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SEAC communications

President's Message

I know that a lot of you fellow SEAC'ers are in the education business, one way or another. In fact, I suppose that every electroanalytical chemist spends some time (too much?) trying to teach someone (manager? spouse?) about the wonders of electrochemistry. I, for one, am becoming less and less certain about how to teach our subject than when I was a freshly minted assistant professor, full of conviction that a decent exposure to Lingane's "Electroanalytical Chemistry" and Delahay's "New Instrumental Methods in Electrochemistry" was enough to inspire any student to pursue a career in the world of dropping mercury electrodes, etc.

All this began to change quickly. I soon found that most students felt no natural attraction to the subjects I loved and so some adroit salesmanship was called for. Or, perhaps, small-scale deceit. I recall that one of my first graduate students entered the group with the impression that his project was the analysis of mixtures of diastereomers by high field (then 100 MHz) NMR. In fact, 90% of the study was electrochemical and eventually he became just as enamored with electroanalytical chemistry as the rest of us.

There are a number of styles of teaching electroanalytical chemistry, reflected somewhat in the textbooks that are written. There is the hard core approach, liberally laced with diffusion equations, Laplace transforms, theory of electron transfer, and the electrical double layer. Others emphasize the analytical chemistry in our field. Here, the stress is on the use of electrochemistry to solve all sorts of practical problems of analysis. Another style promotes electrochemistry as a tool for gaining new chemical information in such diverse fields as organic, inorganic, geo-, bio-, and environmental chemistry. There are undoubtedly other characterizations of educational styles.

The hard core approach has the virtue of maintaining a distinct intellectual identity for our subject. But many find this approach boring if not sterile. Conversely, there may be more excitement in analytical applications and elucidation of new chemistry but there is a danger that the identity of the field is lost. Indeed, it is satisfying to see how all of these parts, both fundamental and applied, fit together into a consistent whole.

But who is satisfied? Mainly the experts who write the books and other folks who have devoted their scientific careers to the field. However, many of our students as well as colleagues from other disciplines simply want to know what electroanalytical chemistry can do for them and our wisest course may be a bit

Editorial

This is our pre-PITTCON '95 issue of the newsletter, and I encourage- nay, insist-that ail of you who are going to fabulous New Orleans this year attend the exciting SEAC activities. These activities include the mixer and, of course, the Charles N. Reilley Symposium. As I mentioned last time, Bill Heineman and Mark Anderson were named recipients of the Reilley and Young Investigator Awards, respectively, for 1995. Their biographical sketches, as well as information on the symposium and the other SEAC activities, appear in this issue. Please join us for technical discussions and good fellowship.

Also in the last issue, I berated the former Reilley Award winners who did not provide to SEAC Communications remembrances of their illustrious careers, as is the unwritten requirement for those receiving that award. By way of embarrassment, I listed those scofflaws but, in the process, I embarrassed myself! From Germany, no less, I received an e-mail message (inside this issue) from Fred Anson once again catching me in a faux pas. As Fred pointed out in no uncertain terms, I cited him in the last Editorial as one of the Reilley Award laureates who owed me a remembrance article, but I subsequently listed him (correctly) in the tabulation of 'Good Guys" who did provide an article. All I can say is that, since I was not speaking ex cathedra, I am allowed to make a mistake once in a long while! Just ask my students. But I do apologize to Fred for the considerable embarrassment I brought him among his peers for the error. It only goes to show the power of the press, lest you other scofflaws persist in trying to evade your obligations.

Unfortunately, Fred's e-mail also brought the sad news that Heinz Gerischer passed away in September. Although I had theopportunity to meet Prof. Gerischer only **a** few times, I can certainly echo Fred's sentiments that he was a wise and stimulating scientist. He will certainly be remembered for his many contributions to electrochemistry.

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Membership Application

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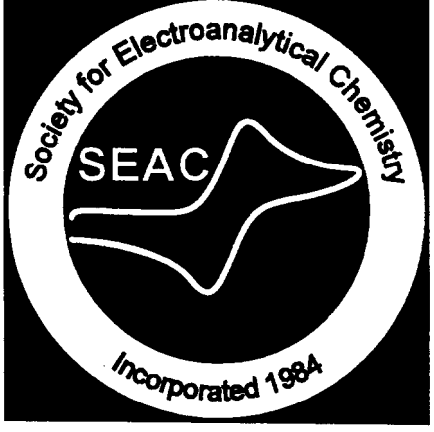

[President's Message, cont.]

I have recently devoted about one-fourth of my graduate course in electroanalytical chemistry to student-led discussions of papers from the current literature. Teams of students are directed to find interesting papers that have something to do with electrochemistry. The entire class reads these papers and participates in discussion after an initial presentation by the team. This is far and away the most popular part of the course. not only for the students but especially for me! I am amazed by the incredible things these students find and I probably learn more than they from this exercise.

So I suppose that nothing is really new here. I now regularly remind myself that you first need to get folks' attention before you can sell anything. And a large part of education is salesmanship.

Dennis Evans

(Editorial, cont.)

In the last issue's President's Message, Dennis Evans mentioned the electrochemistry bulletin board, ELETQM-L. Since then, I received e-mail messages from several members requesting information on how to subscribe. The instructions I sent them are below. Not hearing that there were any problems, I assume their subscriptions went through without mishap.

In case you missed it, there was an interesting interview with Janet Osteryoung, the new Director of NSF's Chemistry Division, in C&EN on November 7th. The former SEAC President gives her views on research opportunities in light of the Chemistry Division's relatively static budget (in constant dollars).

Finally, I want to thank Ann Tyler, who has been preparing SEAC Communications for publication at Bioanalytical Systems. Ann is returning to school in January and will be replaced by Janet Smith, who I'm sure will continue the high quality publishing efforts of her predecessors at BAS. Thanks again, Ann, and welcome, Janet.

Have a great new year, and please keep me posted on new developments concerning SEAC peopleand any activities of interest.

Dick Durst

ELETQM-L

In response to inquiries from Carolyn Ribes, Bernd Speiser, Brian Clamp, Faye Robinson, and Jeff Brewster concerning subscribing to the electrochemistry bulletin board, I sent the following instructions.

To subscribe to ELETQM-L send an e-mail message to:

LISTSERV@ BRUFU.BITNET

Do not fill in the subject line, and type the message:

SUBS ELETQM-L "your name"

You will receive automatic acknowledgment and other info in separate messages from the bulletin board.

To the best of my knowledge, this format has worked for all who have tried it, and they are now being inundated with all sorts of useful information and questionable triviaa. Welcome to the information superbyway.

E-Mail Address Change

The electronic mail addresses for **Universität Tübingen** in Germany have been changed. Bernd Speiser can now be reached under.

bernd.speiser@uni-tuebingen.de

There is also an alternative e-mail address at his workstation:

bs@echem3.orgchemie.chemie.uni-tuebingen.de

PITTCON '95
Symposia of Electrochemical Interest

Monday Morning:

Bioanalysis Using Nucleic Acid Amplification and Probes
Arranged by R.A. Durst
(not electroanalytical, but should be interesting)

Chemiluminescence and Electrogenerated Chemiluminescence
Arranged by A.J. Bard and T.A. Nieman
(sounds really interesting, too bad it conflicts with the above session)

Monday Afternoon:

Ultramicroelectrodes: Advances In Understanding and Application
Arranged by R.A. Osteryoung
(keep thinking small for big results)

Tuesday:

Not much electrochemistry
(go tour the French Quarter or visit the Exposition, but save some energy for the SEAC reception in the evening)

Wednesday Morning:

Chemical Dynamics at Single Cells
Arranged by R.M. Wightman and A.G. Ewing
(this session focuses on electrochemical methods)

Reilley and Young Investigator Awards Symposium
Arranged by F.M. Hawkridge
(this is the big one! but it is usually on Wednesday afternoon, what happened?)

Wednesday Afternoon:

Biosensors for Environmental Monitoring
Arranged by J.M. Van Emon
(includes electrochemical biosensors)

Thursday and Friday:

Not much electrochemistry
(but remember, these are just the invited symposia and there will be numerous sessions with contributed papers on electrochemistry)

New SEAC Membership Chairman Appointed

SEAC Director Andrew G. Ewing has been appointed Chairman of the Membership Committee by President Dennis Evans. This new appointment has been made to provide a broader distribution of responsibilities among the Board of Directors. Andy's term of offii began on July 1, 1994.

This important SEAC committee is responsible for recruiting new members. The Committee receives and reviews applications for membership and collects the initial dues payments. Once a member has been enrolled, all subsequent dues payments are made annually to the Treasurer.

In celebration of his new appointment, Andy has received authorization to offer SEAC members in academic positions the opportunity to nominate their current students and postdoctoral research associates for a one-year free membership in SEAC. There are no strings attached to this offer. Academic members who wish to offer thii free membership to their students need only sign on the "Sponsor" line of the application blank.

For many years the SEAC Secretary also served as Membership Chairman. The Secretary will continue to process applications that are received, on the basis of this ancient history. However, all new applications should be sent to the Membership Chairman using the revised application form, which appears in this issue. Please feel free to reproduce it as necessary.

Professor William R. Heineman Receives 1995 Charles N. Reilley Award

Congratulations to Professor William R. Heineman as the 1995 Reilley Awardee. Heineman is a Distinguished Research Professor in the Department of Chemistry at the University of Cincinnati, where he has been since 1972. He received his Bachelor of Science degree in Chemistry from Texas Tech University, followed by his Ph.D. from the University of North Carolina (with Royce Murray) and postdoctoral work at Case Western Reserve and Ohio State University (with Ted Kuwana).

Heineman also spent two years as a Research Chemist at Hercules Research Center. His research has continually broken new ground in electroanalytical chemistry. He played a major role in the development of optically transparent thin-layer electrodes, electrochemical immunosensors, EXAFS spectroelectrochemistry, and the study of imaging compounds for nuclear medicine. In addition, Professor Heineman has promoted electroanalytical chemistry through the coauthoring of several books, including the popular "Laboratory Techniques in Electroanalytical Chemistry," with Pete Kissinger. Heineman and his students have written well over 200 papers, and hi 41 Ph.D. students have gone on to positions in academics, industry, and government. As one of the nomination letters put it, "Bill is one of the outstanding gentlemen of academic analytical chemistry."

The preceding information was provided by the Awards Committee Chairman, Royce Engstrom.

Charles N. Reilley Award Nominations Solicited

Nominations for the 1996 C.N. Reilley Award are hereby solicited. Nominations should include a letter of nomination describing the individual's significant contributions to electroanalytical chemistry, at least two seconding letters of support, and a curriculum vitae for the individual. All nomination materials will be retained by SEAC. Once nominated, an individual will be considered for the Reilley Award for three years without being renominated. The submission of any supporting information or a renomination is welcome at any time, but the decision on the 1996 Award will be based on the material available to the Award Committee on March 15, 1995.

All nomination materials should be sent to:

Professor Royce C. Engstrom
SEAC–Reilley Award Committee
Department of Chemistry
University of South Dakota
Vermillion, SD 57669

Reilley Awardees

1984	Allen J. Bard	University of Texas
1985	Ralph N. Adams	University of Kansas
1986	Fred C. Anson	California Institute of Technology
1987	Robert A. Osteryoung	SUNY Buffalo
1988	Royce W. Murray	University of North Carolina
1989	Theodore Kuwana	University of Kansas
1990	Jean-Michel Saveant	Universite de Paris VII
1991	Stanley Bruckenstein	SUNY Buffalo
1992	Stephen Feldberg	Brookhaven National Laboratory
1993	Dennis Evans	University of Delaware
1994	Barry Miller	Case Western Reserve University
1995	William R. Heineman	University of Cincinnati

SEAC/Reilley Award Reception

The annual reception for SEAC members and friends will be held at The New Orleans Hilton Riverside and Towers on Tuesday, March 7 from 5:30 to 7:30 p.m. in the Rosedown Room. The reception will also allow us to congratulate the Reilley and Young Investigator Award recipients prior to the symposium on Wednesday afternoon. Come join us to renew old friendships and make new friends. See y'all there.

Professor Mark R. Anderson Receives SEAC Young Investigator Award

Professor Mark I?. Anderson is the recipient of the 1995 SEAC Young Investigator Award. He is Assistant Professor of Chemistry at Virginia Polytechnic Institute and State University. He joined the faculty there after completing a postdoctoral position at the University of Utah with Stanley Pons, his Ph.D. degree with Dennis Evans at the University of Wisconsin, and undergraduate work at Indiina University where he worked with Dennis Peters.

His research interests include surface spectroscopy of electrochemical interfaces, determination of electrochemical reaction mechanisms, surface modification, and chromatographic surfaces. His recent work involves self-assembled monolayers and applications of quartz crystal microbalance techniques.

Congratulations, Mark, and best wishes for a successful career.

The preceding information was provided by the Awards Committee Chairman, Royce Engstrom.

SEAC Young Investigator Award Nominations Solicited

Nominations are hereby solicited for the 1996 Young Investigator Award. Potential recipients must be within 7 years of obtaining their Ph.D. or other terminal degree, and under 35 years of age at the time of nomination. Candidates can be nominated by any member of SEAC.

Nominations will be selected by the SEAC Awards Committee, and must be received by March 15, 1995. The nominations packet must include a letter describing the significant contributions made by the candidate, an updated curriculum vitae, and at least one supporting letter. Once nominated, candidates will be considered for a period of three years without renomination; addiiional supporting materials will be welcome at any time during this period. Nomination files carried over from year to year will automatically be removed from consideration once the candidate reaches the age of 35. Send all nomination materials to:

Professor Royce C. Engstrom
SEAC Awards Committee
Department of Chemistry
University of South Dakota
Vermillion, SD 57069

Young Investigator Awardees

1993	Werner Kuhr Leonidas Dachas	University of California-Riverside University of Kentucky
1994	Adrian Michael	University of Pittsburgh
1995	Mark Anderson	Virginia Polytechnic Institute and State University

New Members

Name	Date	Affiliation
Bernadette T. Donovan	6/16	Univ. of North Carolina, Charlotte
Marc R. Anderson	6/20	University of Kansas
Tina Huang	6/20	University of Kansas
Steven J. Woltman	6/22	University of Pittsburgh
Richard S. Hutchins	6/22	University of Kentucky
Mira Josowicz	6/23	Battelle Pacific Northwest Lab.
Kristin Cline	6/25	Wiienberg University
Tim O'Hara	6/26	University of Texas at Austin
Ralph S. Mazenko	6/26	U.S.D.A.,A.R.S.
Robert C. Bess	6/28	PT Caltex Pacific Indonesia
Chunyao Amanda Chen	6/29	University of Cincinnati
Qinbai Fan	6/29	Cleveland State University
Garrett A. Forbes	6/29	University of Illinois
Eric W. Tsai	6/29	Merck Research Laboratories
Albert Fry	6/30	Wesleyan University
Travis Wade	6/30	Texas A&M University
Christine M. Zook	7/2	Univ. of Maryland, Baltimore County
Honghua Zhang	7/4	Andcare, Inc.
Poonam M. Naruia	7/5	Wake Forest University
Javier Alberto Opezzo	7/15	Buenos Aires University
Francis D'Souza	8/9	Wichita State University
Michael R. Nelson, Jr.	8/15	Georgia Institute of Technology
Brian D. Coleman	9/5	University of Kansas
Stephen Theberge	9/6	University of Delaware
Shihua Song	9/29	North Carolina State University
Radha Pyati	10/7	University of North Carolina
Jay E. Harris	10/13	University of North Carolina
Olaf Kievit	10/16	Yale University
Bemd Speiser	10/20	Universität Tübingen
John J. Breen	11/1	Indiana U./Purdue U., Indianapolis
Scott Dorman	11/5	University of South Alabama
Judith R. Fish	11/7	Washlenau Community College
Matthew E. Johill	11/11	Iowa State University
Correction:		
Kevin W. Hathcock	3/14	University of North Carolina

From the E-Mailbag

Hi Dick,

I am communicating with you from the Fritz Haber Institute in Berlin where I am spending three months on leave. It was nice to receive today the October, 1994 issue of SEAC COMM and to read the congratulatory words you inserted about me. However, I can't resist bringing to your editorial attention the inconsistency between your page 1 assertion that I am among the Reilley Awardees who are overdue in submitting remembrances and the page 3 listing of me as one of the good guys who provided one in 1986. I am happy to confirm that your page 3 data are correct.

The sad news from The Fritz Haber is that Heinz Gerischer passed away on 9/14. He was suffering from heart problems and the implantation of a pacemaker on 9/1 provided only temporary relief. In my book Gerischer was one of the truly great electrochemists of the century; indeed, one of the reasons I came to Berlin was to have a chance to interact with Heinz because he was so wise and stimulating. Chemistry and electrochemistry suffered terrible losses in 1994: Pauling, Gerischer, and Koryta. I'm hoping for a better record in 1995.

So keep up the good work for SEAC, keep after the remembrance-resistars and let me hear from you if you have a chance. The e-mail system here seems to work very well; like President Dennis, I am becoming addicted.

Best regards,

Fred Anson