SEAC*communications*

Volume 19, Number 2, September 2003

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

Available on the WWW at http://seac.tufts.edu

In this issue:

We thank our sponsors and welcome new ones…

Join SEAC **…..- sensors - materials science - transition metal redox chemistry - bioelectrochemistry - teaching**

- President's Message –FAREWELL Mark, Hello Henry!

-Harry Mark Remembered

- REPORT **PittCon® 2003**

-Membership Committee Meeting Minutes

-SEAC MIXER AND REILLEY AWRADS RECEPTION

-2004 Reilley and Young Investigator Award winners announced

-SEAC Members in the News-

- BILL HEINEMAN, MARK MEYERHOFF, FRED HAWKRIDGE

- Bob Osteryoung retires from Analytical Chemistry

-SEAC welcomes New Members

- In Other News

- Meetings…. Meetings….Meetings

- ON THE MOVE

-e- mail - you wrote your comments to previous News…..

-JOBS

Quote to remember: *"There is no question that procedure is important, technique is important"*
Larry Faulkner

- President's Message

FAREWELL Mark, Hello Henry!

Thanks to all the real leaders of SEAC; SEAC Award Winners for 2004; Welcome to our next president

This will serve as my last message as SEAC president. My, how fast two years can fly by!!!! During this period, I have used this space to update you on SEAC activities, recruiting efforts, awards, etc. and occasionally offer some personal opinions on electroanalytical topics near and dear to my heart.

The success of our organization is not dependent on the person who pens this column every few months; rather our society is blessed with a large number of wonderfully gifted individuals, who serve in critical positions within our group, and who truly care about the future of SEAC. I want to thank, publicly, the great work of several officers, committee chairs, and others who I have had the privilege to work closely with during my term as president. This group includes: Joe Maloy (past Treasurer and current chair of our Finance Committee), Sue Lunte (Secretary), Johna Leddy (Treasurer), Debra Rollison (past Newsletter Editor), Anna Brajter-Toth (current Newsletter Editor), Sam Kounaves (Web Editor), Rick Baldwin (chair of Membership Committee), Dick Crooks (past chair of Awards Committee), Werner Kuhr (present Chair of Awards Committee), Craig Bruntlett (past chair of Activities Committee), Greg Swain (present chair of Activities Committee), and the late Harry Mark (chair of our Nominating Committee). It is these individuals along with all the past and present members of the SEAC Board of Directors who do all the leg work that allows SEAC to function effectively, day to day and year to year!

As I depart, I also want to extend a hearty congratulations to next year's SEAC awardees: Adam Heller (University of Texas), the 2004 Reilley Award winner, and Jeffrey Long (Navy Research Laboratory), the 2004 Young Investigator Award winner. Anna Brajter-Toth will be organizing the Awards symposium for next year's PittCon that will honor these two outstanding electroanalytical chemists.

Finally, it is my great pleasure to turn the leadership reigns of SEAC over to our incoming president, Henry White (Department of Chemistry, University of Utah) effective July 1. We all know that Henry is an enormously talented electroanalytical chemist and successful academician, and I am certain that he will use all of his skills well in directing our society over the next two-year period. Expanding the number of SEAC members will remain a top priority in the coming years, and I continue to ask each of you

to help Henry and others in their efforts to recruit more students, post-docs and professionals to join our ranks!

With warmest wishes to all for a pleasant and productive summer season—

Mark E. Meyerhoff

Harry Mark Remembered

Harry Berst Mark, Jr.

February 28, 1934 - March 4, 2003

Most SEAC members knew Harry Mark primarily as an electrochemist or analytical chemist. But, there was far more to our friend and colleague.

Harry Berst Mark, Jr., was born in Camden, New Jersey in 1934**.** He received a B.A. in Chemistry from the University of Virginia and a Ph. D. from Duke University in 1960 working with W.C. Vosburgh in inorganic chemistry. His dissertation research was on the discharge mechanism of certain oxide electrodes. This work stimulated a life-long interest in electrochemistry. From Duke, he traveled a few miles to the University of North Carolina for a two-year postdoctoral fellowship with Charles N. Reilley. During his postdoc, Harry continued his interest in electrochemistry by using polarography to study polaragraphic maxima and catalytic currents for metal complexes. He also branched out into kinetics as applied to analytical chemistry. Reilley and Mark published several classic papers on the analysis of binary mixtures by second-order differential reaction rates. He left UNC with another area of lifelong interest – kinetics. Harry decided that he wanted to learn more about electrochemistry, and so he did a second postdoc, this time with Fred Anson at the California Institute of Technology. Maybe he also felt that he hadn't traveled far enough for his postdoc (Durham to Chapel Hill is only about 30 miles); this time he crossed the continent. With Anson he studied chronopotentiometry – a hot new electroanalytical technique at the time. 13 papers resulted from his doctoral and postdoctoral years.

Harry began his academic career as an assistant professor at the University of Michigan in 1963. He quickly initiated a strong research program that was focused on both electrochemistry and kinetic methods of analysis. His publication of nine papers from his first year and half at Michigan was indicative of his commitment to research. Harry's research expanded into spectroelectrochemistry; his group was the first to do infrared internal reflection spectroelectrochemistry. He also became interested in electronics and instrumentation as applied to analytical chemistry.

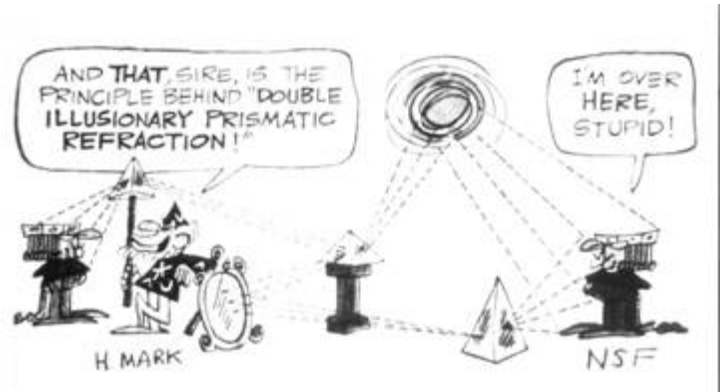
In 1970 Mark was recruited as a professor in the Department of Chemistry at the University of Cincinnati, where he spent the rest of his career. During this time he served a term as Head of the Chemistry Department. His headship was characterized by significant growth of the department. While at Cincinnati, Harry's research interests further expanded into diverse areas such as the chemistry of activated carbon surfaces and humic acid, and vitamin B_{12} electrochemistry. He was one of the early workers in conducting polymers. He enjoyed a fruitful collaboration with his organic chemistry colleague Hans Zimmer on thiophene conducting polymer electrodes.

Harry was an electrochemist and analytical chemist of international repute. He published over 300 articles in refereed scientific journals and wrote or edited 14 books. He was the co-editor of an 8 volume series on "Computers in Chemistry and Instrumentation". He gave over 200 talks at scientific meetings including plenary lectures at international meetings in countries as diverse as India, Yugoslavia, United Arab Emirates, Portugal and Morocco. He was a visiting Professor in China and Belgium. He served on the editorial boards of 8 international scientific publications**.** 52 graduate students and 42 postdoctoral associates studied in his laboratory. He was a member of the IUPAC commission on Analytical Nomenclature, Alpha Chi Sigma, American Chemical Society, American Institute of Chemists, Comite International de Thermodynamique et de Cinetique Electrochimies, Electrochemical Society, New York Academy of Science, Society of Applied Spectroscopy, Western Electroanalytical Theoretical Society, Society for Electroanalytical Chemistry, and the International Society of Electrochemistry. Mark served as Regional Editor for the Journal of Solid State Electrochemistry.

In recognition of his many accomplishments Mark received the Medaille d'Hommage, Universite Libre de Bruxelles, ACS Cincinnati Chemist of the Year, George Rieveschl Jr. Award for Distinguished Scientific Research, Technical Societies of Cincinnati Distinguished Scientist Award, and the McMicken Dean's Award for Research and Scholarship. He was an elected Graduate Fellow of the University of Cincinnati and was a member of Phi Kappa Phi and Sigma Xi honorary Societies.

Harry was a long-standing member of SEAC and was on the Board of Directors and Chair of the Nominating Committee. Harry's unofficial involvement with SEAC traces back to earlier societies from which SEAC was derived. In the 1960's, Fred Anson (California Institute of Technology) founded the San Clemente Surfing and Discussion Society as a means of stimulating informal discussion among electrochemists. The society's name proved to be an impediment to some scientists receiving permission and/or funds to attend the discussions. Consequently, Mark, who was the Society's secretary and editor of its newsletter, held a contest among the membership for a new name. The winner was to receive a platinum-coated bottle of Cutty Sark. Ralph Adams was declared the winner for the name Western Electroanalytical Theoretical Society (i.e., WETS, which is the forerunner of the Society for Electroanalytical Chemistry, SEAC). Mark tried coating numerous empty Scotch bottles by the liquid Pt process. During these experiments, the Assistant Department Head at Michigan was giving some visiting

dignitaries a tour of the Department. Mark was standing at a lab bench with about 20 bottles lined up in front of him facing the door, when the door was opened by the Assistant Head with the words "And here we have our laboratory for electrochemistry." He then saw Mark and his bottles and closed the door immediately without a word to anyone. Adams was subsequently presented the trophy at Robert Osteryoung's house in San Clemente at the next meeting of the Society. During this meeting the idea of a Gordon Research Conference on Electrochemistry was approved. Incidentally, the trophy presented to Adams was silver plated. Mark decided that the liquid platinum gave a surface that was inappropriately rough to be a fitting trophy. He claims the idea of using the liquid platinum for an OTE came before the experiments with the liquor bottles.



As you can tell from this story, Harry was known for his wonderful sense of humor. He especially enjoyed reading the comics, and one of his favorite characters was the Wizard of Id. The following is a cartoon that Harry used in his talk at the symposium on electroanalytical chemistry at the ACS meeting in Miami Beach in 1997(?). Harry's talk was on spectroelectrochemistry. In the cartoon, he is explaining his new technique to NSF. Presumably the king is Fred Findeis, a program director at NSF who was a very good friend of Harry's.

Harry also enjoyed suitably altering comics and taping them to the doors of colleagues or the desks of students. His favorites included the Wizard of Id (he once explained that Sir Rodney was his alter ego), Far Side and Dilbert. Another favorite strip was "Crock" which combined his love of humor with another passion, the French Foreign Legion. Harry had an impressive collection of Foreign Legion badges, insignia and other mementoes as well as books on the subject. He could usually tell you exactly where every detachment was located at any given time.

To say that Harry took an interest in automobile racing would be an understatement. His interest began during his postdoc in California, which was a hotbed for car racing. He drove Sprint cars and Midgets on the US Auto Club circuit from 1963 to 1975. On this circuit he raced against a number of drivers who drove and won at the Indianapolis 500. He was a member of the USAC Technical committee 1975-1977. Shown is his official USAC photo.

After he discontinued driving racecars himself, his interest in racing and in cars continued. He was a regular at

car races of all kinds including the U.S. Grand Prix and 500 at Indianapolis as well as stock races at the nearby Kentucky Speedway and Sprint car races at a quarter mile dirt track in Lawrenceburg, Indiana. At Lawrenceburg he particularly enjoyed visiting the pre-race pits and talking to old competitors, many of whom were acting as pit crew for their children or grandchildren. Although he had a Honda Civic for his daily transportation, he always had a Maserati or a Ferrari for serious driving on nice weekends. The recent photo below was taken at the Kentucky Speedway.

Another interest of Harry's was antique Colt firearms. He was an international expert on antique Colt firearms and his views and evaluations were eagerly sought at various gun shows around the country. He had a valuable Colt pocket pistol collection of international repute. Several of his Colts were photographed for the definitive book "Colt's Pocket '49: It's Evolution". Always an academic, Harry published five papers on pre-civil war firearms.

Harry loved to travel, attending at least one international meeting a year, and was known world wide. An ardent sumo fan, Harry subscribed to Sumo World. His friend Katsumi Nikki regularly taped sumo bashos and sent them to Harry. Recently resurrecting his interest in model trains, he built an HO gauge layout in his basement.

Mark's enthusiasm for science and life, his willingness to help others and his intellectual honesty made him a role model for many of his colleagues, both national and international.

Harry was an excellent scientist but more importantly, he was a true friend. He embodied what every friend should be: a sounding board for problems both personal and professional, a sense of humor to raise your spirits any time you spoke with him and a sense of trust and honesty that are found in few people. The fact that we have received hundreds of emails and calls of sympathy since his death is a testament to how many others held Harry in high esteem.

Harry was a wonderful colleague and close friend whom we miss very much. We feel very fortunate to have known him.

Bill Heineman
Tom Ridgway

P.S. Harry Mark stories abound, and we are posting them on the UC website (http://www.che.uc.edu/Chemistry/HarryMark.html). If you have a Harry Mark story or a photo of Harry that you would like to share, please send it to Kim.Carey(at)uc.edu

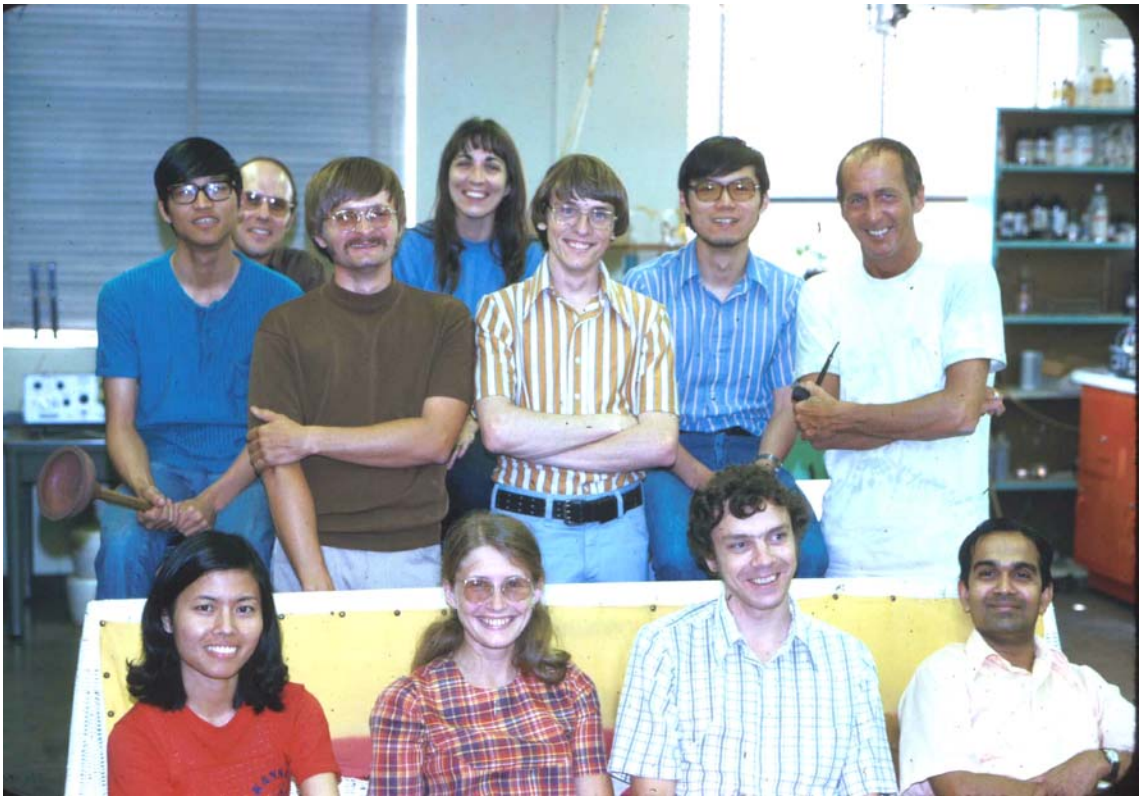
~~~~~~

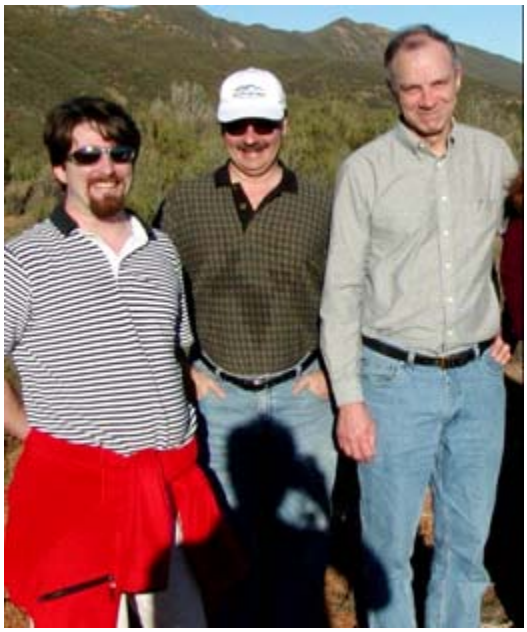
Many of you expressed great sadness when hearing the unexpected news of Harry's passing. I will greatly miss Harry's, gentlemanly, "Hi Anna" that I heard for many years, often unexpectedly, when our wanderer's paths mixed.

-------- *REPORT* PittCon® 2003

Rick McCreery the 2003 Reilley Award winner and **Julie McPherson**, the 2003 SEAC Young Investigator awardee were the featured speaker at the Reilley Awards Symposium, organized by Greg Swain. The Symposium was very well attended, as were many other sessions that featured SEACers. Rick's Reilley talk had a vision of the future well staked out. Talks from Julie's lab also pointed towards the future. Mark Wightman, a long-time friend of Rick's, was also one of the Reilley Symposium speakers. In his talk Mark pointed out the advances made in Rick' lab that contributed to major progress in bioanalysis.

Looking at the pictures that Mark showed, it is not difficult to think of Rick, the California kid, trekking across the country in his convertible, to work with Ralph Adams. The other pictures, with Ralph, and from a hike at a recent Electrochemistry Gordon Conference in California, with Werner and a new talent, had us smiling. Congratulations!
~~~~~~





Thanks to Mark Wightman for the pictures.

-Membership Committee Meeting Minutes

Minutes of the Meeting of the Membership Committee
of the Society for Electroanalytical Chemistry
March 11, 2002

President Mark Meyerhoff called the meeting to order at 5:00 p.m. Approximately 50 members and their guests were present. The minutes of the 2002 meeting were distributed and approved.

Certificates of Appreciation were awarded to retiring Directors Rick Baldwin, Sue Lunte and Marc Porter. The passing away of two distinguished members of our society, Harry Mark and Buzz Adams, this year was acknowledged by Mark Meyerhoff.

The President welcomed the new members of the Board of Directors, Ingrid Fritsch, Petr Vanysek, and Tom Ridgway. Bill Heineman has graciously agreed to assume Harry Mark's role as a Director and as head of the Nominating Committee during the coming year. The new SEAC officers were announced. These are President- Elect Henry White, Secretary Susan Lunte and Treasurer Johna Leddy.

Joseph Maloy presented the Society's financial report. The total net worth of SEAC in 2002 was $86,606.58, which increased to $92,321.84 in 2003.

Mark Meyerhoff will write a letter on behalf of SEAC in support of the Gordon Conference on Electrochemistry.

An invitation to the SEAC mixer that occurred at the Peabody Hotel immediately following the meeting was announced.

The meeting was adjourned at 5:11 p.m.

Respectfully submitted,

Susan M. Lunte, Secretary

.

-SEAC MIXER AND REILLEY AWARDS RECEPTION

was well attended. The general meeting of SEAC membership was followed by the SEAC mixer. There were many students in the crowd, including a group from the University of Maryland, Baltimore County, with Bill LaCourse. Sue Lunte was "helping"

with the refreshments for the new student members. With many new students in attendance the future of SEAC looks good.

This was the first year that during the SEAC mixer we had a poster presentation by Graduate Student Travel Award Winners, and this added a new touch to this fun professional gathering. I am trying to persuade Paul Bohn, who vouches for the quality of the party, to move from the status of the honorary electrochemist, which he jokingly claims, and has held now for many years, to a card holding SEAC member. Paul- here is your great chance to lead other honorary electrochemists, to join SEAC! There is plenty of room to grow under SEAC flagship.

Thanks to Greg Swain for organizing many of the SEAC activities at PittCon® 2003 that kept SEAC members and friends together.

~~~~~~

The SEAC party brought together the current pres and the pres elect, a "father and son" team (Mark and Mark…), and members of the UNC team.

and allowed us to view and …
~~~~~~

CHOOSE YOUR MARK.....OR 5 MARKS

-2004 Reilley and Young Investigator Award winners announced

-2004 Reilley Award Winner

Adam Heller, of the Unversity of Texas at Austin, is the 2004 Reilley Award winner. Adam is being recognized for his contributions to the field of electroanalytical chemistry through his work on biosensors. Adam's work has been at the center of the resurgence of interest in sensors. Adam's work emphasizes electrochemistry and materials science, and is unique in its direct coupling of science to important clinical applications. He continues to push the frontiers, by his recent emphasis on "in sensor" power sources. The engineering scientist's approach that Adam brings to the science of electroanalytical chemistry and sensors continues to give electroanalytical chemistry a big push. Adam's communication skills, have promoted the new ideas and since forcefully. Join us for the celebrations at PittCon® 2004 in Chicago.

-2004 Young Investigator Award Winner

Jeffrey W. Long is a staff scientist in the Advanced Electrochemical Materials Section of the Naval Research Laboratory in Washington, DC. Jeff became a staff scientist in the Surface Chemistry Branch at NRL in August 2000 after a post-doctoral stint with Debra Rolison. Jeff's research on novel electrode materials is currently focusing on hybrid nanoarchitectures comprising ultrathin polymer coatings on electrically conducting aerogels.

Thanks to Debra Rolison for the bio of Jeff in this issue.

-SEAC Members in the News-

- BILL HEINEMAN, MARK MEYERHOFF, FRED M. HAWKRIDGE

Bill Heineman is the winner of the 2003 EAS Award for Outstanding Achievements in the Fields of Analytical Chemistry. Bill has been a longstanding leader in the electraoanlytical chemistry community – he and Pete Kissinger coauthored one of the most popular and useful reference books in the field- **Laboratory Techniques in Electroanalytical Chemistry** that has been a best seller at **Dekker**. The book, at the time of its first publication, has made the field of electroanalytical chemistry accessible and thoroughly modern. Bill's work on electrochemical immunosensing has been pioneering and is still one of the most impressive developments in its vision of the future of electroanalytical chemistry. Bill has been recognized for his work in many ways, including in 1995 by the **Reilley Award,** but has always maintained an incredibly even and modest keel. Congratulations to one of the hardest working, true leaders in this field. Bill will receive the Award in November at the 2003 EAS meeting.

Fred M. Hawkridge and Mark Meyerhoff are the 2003 ACS Division of Analytical Chemistry award winners. Congratulations!

Mark E. Meyerhoff is a recipient of the ACS Division of Analytical Chemistry Award in Electrochemistry sponsored by Cole-Parmer. Mark is known to you all as the president of SEAC. As a scientist, Mark has made his "mark", and continues to do so, in the field of potentiometry, which he made highly relevant in modern bioanlaysis, through his work on gas sensors, and his recent work on NO

releasing polymers. Mark has been "a father" of many of the new generation of electroanalytical scientists, who are already leaders- Mark Arnold, Eric Bakker, Leonidas Bachas and Sylvia Daunert. Way to go!

Fred M. Hawkridge **is a recipient of the ACS Division of Analytical Chemistry Award for distinguished Service in the Advancement of Analytical Chemistry sponsored by the Waters Corporation.** We had congratulated Fred last year in his recognition by the 2002 American Microchemical Society Award. Fred has contributed to this community not only through his groundbreaking science of bioelectrochemistry, but also through his service at NSF and NIH.

Congratulations Bill, Mark and Fred!!!

-Bob Osteryoung retires from Analytical Chemistry

Analytical Chemistry recently announced the retirement of Bob Osteryoung as associate editor. The manuscripts in the areas previously handled by Bob will now go to the Editor, Royce Murray. Bob's stint at Anal. Chem. followed reorganization of the journal after George Morrison's retirement as editor. During Bob's tenure as associate editor, many new developments in electroanalytical chemistry, at the interface with different areas of science, were taking place. Bob seemed to delight in seeing the changes, the emergence of new talent, and in the continued impact of the "greats", who were attracted to publish in the journal by its wide readership and quality of science. As associate editor Bob could be tough, but his sense of fun was always there, and the science flourished. Thanks Bob!

-SEAC welcomes New Members

SEAC New Members 2003

Mario Alpuche-Aviles, Mississippi State University
Christopher Baldy, PPG Industries
Mary Bedner, University of Maryland
Chun-Hsien Chen, National Tsing Hua University
Sang Sub Han
Kevin Hathcock, Columbian Chemical Company
Jie He, North Dakota State University
Jacob Ketter, University of North Carolina
Mustafa Kilinc, Ege University
Yuehe Lin, Pacific Northwest Laboratories
Peter Mahon, The Australian National University
Heidi Martin, Case-Western Reserve University
Mark Olson, University of Maryland, Baltimore County
Dana Spence, Saint Louis University
Shannon Vandaveer, University of Kansas
Melissa Villanueva, University of North Carolina
Wei Zhan, Texas A&M

AND MORE

Amy Beisler, University of Pittsburgh
Laura Borland, University of Pittsburgh
Kathryn Brogan, Unversity fo North Carolina
Randhir Deo, New Mexico State
Serenity Desmond, Penn Sate
Daniel Eves, Penn State
Caroline Geary, University of Pittsburgh
Wayne Gellett, University of Iowa
Doug Gilman, University of Tennessee
Samo Hoćevar, National Institute of Chemistry
Eric Horowitz, Penn State
Alfredo Jesús Ibáñez, New Mexico State
Hideki Kuramitz, University of Cincinnati
Anne Maghasi, University of Cincinnati
Bridget Mahon, University of Pittsburgh
Ronita Marple, University of Maryland, Baltimore County
Joe Mitala, University of Pittsburgh
Swati Modi, University of Maryland, Baltimore County
Alexander Muck, New Mexico State
Mary Newton, University of North Carolina
Tracy Paxon, Penn Sate
Xiomara Perez, Penn State
Ronan Polsky, New Mexico State
Paula Jo Ream, Penn State
Matthew Szapacs, Penn State
Murat Unlu, University of Iowa
Chamike Wansapura, University of Cincinnati
Wei Zhou, Texas Tech
Imants Zudans, University of Cincinnati

We welcome new members. *Thanks to Nancy Harmony, Sue Lunte and Johna Leddy for the membership update.*

If you forgot to renew your 2003 membership– the dues will go up…… -so catch the last year's rates now. To renew, or to join: http://seac.tufts.edu

- Meetings…. Meetings….Meetings

Remember the Orlando Electrochemical Society Meeting this Fall. The meeting promises to be interesting with a Symposium dedicated to **Mike Weaver** and newest in nanoscience. See you there!

- In Other News

In February Dan Buttry sent this message.
To: Electrochemistry GRC Conferees
From: Dan Buttry, 2003 Vice Chair

Subject: Future of the Electrochemistry GRC meeting

As many of you know, the winter 2004 Electrochemistry Gordon Research Conference has been cancelled. This is a result of unprofessional behavior at the end of the January 2003 conference that resulted in significant damage to one of the rooms in the Ventura Marriott. Such behavior is absolutely unacceptable. It is especially unfortunate that the entire community now suffers from it. In an effort to revive the meeting, I am working with Tito Abruna and Royce Murray to craft an application for its reinstatement to the GRC Board. Success in this will undoubtedly require proposing substantive changes in the meeting. We hope you will lend both your support and your understanding to us as we work through this process.

Since then *Carl Storm, Director, Gordon Research Conferences, (401-783-4011, ex. 107, phone 401-783-7644, fax)* heard form many from this community. The director had independently sent to all conferees who attended the 2003 Electrochemistry GRC an e-mail "about the cancellation of the conference". He also sent a summary of responses he received to that communication.

Dick Van Effen was at the last GRC and had this to say:

….Because this is a matter of great importance to SEAC members, I think an accounting should be given as to what happened. Although activities at a GRC are normally not discussed outside the conference, this matter has nothing to do with the technical content of the meeting.
Basically, a few drunken individuals got carried away late at the WETS party and caused considerable damage ($1300) to one of the salons at the Ventura Beach Marriott (I saw the damage but was not present when it happened). GRC headquarters paid for the damage, and summarily canceled future electrochemistry conferences, in what I would call a ludicrous overreaction. What should have been done is to identify the individuals who were responsible, if possible, and bar them from further GRC participation, not punish the entire electrochemical community. We need to support Dan Buttry, and Tito.
Best Regards,

Dick Van Effen (25 Feb 2003)

At this time the GRC reinstatement proposal has been submitted and is under review. We should learn the outcome sometime in September, after the GRC Board looks over the reviewers' appraisals. There has been strong support for the reinstatement and SEAC board voted to send in a strong supporting letter. Dan Buttry and Tito Abruna will keep us posted.

☆ **Larry Faulkner,** *as the president of the University of Texas,* discussed a recent Supreme Court decision on NewsHour with Jim Lehrer (June 23, 2003). Larry was interviewed as part of a group of university presidents, including the president of the University of Michigan, which was at the center of the decision. The quote in this issue of the Newsletter is from Larry talking to Margaret Warner, who carried the interview. The interviewer referred to Larry as Mr. Faulkner. In response to Margeret Warner's question, Larry used the precise scientific language of Prof. Larry R. Faulkner, that we know him for, from his electroanalytical chemistry days/fame (June 23; see www.pbs.org/newshour for a full transcript).

This from Chuck Martin

Subject: Dear Bio/Nano Enthusiasts (sent to the University of Florida mailing list).

Now that the semester is over (Spring, Ed.), I wanted to give you all an update on things happening within the Bio/Nano Center (that Chuck directs at UF, Ed). First, we continue to be very successful at generating collaborative research grants. Weihong Tan hassled up a successful effort at landing a second NSF Nanoscience Interdisciplinary Research Team (NIRT) grant. *We now have two NIRTS.* I wonder how many universities can make that statement! Weihong and his collaborators have also landed a $15M NIH Center of Excellent grant and a Packard Foundation grant. As for me, I just landed a DARPA grant. There is now something like $30,000,000 in grants running through the Center! I am working with a professional webpage design company to put together a better Bio/Nano webpage. On this webpage, I would like to have links to your webpages.

Charles R. Martin, University of Florida, Department of Chemistry

In addition – as some may know, Chuck recently (June 16th, 2003) tied the knot. For more info/congratulations contact him at: cmartin@chem.ufl.edu. Chuck has informed me, after a prompt, that gifts are welcome!

Electroanalysis Selected for the 2007 Mars Phoenix Mission.

Recently NASA announced the selection of the "Phoenix" lander for the 2007 Mars Scout mission to advance our thinking about the origins of life. The Phoenix will set down in the water-ice-rich polar region to search for clues to the history of water, and microbe suitable environments. One of the co-investigators is **Sam Kounaves**, who is a part of the science team and in charge of the electrochemical sensor systems for measuring inorganic ions in the Martian soil. Even though the northern polar plains are now thought to be too cold for water to exist as a liquid, periodic variations in the Martian orbit allow a warmer climate to develop every 50,000 years. During these periods any dormant organisms could come back to life, and evolution can proceed. The mission of Phoenix is to verify whether the northern plains are indeed a viable habitat on Mars.

For more information see: http://planetary.chem.tufts.edu/Phoenix/index.html

-ON THE MOVE or —SEAC on the Move!—

Transition to full-time scientific staff at the Naval Research Laboratory: From where to here or some equally pretentious sounding nonsense

Whilst staring at a computer screen and working diligently on a proposal on some bio-nano-related thing, I was asked, nay directed, by a certain former editor of a familiar publication to alert my indifferent colleagues that I am in fact, still at the Naval Research Laboratory. Now as full-time staff.

My employment here was precipitated by a series of events nearly as awkward and complicated as my arrival as an NRC postdoctoral associate. After fits and starts, a couple of publications (more on the way, I promise! ye of baited breath), various successes and failures in social endeavors, sports, weight loss, weight gain, utter failures to get myself invited to any A-list Washington functions (Maureen Dowd, I'm still waiting for the call), I found myself nearing the end of a third postdoctoral year in the Summer of 2002. DC had been very stimulating and I wanted to stay. After flirting heavily with offers from the private sector and a few other organizations, I found myself agreeing to stay here to pursue a few things that have been stuck in my craw for a while. But now I must get back to the proposal.

Jeremy Pietron
jpietron(at)ccs.nrl.navy.mil

As if there weren't enough Texans in Washington already, **Wendy Baker** has relocated to DC to work for Debra Rolison in the Advanced Electrochemical Materials group at the Naval Research Lab. Wendy completed her Ph.D. with **Dick Crooks** at Texas A&M (Spring, 2002) following her investigations of nanometer-scale electrodes and electroactive dendrimers. She is currently busy pursuing her NRC-sponsored postdoctoral research in high-surface-area aerogel-based fuel cell electrodes, adapting to life in the big city, and training her new dog Maddie in the ways of the electrochemical sciences. Wendy can be reached at: wbaker(at)ccs.nrl.navy.mil

[**Note**: Debra informs us that in accordance with the Animal Welfare Act of 1966, Maddie has been provided with proper lab safety eyewear since mugging for this photo.]

Michael Doescher knew a career in science was for him after the years spent as a test subject at the Electroshock Therapy Institute of Iowa (Luther College). He didn't realize how little things actually change on the other side of the padded door as, after his escape, he joined **Micky Myrick**'s group at the University of South Carolina. Mike recently finished his Ph.D. and has joined Debra Rolison's Advanced Electrochemical Materials section at the Naval Research Laboratory in Washington, DC where he is putting nanoarchitectures through their conductimetric paces. Other Iowa-loving electrochemists can reach Mike at: doescher(at)ccs.nrl.navy.mil

---

Jeffrey W. Long Jeff's journey to NRL started with earning his B.S. degree with honors in chemistry from Wake Forest University in 1992, where he was introduced to the world of electrochemistry and conducting polymers by Professor Ronald Noftle. Jeff then traveled east down I-40 to attend graduate school at UNC-Chapel Hill, working under the tutelage of Professor Royce Murray. While at UNC, Jeff's research focused on the synthesis and electrochemistry of electroactive polyether melts, with the goal of understanding electron transfer, physical diffusion, and axial ligation reactions in semi-rigid media. Areas in which patience is not only a virtue, but a necessity.

With his UNC Ph.D. sheepskin still bleating, Jeff joined Debra Rolison's group in 1997 as an NRC postdoctoral scientist at the Naval Research Laboratory. He then began his investigations of nanoscale electrode materials, including aerogels and related structures, which are relevant for the Navy's future energy storage and conversion needs. Jeff's postdoctoral research accomplishments at NRL included synthesizing and characterizing metal oxide aerogels as high-performance battery and ultracapacitor candidates, as well as discerning the true chemical nature and methanol oxidation activity of commercial Pt–Ru electrocatalysts. Jeff became a staff scientist in the Surface Chemistry Branch at NRL in August 2000. Later that year, he received the Young Investigator award at the Sixth International Symposium on Aerogels in Albuquerque, N.M. He continues his research on novel electrode materials at NRL, currently focusing on hybrid nanoarchitectures comprising ultrathin polymer coatings on electrically conducting aerogels. Jeff is the 2004 Young Investigator Award winner. Congratulations!

Thanks to Debra Rolison for the on-the move update!!!

---

e- mail - you wrote **your comments to previous News…..**

Hi Anna,

I hope you're doing well. I am in the midst of Winter term, constructing a second take-home midterm for my poor instrumental analysis students! I just read the latest SEAC newsletter and I was taken aback by the statement that our SEAC member pool is shrinking. The suggestion to advertise as a more inclusive organization is a good one. I think we pride ourselves on recognizing the impact that electroanalytical chemistry has had on many areas of research, and that should be reflected in our membership.

Here are some ideas for SEAC promotion:

1. Propose and organize symposia at other conferences besides Pittcon, such as FACSS. I know FACSS has a token electroanalytical presence, but it could easily be strengthened.

2. Have subcommittees within the current membership travel to regional and local conferences to setup tables to promote SEAC. SEAC members committing to this could be rewarded with a modest travel stipend and/or an agreement with the conference to waive registration fees. Such conferences could include ACS regionals, EAS or separations meetings.

2a. This is related to idea 2. Have a greater presence at specialized conferences where electroanalytical chemistry has had a developmental role. Liquid chromatography, neurotransmitter studies, nanotechnology, capillary electrophoresis, environmental analysis/remediation...all of these areas (and more) have been greatly impacted by methods which have been developed or promoted by SEAC members. This could include some sort of association with ACS, AAAS, or GRC.

A separate topic - the Gordon Research Conference. With respect to GRC not sponsoring an electrochemistry conference next year, I think that from my perspective as a faculty member at an undergraduate institution, a summertime conference would be much more

feasible. I could easily get away for a couple of days during the school year. However, in the spirit of the GRC, staying for the entire conference would not be easy. Obviously, faculty at teaching institutions could not contribute nearly as much to the information presented at the GRC. However, I believe that there is interest from such faculty members to attend and maintain/develop close ties with brethren at research institutions. This is beneficial to both parties. I'm not so sure there is a real lack of interest in the Electrochemistry GRC. I hope this is a helpful thread to initiate the SEAC membership discussion!

Steven Petrovic, Assistant Professor of Chemistry, Southern Oregon University
Ashland, Oregon 97520, (541) 552-6803, petrovis(at)sou.edu

Thanks to Steve for his input!

I have also heard from drhuang(at)drhuang.comDr Weiguang Huang, BS, MS, PhD, MACS, 124 Eastern Ave, Kingsford, Sydney, NSW 2032, Australia, 20001-2002 Golden Web Award winner who has invited me to join the electrochem group "hosted by Yahoo! Groups, a free, easy-to-use community service." http://www.electrochem.net">www.Electrochem.Net www.ElectrochemistrySoftware.com.

The ad stated that, "By joining electrochem, you will be able to exchange messages with other group members, store photos and files, coordinate events and more…and are invited "to join to discuss your questions."
*I have not joint, but I get copies of a lot of correspondence. One request was to review software***,** Polar 4, that apparently can be downloaded from that website "with manual and tutorial" . http://dbweb.liv.ac.uk/ltsnpsc/swrevs/5polar.htm.

According to the ad -Polar (an abbreviation for Polarography) Software POLAROGRAPH.com (former Polar) is virtual polarograph and general electrochemical simulator with data analysis. It analytically and digitally simulates voltammograms (polarograms) on virtually any mechanism (finite and semi-infinite diffusion, convection and absorption) at over 10 electrodegeometries (planar, spherical, semi-spherical, cylindrical,semi-cylindrical, microdisc, thin film, rotating disk, rotating ring electrodes) in over 10 techniques (linear sweep and CV, DC, normal pulse, reverse normal pulse, differential pulse, square wave, additive squarewave, staircase voltammetries). It simulates over 20 effect factors, e.g.charge current, resistance, noise, preconcentration time and potential, convection pH, the reactant and product numbers, etc. User can type in his mechanism with any symbol. It includes over 200 theoretical equations.It plots and analyses any x-y data for peak location, peak height, peak width, semi-derivative, derivative, integral, semi-integral,convolution, deconvolution, curve fitting, and separating overlapped peaks and background current.

Seeing this I had asked: ***How is Polar different or similar to DigiSim and similar packages available from BAS and elsewhere? Is there a cost to join your echem discussion group?***

The response I got:

FAQ in its manual:

Q: How does it compare to competitors?

A: Polar has advantages over competitors (see details on the feature Table in Chapter 2 Features):

1.Competitor only digitally simulates a single technique CV at 5 electrode geometries, while Polar analytically and digitally simulates over 10 techniques at over 10 electrode geometries.

2. Competitor cannot simulate absorption while Polar can.

3.Competitor cannot simulate reactions with reactant or product number, e.g. 2A+e=B, while Polar can.

4.Competitor cannot separate overlapped peaks and background, while Polar can.

5.Competitor does not support Windows 95 features, e.g. long filename, while Polar does.

6. Competitor cannot simulate effect of pH, while Polar simulates over 20 effect factors.

7.Competitor cannot calculate any theoretical value, while Polar includes over 200 theoretical equations.

8.Competitor cannot analyze data, while Polar can.

9.Competitor cannot check simulation accuracy by surface concentration, while Polar can.

10. You download and try Polar free.

11. Polar is much cheaper and more powerful.

12. You do not worry about if you lose the Dongle.

No cost to join echem discussion group.

SEACErs comments ?

And this news from Kathy Ayers, and Dick Durst:

Hi Anna:

After Johna set the precedence for bringing babies to GRC conferences, I decided to continue the tradition by bringing Sara (born May 25 2002) to the 2003 conference. Grandma babysat her while I attended sessions and gave my talk, but we all joined the table at meals, where Sara was a big hit. She was fascinated by John Stickney and helped Johna combat baby homesickness. I didn't think to bring the camera downstairs with me, so I don't have any of her actually at the conference, but here are a couple of her at home in case you are interested. She's learned to stand since the conference and is quite proud of herself, but the other one looks more like her in person.

--Kathy Ayers

Energizer

Dick Durst wrote:
From: "Richard A. Durst" <rad2(at)nysaes.cornell.edu>
Subject: **SEAC News Item**

Anna, here is a brief announcement for the next issue of the SEAC Newsletter. Antje Baeumner and I are very pleased to announce the birth of their son, Vincent Durst Baeumner, on April 9th in Ithaca, NY. Despite his difficult last name, Vincent is an extremely happy little boy and growing rapidly. Mother and father are also doing well, albeit they could use a bit more sleep.
A recent photo of him (at about 2 months old) and Antje is attached for your viewing enjoyment (at the present time, he has his father's hairline).

Congratulations to Dick and Antje.

-JOBS –JOBS -JOBS

Subject: **Postdoctoral position**
Hi Anna,
I wondered if you could send the following postdoc announcement to the SEAC members.

Postdoctoral Position at Georgia State University

A postdoctoral position is available immediately for NSF-supported research on the fabrication, characterization, instrumentation and software development, and modification of addressable microelectrode arrays. Experience in microelectrodes, scanning probe techniques including AFM and scanning electrochemical microscopy (SECM), electroanalytical chemistry, instrumentation and electronics, electrode surface,