, it is not possible to publish in the Newsletter the Journal's FTP address and password/user ID info. You can contact Heather Brashear at:

jphycol@csusm.edu

and she will provide you with instructions for accessing and downloading the file.

Michael Wynne
University of Michigan, Ann Arbor



2007 ANNUAL PSA BUSINESS MEETING MINUTES

Minutes of the General Business Meeting of the Phycological Society of America
Bristol Room, Crowne Plaza Hotel
Warwick, Rhode Island
07 August 2007

Minutes from the 2006 General Business Meeting in Juneau, AK were approved without dissent by the membership.

President's Report:

President Richard Triemer extended his appreciation to Past-president Morgan Vis for her continued assistance with Executive Committee (EC) business and introduced Bob Andersen as President-Elect for 2008. Outgoing members of the EC were also thanked for their service and include John LaClaire (Membership Director), Alison Sherwood (Communications Director), and Hilary McManus (Student Member of the EC). President Triemer noted that the PSA has many committees and that 98 members are needed to fill all possible positions among them. Ordinary members wishing to serve on any of the Society's committees should contact Drs Triemer or Andersen. It was also strongly emphasized – here and at the preceding student luncheon (see below) - that student members are welcome on all committees and those seeking appointments should also contact the President or President-Elect.

The first annual student luncheon was held here in Rhode Island and ~70 students attended. At the luncheon the members of EC were introduced and each briefly explained their responsibilities. In this way the EC provided an overview of how the Society functions and reported that, via the general treasury and endowments, this year $30K was allocated to support PSA student travel and research. The students were then charged with providing the EC with recommendations for topics, plenary speakers, symposia participants, etc. for up-coming meetings. The students were also asked to contribute ideas for topics that, directly or indirectly, address professional growth and development that will provide the framework for discussions at up-coming student luncheons.

The PSA's Education Committee has been working on digitizing the PSA's Slide Collection. These images and others will be posted on the Society's website as a growing resource for professionals and teachers alike. In this vein, the concept of a *'Phycowiki'* site was discussed at some length. This project, based on the increasingly popular Wikipedia concept, aims to develop a site and build site content using data and expertise found among the society's members (and, in the future, other professionals). *Phycowiki* is envisioned as providing content for use by laymen, teachers, students, etc. However, separate in-depth, more professional and technically oriented content will available only to Society members or, in the future, other contributors or subscribers.

Treasurer's Report:

Chuck Delwiche reported there are $193K in the Society's general treasury that are divided between the checking and money market accounts. Over the past few years our PSA – Blackwell Publishing, Inc. (BPI) actual profit share has consistently exceeded annual projections provided by BPI. For this reason the EC expects to move ~50K from the general treasury to an as yet unspecified line in the endowments portfolio by the end of the 2007 calendar year. Although costs for the journal's editorial office in San Marcos, CA are expected to rise in 2008, preliminary projections for costs and expenditures for 2008 indicate that the Society again should realize a surplus of funds in the general treasury next year.

The Treasurer is exploring options that will allow the Society to accept donations made by credit card and also allow use of credit/debit cards for payment at the annual auction. The Treasurer and the EC recommend the widely used PayPal system for these purposes. A one-time fee of ~$125.00 would be incurred for setting up the PSA's PayPal account.

The Treasurer mentioned that there is little rationale for continuing to maintain the PSA's general treasury funds at Douglas County Bank in Lawrence, Kansas. The Treasurer and the EC are investigating the possibility of moving our accounts to a 'national bank'. For example, one that: (1) has branches in most urban areas nation-wide, and (2) provides technical and software support for the electronic maintenance of spreadsheets (ledgers, balance sheets, etc.) and for conducting transactions electronically (i.e., no paper, no post).

Fund Manger's Report:

Tim Nelson reported that ~$1900 were raised at last evenings' annual auction and that the EC has agreed to use these funds to support the PSA's Grants-in-Aid of Research program. The PSA's endowments funds total 1.1M dollars. Of these funds $825K are invested in bonds whereas the remainder is placed in the treasury reserve. Tim then provided figures for anticipated endowments income and expenditures for 2008. He also reported that in 2008 the amount of money available to support student travel via Hoshaw Travel Awards will increase from

$7500 to $10,500. The increase was made possible by the EC's decision (in calendar year 2006) to move $50K from General Treasury to the Hoshaw Travel Award line in the PSA's investments portfolio.

Membership Director's Report:

John LaClaire reported that as of August 1, 2007 the PSA included 955 members in good standing. One hundred and seventy-seven persons that were members in 2006 have yet to re-new or have lapsed. For purposes of comparison, John noted that in early- to mid 1990's membership peaked at ~1300 persons. The membership list now includes nearly 100 life members and institutional member-ships have remained steady over the last 4 – 5 years. In an effort to recruit and retain members the EC approved for presentation on the up-coming ballot two new membership categories: (1) Postdoctoral and (2) Teacher/Pupil. Due to a lack of past response it is also proposed that the 'Patron Member' be discontinued as a membership category. A motion was made to maintain the 2008 membership fees (=dues) structure at current (2007) levels and was unanimously passed.

***Journal of Phycology* Editor's Report:**

Bob Sheath reported that submissions to the *Journal of Phycology* were up in 2006 (n=305) and that number of journal pages published and the average length of individual manuscripts are also increasing. The average *Journal of Phycology* submission is now 11 published pages in length and the Associate Editors and Editorial Board have been asked to find reasonable means to emphasize brevity and conciseness.

As submissions to the journal from professionals in Asia and Europe increase, so do the number of papers written by persons who are non-native English speakers. Although these papers are very welcome, careful editing of English composition (e.g., grammar and syntax) is becoming an important and challenging time/management issue for the Editor and his staff – especially given that *Journal of Phycology* publishes more pages/yr and more papers/yr than other phycological journals.

Despite challenges noted above, the turn-around time from submission to first notification is now 2.27 months, down from a high of 3 months in 1996.

The Journal's 2005 impact factor was a very solid 2.52 and steadily continues to increase annually.

Subject areas (in which published articles are listed on the back of each issue) are changing. 'Genomics' has been added whereas in 2006 no article was published under the 'Ultrastructure' subheading. The Journal's Legacy Project has been completed: all papers published in the Journal (1965 – present) have been scanned (digitized) and stored as reasonable quality PDFs (www.jphycol.org).

To try and reduce the workload of the Associate Editors, Bob recommended increased participation of, and greater reliance on the expertise of, Editorial Board members. Editorial Board members, for example, might be asked to serve as "Guest Associate Editors" charged with selecting reviewers and adjudicating reviews received from

Communications Director's Report:

Alison Sherwood reminded those in attendance that as of this year (2007) the Newsletter is available only on-line. The Society's website can be found using the following link: www.PSAalgae.org. The *Journal of Phycology* website maintained by the Society and BPI is located at www.jphycol.org. In addition to other features, the latter site contains a searchable directory of current members and it is also the site for on-line voting.

Next year's PSA meeting will be held in New Orleans, 27 – 30 July. The local organizer is Jim Wee (Loyola University). In 2009 the meetings will be held in Hawai'i and Alison Sherwood will act as local organizer.

Meeting was adjourned at 6:45 PM

Deadline for contributions for the next PSA Newsletter:

January 15th, 2008

Please contact Juan Lopez-Bautista
jlopez@ua.edu

Algal illustrations from Harvey's *Phycologia Australica* from the PSA website: http://users.ugent.be/phycology/harvey/