

SEAC *communications*

Volume 24, Number 3, October 2008

Editor

Anna Brajter-Toth

Department of Chemistry
University of Florida
Gainesville, FL 32611-7200
atoth(at)chem.ufl.edu

Associate Editor

J. Faye Rubinson

Department of Chemistry
Georgetown University
Washington, DC 20057-1227
jfr(at)georgetown.edu

Regional Editors

Alan Bond

Professor Alan M. Bond
School of Chemistry
Monash University
Victoria 3800 Australia
a.bond(at)sci.monash.edu.au

Karl Cammann

Westfälische Wilhelms Universität
D-4400 Münster, Germany
Cammann(at)uni-muenster.de

Yoshio Umezawa

Research Institute of Pharmaceutical Sciences
1-1-20 Shinmachi, Nishitokyo-shi
Tokyo 202-8585 Japan
omezawa(at)musashino-u.ac.jp

SEAC Web Editor

Samuel Kounaves

Department of Chemistry
Tufts University
Medford, MA 02155
samuel.kounaves(at)tufts.edu



The Society for Electroanalytical Chemistry - 111 Loren Place, West Lafayette, IN 47906

Available on the WWW at <http://electroanalytical.org>

FROM THE PRESIDENT...

Now that summer is over, it is time to move from spending our time absorbing photons on the beach to pushing electrons on the bench. This newsletter is a good guide concerning future events in the world of electroanalytical chemistry, the whereabouts of colleagues and job opportunities in the field of electrochemistry. We are all looking forward to the C.N. Reilley award symposium this spring in Chicago featuring or Charles Martin of the University of Florida. There are also several other electrochemistry sessions, both bioanalytical and materials oriented, that have been organized by SEAC members for Pittcon this year. I am looking forward to seeing all of you in Chicago this March.

Also, it is not too soon to think about nominating individuals for the SEAC Young Investigator Award as well as the C.N. Reilley Award for Pittcon 2010. The deadline for these applications is March 1st.

It is with regret that I inform you that Anna Brajter-Toth has resigned as editor of the SEAC newsletter. Anna took over the job as editor in 2002 from Debra Rolison and was solely responsible for the production of the newsletter until 2007. Serving as editor of the newsletter is a very difficult and time consuming job and we are all very grateful that she agreed to do it for so long. The newsletter has always been a great source of information not only about SEAC business but also about the life and times of the members of the electroanalytical community. There is no administrative support for SEAC. Therefore the newsletter is produced entirely through the generosity of SEAC members such as Anna (and more recently Faye) who are willing to give their time and talents to the organization. Along with the entire membership of SEAC, I want to thank Anna for her six years of service as SEAC editor.

Lastly, a heads up: dues notices will go out in January and on-line payments can be made at <http://www.electroanalytical.org/membership.html>. If you have been a member for a while, you might consider Lifetime membership. A big advantage of lifetime members is that you do not have to renew every year. We also have additional levels of contribution for lifetime members who would

like to increase their financial contribution to the organization. This is also an excellent time good time to recruit new members. In particular, students are invited to apply for membership. The first year of membership is free for students and post docs and subsequent years are half price (\$10/year). You can barely get a good fast food meal for that amount. Student members are also eligible for travel grants to Pittcon. Applications are due January 31st.

We will be putting out another newsletter just before Pittcon with updates on the different sessions and SEAC activities. I hope everyone has a healthy and productive fall.—Sue Lunte

In this issue:

From the President
Call for Nominations for BOD
Call for Awards Nominations and Travel Grants
—Reilley and Young Investigator Awards, 2010
—Student Travel Awards, PITTCON 2009
Focus on Reilley Awardee for 2009-Charles Martin
Member News
Jobs and Graduate Programs
Upcoming meetings
—SERMACS
—Electrochemistry Gordon Research Conference
—Other meetings
Analytical Digital Sciences Library
THANK YOU, ANNA
Deadline for next issue – December 31st

Call for Nominations – SEAC Board of Directors

It is nearly time to elect new board members. The terms of office for the following SEAC Directors will expire after June 30, 2009: Leonidas Bachas, Jon Howell, and William LaCourse.

As stated in the Society's Bylaws, these individuals are not eligible for immediate re-election as Directors. The Nominating Committee (Chaired by Kathy Ayers) is currently preparing a slate of candidates to fill three positions on the Board of Directors.

This list, according to the Bylaws, will include any person nominated by at least 10 members of the Society together with others deemed appropriate by the nominating committee. The list of candidates must be submitted to the Secretary by November 15 for the election to be held during the period December 1 – January 15. You are hereby invited to submit your suggestion(s) directly to the Chair of the Nominating Committee at [kayers\(at\)protonenergy.com](mailto:kayers@protonenergy.com). The term for the new Board of Directors members will be from July 1, 2009 – June 30, 2014.

CALL FOR AWARDS NOMINATIONS AND GRADUATE STUDENT TRAVEL GRANTS

The **Charles N. Reilley Award in Electroanalytical Chemistry** is given in memory of one of the most distinguished analytical chemists of the 20th century. Reilley's interests were both fundamental and broad; he made seminal contributions not only to electroanalysis, but also optical spectroscopy, NMR, chromatography, data analysis, instrumentation, and surface analysis. The signature of his research was to decline empiricism, seeking a basic understanding of measurements and detection schemes. Reilley recognized that measuring things is at the heart of modern chemistry. Reilley is central in the history of the Society for Electroanalytical Chemistry, which was formed following his death in 1981, as a vehicle for managing the award. A biography of Charles N. Reilley is available at: <http://newton.nap.edu/html/biomems/creilley.pdf>.

Award Nominations due: March 1, 2009.
Graduate Travel Grant nominations due: January 1, 2009.

For the **SEAC Young Investigator Award**, sponsored by [Cypress Systems](#), nominees must be within seven years of obtaining their Ph.D. or other terminal degree at the time of nomination. Candidates may be nominated by any member of SEAC. These young members of the electrochemistry community are our future and deserve recognition as they move forward. Please think about recent graduates from your program or exciting new work that you have heard from young speakers at your institution.

SEAC Graduate Student Travel Grants, sponsored by [Eco Chemie](#), [Princeton Applied Research](#), [CH Instruments](#), [Gamry Instruments](#), and [Nova Biomedical](#), is awarded to promising graduate students to offset the cost of travel to the Pittsburgh Conference to deliver an oral presentation in a Conference symposium. The presentation should be on a topic related to their Dissertation or Thesis, and in some area or application of electroanalytical chemistry. Because the costs in various venues of the Conference may vary, the amount of the award will be determined by SEAC and will be between \$250 and \$500. The value of all of the awards in any one year will be equivalent, but it may vary from year to year. Not more than two awardees will be selected from any one research group and no more than three awards will be made to students from any one educational institution. **Nominations for travel grants are due January 1st.**

Further details about all of the awards and the nomination processes can be found on the Society website at www.electroanalytical.org.

CHARLES N. REILLEY AWARDEE FOR 2009 –CHARLES MARTIN

As announced in our last Newsletter, the 2009 Reilley awardee will be Professor Charles R. Martin, the Colonel Allan R. and Margaret G. Crow Professor in Chemistry at the University of Florida. Professor Martin, who has also be honored with the Carl Wagner Memorial Award of the Electrochemical Society and is a Fellow of the Electrochemical Society, currently is involved in

research in the area of Materials and Analytical Chemistry with a special emphasis on nanomaterials and the bio/nano interface. His pioneering research in the development of the template method for preparing nanomaterials and have lead to a number of applications in the



preparation of nanotubes and nanotube membranes in biosensors and separations. In addition, Professor Martin's group is investigating electrochemistry at nanoscopic electrodes in electrochemical energy storage and production.

Dr. Martin's initial publications were in the area of ion-selective electrodes, research carried out in the laboratory of Henry Freiser, but over the years, he has made contributions to such diverse areas as Ru-bipy photophysics, polymer-modified electrodes (both electroactive and conducting) electromodulated ion-exchange chromatography, and fabrication and applications of nanotubes and nanopore membranes. He is the author of 300 publications and a frequent invited speaker at national and international scientific meetings.

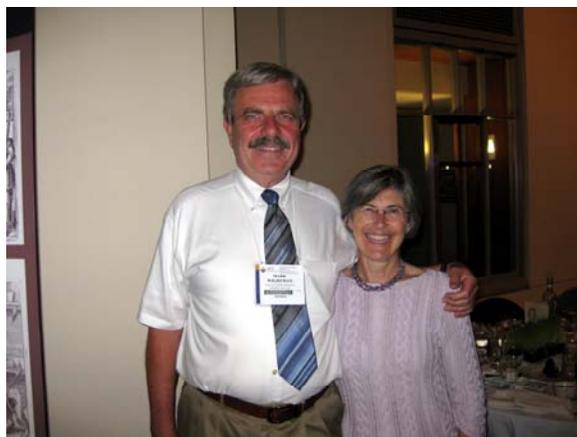
In Dr. Martin's words: "If I have any advice to offer to young scientists just embarking on their careers it would be this - Whatever scientific box you are in, get out of it. Don't be satisfied with writing papers that only a handful of experts in your field find interesting. Instead, in your research talk to as broad an audience that you can.

"I'm honored to receive this award named for Charles Reilley. Over the years I have had the opportunity to read some of his papers. He was really, really smart!" (A sentiment shared by us all, Chuck.)

As many of you know, in his spare time, Martin is a musician, band leader and recording artist. His band 'Charles Ray & The Righteous Kind' just finished a critically acclaimed CD called 'Some Are of Love.' The band does all-original 1960s-inspired rock. You can learn more about Chuck's alter ego and the band at www.myspace.com/therighteouskind.

Congratulations once again to a "righteous" awardee.

OTHER MEMBERS IN THE NEWS



SEAC members were well represented at the recent Awards dinner at the ACS National Meeting in Philadelphia. Adam Heller received the ACS Award for Creative Invention while Mark Wightman received the ACS Award in Analytical Chemistry. Another of our members, Richard Crooks, received the ACS Division Analytical Chemistry Award in Electrochemistry

Mark Wightman, shown at left with his wife, Donna, is a professor at the University of North Carolina Chapel Hill. He was recognized for his development of electrodes that have enabled the determination of neurotransmitter concentrations on time and length scales necessary for measurements

near single neurons and in living brain.

Adam Heller, professor emeritus at the University of Texas, received the ACS Award for Creative Invention. Adam's research contributed to the design and manufacture of an almost painless blood glucose monitoring device capable of measurements on extremely small volumes of blood, constituted a major step in improving the quality of life for diabetic patients worldwide.

Richard M. Crooks was awarded the ACS award in Electrochemistry for his work in the synthesis, characterization, and electrocatalytic properties of nanoparticles; analysis in microfluidic electrochemical cells; and bioelectrochemistry. Dr. Crooks is a professor of chemistry at the University of Texas. Dick is shown at right with fellow SEACer and former Newsletter editor Deb Rolison

More detailed descriptions of the awards presented to Mark and to Adam can be found at <http://pubs.acs.org/subscribe/journals/ancham/80/i07/html/0408people.html>.

More information on the award presented to Dick Crooks appears at <http://pubs3.acs.org/journals/ancham/news/2008/08/28/people1.html>. (contributed by Jon Howell)



NEW MEMBERS AND THOSE ON THE MOVE

New sponsored student memberships

Ryan Cantor, Georgia Tech, Mira Josowicz group

Courtney Kuhnline, U. Kansas, Sue Lunte group

Thomas Linz, U. Kansas, Sue Lunte group
Anne Regel, U. Kansas, Sue Lunte group

New Student Member

Eleni Bitziou, Imperial College, UK

New Regular Members

David Atherton, Exide Technologies
Vernon Somerset, CSIR, South Africa

On the move:

Daniel Eves has moved Department of Chemistry and Biochemistry at Brigham Young University for a post doc position with Adam Woolley

Mark Anderson has moved to the University of Colorado at Denver.

Spencer Hochstetler is at Eastman Chemical in Kingsport, TN.

Joseph Wang has moved to UC San Diego to assume a position in the Department of Nano-Engineering (<http://ne.ucsd.edu/faculty/jwang.html>).

Andy Gilicinski (PhD Evans '87) has moved to a new role at Clorox - directing the company's Open Innovation efforts, and working with raw material suppliers, research institutes and universities to

drive new technology creation with which to build new consumer products. In his prior role directing new home care product development at Clorox, he launched the new GreenWorks line of 99% natural (plant-based) cleaning products, which in 6 months have grown to 2% of Clorox sales. (Andy also wanted to add "Congratulations to Chuck Martin!! Well deserved.")

POSITION OPEN AT BASi

JOB POSITION - ELECTROCHEMISTRY PRODUCTS SALES REPRESENTATIVE AT BASi

BASi currently has an immediate opening for an Electrochemistry Products Sales Representative at our corporate headquarters in West Lafayette, IN. The focus of this position is to sell BASi electrochemistry products to industrial, academic, and government laboratories worldwide. This position involves both direct customer interaction (phone calls, written correspondence, telemarketing, exhibitions, demonstrations, etc.) and occasional laboratory work (e.g., evaluate customer samples, develop short application notes, evaluate new products, etc.). Some overnight travel is required and international travel is possible.

Applicants should have a Bachelor of Science in Chemistry or related field with general knowledge of electroanalytical chemistry (equivalent combination of related education and required work experience will be considered), a basic knowledge of a Microsoft Windows environment, and strong, proven communication skills (oral and written). A candidate needs to be an energetic self-starter, have the ability to multi-task, be able to work in team environment, and have a pleasant outgoing personality. Sales experience, a mechanical and electronic aptitude, and fluency in Spanish are beneficial.

NO PHONE CALLS PLEASE

BASi offers competitive compensation and benefits. Interested candidates please forward resumes, along with salary expectations to: hr@bioanalytical.com

BASi (EPS - 0908)
Human Resources
2701 Kent Ave.
West Lafayette, IN 47906
www.bioanalytical.com
www.baspeople.com

All applicants must be currently authorized to work in the United States. No visa sponsorship available. *BASi is an Equal Opportunity Employer*

ELECTROCHEMISTRY/NANOSENSOR POST-DOCTORAL OPPORTUNITY DREXEL UNIVERSITY

An opportunity has arisen in the area of Nanoscale Carbon Electrodes for Intracellular Electrochemistry., part of a collaboration with groups in Penn Engineering, Drexel Engineering and Temple University's medical school.

The candidate should have significant electrochemistry experience. Expertise in the following areas would be useful; microelectrodes, voltammetry, surface modification, metal deposition, sensors, electrochemistry, carbon materials, microscopy [Scanning Electrochemical

Microscopy (SECM), Scanning Electron Microscopy (SEM), Atomic Force Microscopy (AFM) and Scanning Tunneling Microscopy (STM)].

A strong record of publication in peer-reviewed literature attesting to these capabilities is required. Additional responsibilities include training and supervision of students, and preparation of reports and manuscripts for publication. Ph.D. in Chemistry or related discipline, awarded in the last five years, is necessary.

Temple University is an Equal Opportunity/Affirmative Action Employer, and specifically invites and encourages applications from women and minorities (AA, EOE, m/f/d/v.).

Applications should be addressed to:

Dr. Eric BORGUET
Department of Chemistry
201 Beury Hall
Temple University
1901 N. 13th Street
Philadelphia, PA 19122 USA

[eborguet\(at\)temple.edu](mailto:eborguet@temple.edu)
<http://www.temple.edu/borguet/>

POSTDOCTORAL RESEARCH FELLOW POSITION – NEW MEXICO STATE UNIVERSITY

Postdoctoral research fellow position is available in the Department of Chemistry at New Mexico State University. Expertise in electroanalytical chemistry, electrode surface modification, micro- and nanoelectrodes, electroless template deposition, nanoparticle synthesis and electrochemistry, microfabricated arrays, and scanning electrochemical microscopy (SECM) is desired. The project is both fundamental and applied in scope and involves electrochemical investigations on array platforms, with an emphasis on electrocatalysis. The position is for one year with the possibility of renewal. Please submit a resume including names of Ph.D. and postdoctoral advisors to Professor Cynthia Zoski at [czoski\(at\)nmsu.edu](mailto:czoski@nmsu.edu).

NEW GRADUATE FELLOWSHIP PROGRAM – U TEXAS



Center for Electrochemistry
The University of Texas at Austin

The Center for Electrochemistry (CEC) has established a fellowship program for

graduate students wishing to pursue a Ph.D. in Chemistry, Materials Science or Engineering with special emphasis in electrochemical science and technology. Eligible candidates must have completed their B.S. degree or at least be in their final year of study as undergraduates or in the completion of a MS degree as graduates in science or engineering disciplines.

Applications for 2009-2010 CEC fellowships are now being accepted. Applications must be received by March 15, 2009, in order to be considered. Fall 2009 applicants will receive a \$5K fellowship at the beginning of the Fall semester and an additional \$3K fellowship at the end of the Spring semester. The latter is contingent on fellows meeting certain academic benchmarks during their first year of study. This fellowship supplements other existing means of support for students appointed as teaching assistants or graduate research assistants.

To be considered for the CEC fellowship support, you must first apply to the Graduate School of the University of Texas at Austin and to the department or program which will award your

degree (currently the Department of Chemistry and Biochemistry, Materials Science and Engineering Graduate Program, and the Department of Mechanical Engineering). Admission to the University does not guarantee fellowship support from the CEC. You can apply to the CEC fellowship program by filling out our short on-line application. Admission decisions will be based on a combination of undergraduate grades, GRE scores, undergraduate research accomplishments, and letters of recommendation, and a desire to pursue a career in electrochemical science and technology. Before applying to the CEC fellowship program, you are encouraged to become familiar with the CEC faculty research interests by accessing the faculty links. Faculty members taking part this year are Allen J. Bard, Richard M Crooks, Arumugam Manthiram, Jeremy P. Meyers and Keith J. Stevenson. For questions about the application process, contact Ms. Angie Nelson via email: cec@cm.utexas.edu. For other information see the CEC website at cec.cm.utexas.edu (Contributed by Allan Bard, U. Texas-Austin)

MEETINGS OF INTEREST TO OUR MEMBERS

Southeast Regional Meeting – American Chemical Society

An “Electrochemistry at the Nanoscale” Symposium will be held at the 60th Southeastern Regional Meeting of the American Chemical Society (SERMACS) in Nashville, Tennessee this November 12-15, 2008. Keynote speakers for this overall SERMACS meeting include Professors Robert H. Grubbs, James Tour, and Richard Zare, and ACS CEO Madeline Jacobs.

The “Electrochemistry at the Nanoscale” symposium will feature advances in understanding and applying electrochemical principles to the expanding list of nanotechnologies. Electrochemists in general have been interested in nanoscale interfacial properties long before the current nanotechnology emphasis. Thus, electrochemistry is uniquely able to address many of the challenges involved in the analysis of macromolecular systems. Critical applications involving the careful control of electrochemistry in nanoscale systems include fuel cells, catalysis, bioanalytical sensors, and energy conversion and storage among others.

For additional information, please check out the SERMACS 2008 website: <http://www.sermacs2008.org/> (Abstracts for this meeting were due by September 5th, but contact David Cliffel for submission of late abstracts or additional information [d.cliffel\(at\)vanderbilt.edu](mailto:d.cliffel@vanderbilt.edu)).

Electrochemistry Gordon Research Conference

Steve Creager writes:

The Electrochemistry Gordon Research Conference has been held each winter / spring on the western US coast since before many of us can remember. As attendees at the conference held in January 2008 know, the people at GRC have decided to switch the conference to a biennial schedule, such that the next conference will be held in January 2010, NOT January 2009. The factors behind this change are probably many but likely include a gradual decline in attendance, increasing numbers of topical GRCs, and a general trend within the GRC organization to have most conferences held every two years.

I am co-chair of the Electrochemistry GRC to be held in January 2010, and while that may seem far off, time will fly and the conference will be here very quickly. So, I ask two things at this time. (1) please mark Spring 2010 on your calendar for the conference; I'll do my best to contact the community with firm dates when I know them. (2) If you have ideas for topics you'd like to see covered, please feel free to contact either myself at Clemson (email [screage\(at\)clemson.edu](mailto:screage@clemson.edu)) or the conference co-chair, Prof. Dan Scherson at CWRU (email [daniel.scherson\(at\)case.edu](mailto:daniel.scherson@case.edu)) with suggestions.

One final thing; we have applied for and been approved to have a Graduate Research Symposium (GRS) to accompany the conference. In brief, a GRC GRS is a graduate student / postdoc-centered event that runs at the conference site, on Sat and Sun before the conference begins. Dr. Ryan White (PhD Univ Utah, Henry White, 2007; currently postdoc at UCSB) will organize the Echem GRC GRS. Suggestions for that portion of the conference may be directed to Ryan; Email; [rwhite\(at\)chem.ucsb.edu](mailto:rwhite(at)chem.ucsb.edu).

Thanks, and I welcome all input in advance of what I hope will be a continuation of the long history of excellent Electrochemistry Gordon Research Conferences. (Contributed by Steve Creager, Clemson)

ANALYTICAL SCIENCES DIGITAL LIBRARY

ASDL has partnered with the ACS Division of Analytical Chemistry (ACS-ANYL) and now can be conveniently accessed from <http://www.analyticalsciences.org>. The ASDL, which is part of the National Science Digital Library project, contains a collection of peer reviewed, web-based materials focused on chemical measurements and instrumentation. The ASDL also publishes the electronic *Journal of the Analytical Sciences Digital Library (JASDL)*. *JASDL* accepts for peer-review material in a variety of forms related to teaching the science of chemical measurements and instrumentation. Publication in *JASDL* is through the Creative Commons license, in which the author retains copyright.

SEAC members can help the ASDL better serve the needs of the analytical chemistry community by suggesting websites for review, submitting material to *JASDL*, or volunteering to serve as a reviewer of ASDL content. For more information, please consult the ASDL website, or contact Cindy Larive at UC-Riverside ([clarive\(at\)ucr.edu](mailto:clarive(at)ucr.edu)).

Also, while you are at <http://www.analyticalsciences.org>, consider having your institution become a Patron or Partner of ACS-ANYL. (Contributed by Carol Korzeniewski, Texas Tech University)

LAST, BUT NOT LEAST – THANK YOU ANNA!!!



As indicated by Sue Lunte in her President's letter, Anna Brajter-Toth will be stepping down as Editor of the Newsletter. For over six years, Anna has spearheaded efforts to keep us all informed of awards, events, and miscellaneous doings in the electroanalytical community. She has given us the bad news that has befallen our community with sympathy and understanding. She has been patient with those of us who were responsible for sending her information. She has worked to make sure that information is accurate and contacts are provided for more detail. She has done all of this with an unfailingly cheerful attitude, despite the fact that she had to do almost all of it by herself.

Thank you, Anna, for a job well done. All of our members appreciate your service over the last several years.