

SEAC *communications*

Volume 15, Number 1, February 1999

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President's Message

Greetings once again from Chapel Hill. I hope this message finds your electrons flowing freely and your Faraday's doing good chemistry.

I have just returned from the HPCE meeting—that's high performance capillary electrophoresis to those of you not in the know on the latest nomenclature. It's not that I've switched fields; electroanalysis still is the major focus in the Wightman laboratory. Indeed, the effort of my laboratory in separations is at its lowest stage in years. It's just that I had heard so much about this particular meeting that I was curious to see for myself what caused such excitement. Symposium Chair ED YEUNG convinced me this would be a good idea, so I traveled to the meeting site in Palm Springs, CA. I turned out not to be the only SEAC member in attendance. Several were there including SEAC Secretary ANDY EWING and Membership Chair, SUSAN LUNTE.

As the meeting progressed, I was impressed by the things that I heard. In a little less than two decades the technique we originally knew as CZE has developed from a curiosity to a technique that is involved in multiple areas including sequencing the human genome and examining the proteosome, the proteins expressed in a single cell. This community has nurtured the concept of analytical chemistry on a chip, and it was fascinating to see miniaturization of chemical processes extending from separations to mass spectrometry. As it has since the early times of this research area, electrochemistry plays an important role for detection in the very small volumes that are commonplace in CE investigations. It was also interesting to see that analytical challenges attacked by electroanalysts some time ago are now targets for these new separation techniques, and that they are able to provide entirely new insights into these chemical and biochemical processes. Overall, the whole meeting reinforced my belief that analytical chemistry as a whole continues to be an exciting, flexible discipline that is central to so many areas on the frontiers of science. Furthermore, I was pleased to see that electroanalysis continues to play a central role in these discoveries.

Of course, Pittcon is the place where one can obtain the broadest overview of modern analytical chemistry, and, at the same time, celebrate the recognition of the SEAC award winners. Our program this year looks as intriguing as ever, but the concept of SEAC members united with mouse ears at Disney World is one that I am having trouble getting used to. As of this writing, it is much less than a month away, and in my laboratory, we are hustling to get the final data for our presentations. I hope your data are already in place as you read this, and the slides are shot, the overheads printed, or the poster prepared. I look forward to seeing all of you there. Be sure to notice that the SEAC reception will be held Wednesday, 5-7 p.m., in the Peabody Orlando. Visit with us there before you go to the open house at Disney World.

As I have noted in previous columns, SEAC works because of the activities of its board members as well as members of the Society at large. This year I would like to recognize in this column one important friend of the Society, ROBERT ENSMAN. Although not a wet electrochemist, Bob has made significant contributions to our discipline through the development of new instrumentation. In addition, Bob has supported the Young Investigator Award since its inception. Coincident with his retirement from Indiana University, this support will end. Thanks for all of your contributions, Bob. We look forward to seeing you at many more Pittcon and SEAC symposia.

Mark Wightman

Editorial

This is it! This really is it—the very last, hold-in-your-hands, BAS-printed, snail-mailed version of *SEAC Communications*. As of early February, we have had only three SEAC members tell me that they would like snail-mailed, PDF-derived versions of the newsletter. Professor GARRY RECHNITZ of the University of Hawaii graciously tested for your Editor the aesthetic pleasure of the PDF version of issue 14(3) in comparison with its BAS-printed progenitor and pronounced the PDF-version acceptable (though he plans to stick to reading the webbed version of the newsletter). While, we of SEAC can only be impressed at how web-functional we all are, should any last-minute realizations sink in when six months (or a year or two or ten) go by and a copy of *SEAC Communications* has *not* plopped into your mailbox, the following limited-time offer will still apply:

*Hear Ye! Hear Ye!! Any member of SEAC requiring a hard copy of SEAC Communications to be snail-mailed to her or him after cessation of formal print publication (ca. NOW!!!), please contact **your Editor** at [rolison\(at\)nrl.navy.mil](mailto:rolison(at)nrl.navy.mil)*

Our future issues—as promised/threatened—will be entirely web-based, so when you want a hard copy, please just click on your printer icon! Boundless thanks go to Bioanalytical Systems, Inc. for coordinating the newsletter's publication, lo these many years. My personal thanks go to the excellent technical information staff at BAS with whom I have worked (KEVIN LEAMON, OSCAR NAGLER III, and the amazing JENNIFER TREECE) without whom this and all previous hard copies of *SEAC Communications* would never have made it into your hands, your files, or your trash can.

And a reminder: If YOU (*your name here@wherever*) did not receive an electronic notification that this issue (15(1) 1999) was available on the SEAC website [<http://seac.tufts.edu>], you are either not in my electronic data base or the e-address I have for you is no longer relevant. If you are not in my electronic data base, you will not receive future notifications of new content on the SEAC website (including postings of new editions of *SEAC Communications*). Your electronic fate is in your hands!

To close this final snail-mailed editorial, I asked my distinguished predecessors who wore the editorial mantle to wax nostalgic on their eras (all the way back to the paleolithic, pre-SEAC days of *Interface*), but they were and are still very busy people...I expect, though that you will find in future webbed issues vignettes from FARADAY FARBUNCLE, BILL GEIGER, and our stalwart DICK DURST. For my part, I am amazed that enough information for any given issue was ever assembled without the lowered activation barriers that electronic mail brings us. I know that if I have to address an envelope or find a stamp, it just doesn't get done—but I will still sit down to my keyboard, so I salute our newsletter correspondents past, present, and future for keeping all of us in touch, be it by cornering your Editor at a meeting, phoning, hollering, writing a letter, or zapping an e-message.

See you in Orlando.

Debra Rolison

SEAC on the Move!

ANNA FARRENKOPF, recently Ph.D.'d by the University of Delaware has abandoned the Atlantic Ocean for the Pacific Ocean (which was her electrolytic medium of study even when she was on the East Coast). She writes on Mon, 9 Nov 1998 11:41:46 -0800: "the snail-mail version of the fall letter has arrived and reminded me to bookmark SEAC on my new machine. The snail-mail information is correct. Please add me to the e-directory.

Anna Farrenkopf
Research Associate
Center for Coastal and Land-Margin Research
Oregon Graduate Institute
Portland OR 97291-1000

...so added, Anna—and thank you for the e-update...as many of you may recall, Anna taught us a new word in SEAC Communications 13(3) 1997: diagenesis! Use it in a sentence today!!

SEAC's Cartoonist Extraordinaire, Daren Caruana, has left UT-Austin (and Adam Heller's group) for London, England. He writes on Tues, 8 Dec 1998 20:55:02: "Dear Debra—I hope this e-mail finds you in good spirits. I thought I would let you know of my new address. I have moved to University College London working for Dave Williams. I do hope you will continue to include my cartoons in the SEAC newsletter. Thanks and I hope to meet you again some time soon. All the best.

Daren Caruana
Dept. of Chemistry
University College
20 Gordon Street
London
WC1 HOAJ
UNITED KINGDOM

...I'm down to the last two of your stockpiled cartoons, Daren (exhibited in this issue)...fire up your pen and electroanalytical imagination!

Katsumi Niki, lifetime member of SEAC, has been spending a good chunk of his recent research life here in the USA, most recently doing collaborative research with Therese Cotton at Iowa State University. As a consequence of Therese's death last autumn (please see the "In Memoriam" to Therese in this issue), Katsumi is moving to Illinois State University, Normal, IL, to continue his current research project in collaboration with other institutions in the States. He writes on Mon, 21 Dec 1998 11:37:13 -0600: "I am going back to Japan to renew my passport and visa and will be back to Normal on 7 March 1999. I wish you a Happy New Year and a successful 1999.

Katsumi Niki

... hmmm ... a SEAC member and "Normal" in the same sentence ... who'd a-thunk it!

Special Exclusive to *SEAC Communications*

—Bard Bash '98!—

While many of us were preparing for the December holidays (and a few misfortunate of us were putting the finishing touches on Special Issues of *Langmuir*—e.g., ELECTROCHEMISTRY AT NANOSTRUCTURED MATERIALS, *Langmuir*, 1999 15(3), on your library shelves, now!), a representative fraction of the electrochemical world was assembling in Austin, Texas to celebrate the 65th birthday of ALLEN J. BARD (SEAC's Inaugural Reilley Awardee, among other honors). Many Happy Returns, Al, from all your SEAC compatriots!! As always, *SEAC Communications* had on-site representation. Cub Reporters DICK CROOKS and HENRY WHITE report the following (unless otherwise noted all photos were taken by official University of Texas photographers):

Celebration of Professor Allen J. Bard's 65th Birthday Anniversary

On the weekend of 18-20 December 1998, more than 100 current and former group members and their spouses converged on Austin, Texas to celebrate the 65th birthday anniversary of Professor Allen J. Bard. The Bard birthday bash kicked off Friday evening with a stand-up buffet at the Littlefield House on the University of Texas (UT) campus. This beautiful, old building, coupled with a balmy Hill Country evening, was the perfect setting for honoring Al, precisely sixty-five years after his birth to John and Dora Bard in New York City on 18 December 1933 (see side bar for a brief biography of Al's early days). Since the event had the blessing of UT president and former Bard-group member LARRY R. FAULKNER (SEAC member and recent Reilley Awardee), it was possible to really roll out the red carpet Friday. Nattily costumed waiters strolled among the participants providing drinks to help loosen their tongues as they reminisced about Al's forty years at UT and the part they and their contemporaries played in building one of the major centers for electrochemistry in the world.

All generations of the Bard group were represented, including the very first person to receive a Ph.D. from the group, Dr. JASPAL MAYELL, who graduated in 1962. Many SEAC members were also there, including one of the organization's founders, Dr. JOSEPH MALOY (Seton Hall University).



MANNY SOLON tells FRANK FAN how it used to be in the good old days.

The evening was capped with the singing of Happy Birthday, the cutting of a wonderful birthday cake (complete with Blue Bell ice cream, a local favorite imported from Brenham, Texas), and the presentation of a few gifts to mark the occasion.



The official Bard-Bash Birthday cake, Blue Bell ice cream, and a few words from the birthday boy capped off the Friday evening festivities—DICK CROOKS (far left) and HENRY WHITE (center) applauded the birthday boy (photo taken by JASPAL MAYELL).

Standing with Fran, his wife of 41 years, the assembled group presented Al with a number of mementos to mark the first forty years of his career. These included a bound copy of a special Festschrift issue of the *Journal of Physical Chemistry B* (3 December 1998, vol. 102, no. 49) published to coincide with the party in Austin, a bound set of his scientific papers (I don't think any of us realized that it would require nine volumes to bind up his 700+ research publications!), and a T-shirt commemorating both the birthday party and the Festschrift (next time you're in Austin, you might see this T-shirt flashing by you on the Town Lake jogging trails).



A group of (very) suspicious characters: seated, left to right: CHUCK MARTIN (Colorado State University), MIKE WARD (University of Minnesota), and STEVE FELDBERG (Brookhaven National Laboratory); standing, left to right: FRANCISCO URIBE (Los Alamos National Laboratory), ISRAEL RUBINSTEIN (Weizmann Institute of Science), and LARRY FAULKNER (University of Texas).

After the formal get-together, group members drifted off in era-segregated groups to local watering holes to continue their earnest scientific discussions, like who made the best lab gin. Several groups found their way to the always-popular Austin Chili Parlor, where they make "Triple-X" chili-eaters sign a waiver holding the management blameless in case of subsequent health problems. The oldsters (TOM and ARDEN ATKINSON, VES and HOLLY CHILDS, STEVE and KITTY CRUSER, BRUCE KOWERT, MARLENE and JOE MALOY, DEWITT and ALICE PAYNE, and HIROYASU TACHIKAWA) had made their way over there earlier, and seemed to have already put away a few Shiner Bocks before our arrival. The "younger" gals & guys (JULIE GARRARD, CHUCK MARTIN, MICHAEL MIRKIN, TOM MOFFAT, PATRICK UNWIN, and a few others) did manage

to outlast the 50-something crowd, but only by a few longnecks.

On Saturday, we gathered in the Welch Hall Convocation Center, known to former Bard group members as the "**fancy** meetin' room" for a full day of research presentations. The Bard group has always had a reputation of casting a broad scientific net, so it isn't too surprising that the range of research interests among the current and former members who spoke was equally eclectic. CHUCK MARTIN chaired the morning session, which featured talks by BERNHARD KRAEUTLER, VES CHILDS, *J. Electrochem. Soc.* editor PAUL KOHL, JOE MALOY, SU-MOON PARK (who flew in from Korea for the occasion), TIMOTHY HENNING, and ISRAEL RUBINSTEIN (who made the long trip from the Weizmann Institute). After a group photo-op in front of the UT Tower and a break for lunch (we definitely do not recommend the armadillo chili at the Hole in the Wall), ISRAEL RUBINSTEIN took over as MC and the participants were treated to talks by CHUCK MARTIN, MIKE WARD, JOHNA LEDDY, ANDY GEWIRTH, GENE SMOTKIN, MICHAEL MIRKIN, and the two of us.

After a short break for everyone to catch their breath, we all joined Al, Fran, their daughter and son-in-law SARA and JON GOODMAN, granddaughter Marlee, the folks who send you the bad news about your *JACS* manuscripts (MICHELE LEUZINGER, ROSE MCCORD (wife of former Bard student PAUL MCCORD)), and Al's office staff (JOHN LEAMONS), on the top floor of the LBJ Presidential Library for a fantastic halibut dinner and another splash or two of spirits. (To put the length of Al's career in context, several people noted that Al was teaching in Austin well before LBJ was president.)

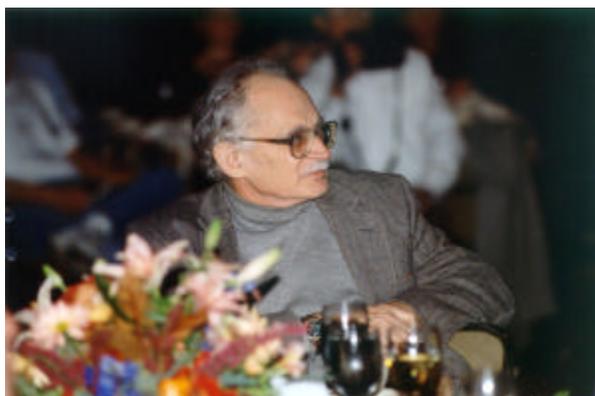


Electrochemistry: the Next Generation— Professor Bard's granddaughter, Marlee, and her mom, Sara, find some quality crawl space Friday night at Littlefield House; they are flanked by FRAN BARD (L) and JON GOODMAN, Sara's husband (R).

Larry Faulkner gave an inspired after-dinner keynote address in which it is certainly fair to say he captured Al's remarkable scientific and personal achievements of the last forty years: the creativity, integrity, humbleness, incredible work ethic, and the overall sense of quality he brings to any project he undertakes.



The student talks



The teacher listens

Al followed with a few heartfelt words of his own about the group members, reminding us (in true Bard style) that we are co-owners of many of these achievements. Honorary group member, long-time SEAC member, and Reilley awardee STEVE FELDBERG provided the audience with the outsider's inside line on Al and the many generations of group members he has worked with over the years, and then the floor was opened to others who wished to share an amusing anecdote or provide a perspective on how their time in the group had affected their personal and professional lives. The dinner festivities broke up late, but rumor has it that smaller bands of former group members continued the reunion well into the morning in the bars throughout Austin.

The two of us awoke just in time to witness the end of the Bard Reunion Fun Run around Town Lake, but in plenty of time to attend the wonderful Sunday-morning brunch hosted by Al and Fran. This was a great chance to take a last few pictures and to bid farewell to old and new friends. One of us headed the old pick-up back towards College Station, but the other, under the watchful eye of fashion consultant CHUCK MARTIN, headed back down to South Austin to find that special pair of lizard-skin boots to commemorate the weekend (word is they are a bit tight but look great!).

It was great fun and an honor for former group members to return to Austin to commemorate Allen J. Bard's many contributions to science on his 65th birthday anniversary. Those who have experienced first-hand Al's love for science will appreciate that this event simply marks a passing milestone in a scientific career that remains as active as it was when he first started 40 years ago. Perhaps this continuing enthusiasm for science is his most visible and lasting legacy. We look forward to many more years of research achievements, teaching, and friendship from this remarkable scientist, colleague, and friend.¹

Richard M. Crooks and Henry S. White
11 February 1999

¹ Al wishes to let his many friends and colleagues world-wide know that he is fine and back at work after his recent health problems.

A Brief Biography of Allen J. Bard

Allen grew up and attended public schools in the Bronx. As a youth he was always interested in science, largely due to the influence of his older brother, Selden, and older sister, Shirley. He spent a lot of time at the Museum of Natural History, the Bronx Zoo, and the Bronx Botanical Gardens, and in doing as many science experiments as reasonable in an apartment in New York City. This interest in science was strengthened during his attendance at the Bronx High School of Science (1948-51).



He entered The City College of the College of New York (CCNY) in January 1951 and majored in chemistry. Allen was also active in student politics and was Vice-President of the Student Council and President of the Senior Class of 1955. He worked at a number of jobs while in college, including a stint as student aide trainee at the New York Naval Shipyard (1954). Aircraft carriers were being overhauled at the shipyard, and it was Allen's job to analyze for the oxygen content in the hydraulic fluid used in deck elevators. Allen also worked as a flunky at the Women's National News Service, and, during holidays and the summer, as a busboy, waiter, or camp counselor. Upon graduation in January 1955 he took a job with The General Chemical Company (a branch of Allied Chemical Company) in Morristown, NJ, commuting from the Bronx. At the time, General Chemical was

developing an instant pancake batter using a propellant, Genetrons (Allied Chemical's fluorocarbon equivalent to DuPont's Freons), to help fluff the batter—one of Allen's duties was to analyze for fluoride content in the pancake batter. He soon decided to try graduate school.

Allen entered Harvard University in September 1955, beginning his graduate studies with Geoffrey Wilkinson (Nobel Prize in Chemistry, 1973) in the then-new area of metallocene chemistry. Wilkinson was denied tenure at Harvard and left in January 1956, a rather fortunate turn of events for the analytical and physical chemistry communities, as Allen then began research in the Spring of 1956 with James J. Lingane, a former student of I. M. Kolthoff. Work with Lingane at Harvard mainly centered on electroanalytical methods. Allen's dissertation was entitled "Studies in the Electrochemistry of Tin." He graduated from Harvard with a Ph.D. in June 1958.

Allen joined the faculty at The University of Texas at Austin in 1958. He was hired by the chemistry department chairman, Norman Hackerman, at the rank of Instructor for a nine-month salary of \$5,200 and with start-up funds of \$5,000 (which the chemistry department hoped he wouldn't spend completely). The department was unwilling to provide an interview trip to Austin (then something of a cow town) and was content to hire him sight unseen. He came to Austin in August 1958 to find that the office and labs were not air-conditioned and the culture very different from that of New York and Boston. The course load for his first semester consisted of two sections of sophomore analytical chemistry and one section of a freshman chemistry-calculations class. The graduate students at this time were scarce and largely netted by the senior faculty. In fact, junior faculty could only co-direct dissertations with senior faculty. In spite of this abusive situation, he stayed and eventually some graduate students joined his group helping to enable him to earn promotion to Assistant Professor. And the rest of the story is well-established history to most SEAC members.

Award Nominations Still Solicited!

SEAC is responsible for the establishment and the administration of the Charles N. Reilley Memorial Award and the SEAC Young Investigator Award. Sponsored by Bioanalytical Systems, Inc. and administered entirely by SEAC, the Reilley Award recognizes an active researcher who has made a major contribution to the theory, instrumentation, or applications of electroanalysis. The Young Investigator Award recognizes accomplishments by a researcher who is within the first seven years of his or her career. This award is sponsored by Ensmann Instrumentation. In conjunction with the presentation of these awards, SEAC arranges an Award Symposium and an informal reception in honor of the Awardees at Pittcon. In this way, SEAC serves as the focal point for analytical chemists who wish to exchange ideas about electroanalytical chemistry at the conference.

—Charles N. Reilley Award—

Nominations for the Y2k (2000) Reilley Award 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, any individual will be considered for the Reilley Award for three years without being renominated. The submission of any additional supporting information or a renomination is welcome at any time, but the decision on the 2000 Award will be based upon the material that is available to the Award Committee by 1 March 1999.

—Young Investigator Award—

For the 2000 SEAC Young Investigator Award, 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. Nominations should include a letter describing the individual's promise in the area of electroanalytical chemistry, at least one seconding letter of support, and a curriculum vitae for the individual. All nomination materials will be retained by SEAC. Once nominated, any individual will be considered for the SEAC Young Investigator Award for three years without being renominated. The submission of any additional supporting information or a renomination is welcome at any time, but the decision on the 2000 Award will be based upon the material that is available to the Award Committee by 1 March 1999.

Requests for further information or submissions of nominations should be directed to:

Professor Richard M. Crooks
SEAC Awards Committee
Department of Chemistry
Texas A&M University
P.O. Box 30012
College Station, TX 77842-3012

Tel: 409-845-5629
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Pittcon® '99 News Flash!!!!!!!!!!!!!!

Two graduate students have been awarded SEAC Graduate Student Travel Grants, sponsored by EG&G Instruments, Princeton Applied Research. These competitive awards are made to promising graduate students to support the cost of travel to the Pittsburgh Conference to deliver an oral presentation on their dissertation research in a Conference symposium. The awardees and their institutions, Pittcon®'99 presentation titles, and thesis advisors are:

ERIC TRAVIS (University of North Carolina)

Advisor: MARK WIGHTMAN

“Electrochemical Analysis of Exocytotic Release of Histamine and 5-Hydroxytryptamine (5-HT) from Individual Mast Cells of Transgenic Mice”

STEVEN WOLTMAN (Univ. of Pittsburgh)

Advisor: STEVE WEBER

“Sensitive Chromatographic Detection by Fluorescence Following Electron Transfer”

Kudos to SEAC member Janet Osteryoung!!

...We like to run this feature in every pre-Pittcon issue of SEAC Communications (see, e.g., 14(1) 1998).

Janet Osteryoung, Professor of Chemistry at the North Carolina State University and Director of the Chemistry Division of the National Science Foundation, is the 1999 recipient of the Charles N. Reilley Award given by the Society for Electroanalytical Chemistry. See below for festivity details.

Kudos to SEAC undercover agent Joel Harris!!

Joel M. Harris, Professor of Chemistry at the University of Utah (and long-time friend, supporter, partner-in-fine-eating, and colleague of many of SEAC's membership) is the 1999 recipient of the Pittsburgh Analytical Chemistry Award from the SACP (Society for Analytical Chemists of Pittsburgh) in honor of his many contributions to analytical spectroscopy and his kinetics studies of solid/liquid interfaces. Professor Harris and his research contributions have previously been recognized by the Coblentz Award in Molecular Spectroscopy and the ACS Division of Analytical Chemistry Award in Chemical Instrumentation. He is also known to appear as a co-author on articles containing electrochemistry...

Joel's award symposium at Pittcon®'99 will be held Tuesday morning starting at 8:30 a.m. in Room 206C of the Orlando Convention Center. Joel's award address is on “Analytical Chemistry at Dielectric Liquid/Solid Interfaces”—a subject near and dear to many SEAC hearts.

... Three cheers, Joel ... we of SEAC salute you ... and remind you that you are dangerously close to becoming an electroanalytical chemist!

Plan your attendance accordingly! Part One.
Pittsburgh Conference—7-12 March 1999, Orlando, FL
Electrochemical/SEAC Focus

Congratulations to the 1999 SEAC Award Winners!

As announced in the October 1998 newsletter, the Charles N. Reilley Award for 1999 will be presented to Professor JANET OSTERYOUNG of the National Science Foundation and North Carolina State University and the 1998 Young Investigator Award will be presented to Professor DAN FELDHEIM of North Carolina State University. Please refer to issue 14(3) of the newsletter or the SEAC website [<http://seac.tufts.edu>] for their respective research biographies. The Reilley Symposium in their honor has been arranged by Professor FRED ANSON of Cal Tech and will be held on Wednesday morning, 10 March 1999, Room 222A of the Orlando Convention Center. The winners of the SEAC Graduate Student Travel Grant will also be announced during the Reilley Award Symposium.

The Reilley Award Dinner in Janet and Dan's honor will be held Tuesday evening, 9 March 1999 at the Peabody Orlando (Plaza C) from 7:00–9:30 p.m. The dinner is open to the membership but reservations MUST be made with the SEAC Activities Chair, CRAIG BRUNTLETT of Bioanalytical Systems, Inc (telephone: 765-497-5806; FAX: 765-497-1102; or e-mail: craig@bioanalytical.com).

Immediately following the Reilley Award symposium on Wednesday morning, the annual meeting of the SEAC membership will be held in the same room (Room 222A). Please plan to stay for this brief business meeting that is required of all tax-exempt organizations. Prospective members and guests are welcome to attend the business meeting.

The Reception for Reilley Awardee Janet Osteryoung and Young Investigator Dan Feldheim will be held on Wednesday, 10 March 1999 from 5:00 to 7:00 p.m. in the Plazas C and D of the Peabody Orlando. Members and guests are welcome. Reservations are not necessary. Hors d'oeuvres will be provided with a cash bar.

SYMPOSIUM—CHARLES N. REILLEY AND THE YOUNG INVESTIGATOR AWARDS
Wednesday Morning, Room 222A, Orlando Convention Center, Orlando, FL
Fred C. Anson (*California Institute of Technology*), Presiding

8:30 INTRODUCTORY REMARKS—**Fred C. Anson**

8:35 Presentation of the 1999 Charles N. Reilley Award to

Janet G. Osteryoung

and

The 1999 Young Investigator Award of the Society for Electroanalytical Chemistry to

Daniel L. Feldheim

by

Professor R. Mark Wightman, President, Society for Electroanalytical Chemistry

8:40 (682) **AWARD ADDRESS. ELECTROSTATIC INTERACTIONS IN MACROIONIC SYSTEMS—Janet G. Osteryoung** (*North Carolina State University*)

9:15 (683) **PHOTOCHEMICAL SYSTEMS FOR HYDROGEN PRODUCTION FROM SUNLIGHT AND WATER—John A. Turner** (*National Energy Renewable Laboratory*), A. Bansal, O. Khaselev

9:45 (684) CONTINUOUS *IN VIVO* MONITORING OF GLUCOSE WITH SUBCUTANEOUSLY IMPLANTED MINIATURE WIRED ENZYME ELECTRODES—**Adam Heller** (*University of Texas at Austin*), D.S. Schmidtke

10:15 RECESS

10:30 (685) **AWARD ADDRESS:** CHEMICAL APPLICATIONS OF METAL NANOPARTICLES: FROM SINGLE MOLECULE DETECTION TO NOVEL DRUG DELIVERY MATERIALS—**Daniel L. Feldheim** (*North Carolina State University*), L.C. Brousseau III, S.M. Marinakos, J.P. Novak, W. McConnell, B. McCrum

11:05 (686) ELECTROCHEMISTRY WITH CONFINED REACTANTS—**Fred C. Anson** (*California Institute of Technology*), C. Shi

Further Pittcon® '99 Symposia of Electroanalytical Interest

Monday morning, 8 March 1999

ELECTROCHEMISTRY: DETECTION IN BIOANALYTICAL—Anna Brajter-Toth (*University of Florida*), Presiding; Room 208C

ELECTROCHEMISTRY: SENSORS AND DETECTORS—Royce C. Engstrom (*University of South Dakota*), Presiding; Room 209A

Monday afternoon, 8 March 1999

ELECTROCHEMISTRY: BIOANALYTICAL, NEW APPROACHES TO DETECTION—Richard L. McCreery (*Ohio State University*), Presiding; Room 208B

ELECTROCHEMISTRY: MEDIA AND ELECTRODES—James A. Cox (*Miami University of Ohio*), Presiding; Room 208C

Tuesday morning, 9 March 1999

ELECTROCHEMISTRY: BIOANALYTICAL VOLTAMMETRY AND AMPEROMETRY—William R. LaCourse (*University of Maryland Baltimore County*), Presiding; Room 208C

POTENTIOMETRIC ION SENSORS—Erno Pretsch (*Swiss Federal Institute of Technology*), Presiding; Room 221A

Tuesday afternoon, 9 March 1999

ELECTROCHEMISTRY: *IN VIVO* VOLTAMMETRY—Adrian C. Michael (*University of Pittsburgh*), Organizer; Room 207A

ELECTRONIC NOSE AND PATTERN RECOGNITION—Omowunmi A. Sadik (*SUNY at Binghamton*), Organizer; Room 209C

Wednesday morning, 10 March 1999

ELECTROCHEMISTRY: POSTERS (*...alas in direct competition with the SEAC Reilley Award Symposium...*)

Wednesday afternoon, 10 March 1999

ELECTROCHEMISTRY: BIOANALYTICAL - SURFACE PHENOMENA—Greg M. Swain (*Utah State University*), Presiding; Room 208B

ELECTROCHEMISTRY: COUPLED TO OTHER PROBES—Johannes F. Coetzee (*University of Pittsburgh*), Presiding; Room 208C

Thursday morning, 11 March 1999

ELECTROCHEMISTRY: SURFACES AND MODIFIED ELECTRODES—William R. Sharpe (*Clarion University of Pennsylvania*), Presiding; Room 208A

Friday morning, 12 March 1999

ELECTROCHEMISTRY: POTENTIOMETRIC AND VOLTAMMETRIC DETERMINATIONS—Stephen G. Weber (*University of Pittsburgh*), Presiding; Room 207B

Pittcon® '99 Symposia with SEAC members' fingerprints all over them (as organizers, presiders, or speakers)

Monday morning, 8 March 1999

BIOANALYTICAL: HIGH SENSITIVITY, LOW DETECTION LIMIT—Robert T. Kennedy (*University of Florida*), Presiding; Room 207B

BIOANALYTICAL: MOSTLY OLIGONUCLEOTIDES—Room 208A

CAPILLARY ELECTROPHORESIS APPLICATIONS—Victoria McGuffin (*Michigan State University*), Presiding; Room 208B

MICROSCOPY - NOVEL APPLICATION—Chia Tsun Liu, Presiding; Room 221E

Monday afternoon, 8 March 1999

BIOANALYTICAL APPLICATIONS OF LIPOSOMES—Laurie E. Locascio (*NIST*) and Zeev Rosenzweig (*University of New Orleans*), Organizers; Room 221A

BIOANALYTICAL: SURFACES AND IMAGES—Michael J. Natan (*Penn State University*), Presiding; Room 208A

CHEMOMETRICS I—Stephen L. Morgan (*University of South Carolina*), Presiding; Room 222B

Tuesday morning, 9 March 1999

IN VIVO ANALYTICAL CHEMISTRY: QUANTITATIVE ASPECTS—Adrian C. Michael (*University of Pittsburgh*), Organizer; Room 207A

Tuesday afternoon, 9 March 1999

SOL-GEL AND POLYMER BASED, MOSTLY OPTICAL, SENSORS—Charles W. Gardner (*Bacharach, Inc.*), Presiding; Room 221D

Wednesday morning, 10 March 1999

CELEBRATING ENVIRONMENTAL IMMUNOCHEMISTRY—Jeannette M. Van Emon (*U.S. Environmental Protection Agency*), Organizer; Room 207A

BIOANALYTICAL: SENSORS - GLUCOSE, GLUTAMATE, MULTIANALYTE—Marc D. Porter (*Iowa State University*), Organizer; Room 207A (...yes...according to Pittcon, both of these symposia are in 207A on Wednesday morning...)

CLINICAL ANALYSIS—Neil J. Szuminsky (*MOI Corporation*), Presiding; Room 208A

Wednesday afternoon, 10 March 1999

CHARACTERIZATION OF THIN FILM MATERIALS BY SINGLE-MOLECULE SPECTROSCOPY—Daniel A. Higgins and Maryanne M. Collinson (*Kansas State University*), Organizers; Room 207B

Thursday morning, 11 March 1999

METAL SPECIATION IN THE ENVIRONMENT—Joseph Wreen, Presiding; Room 208C

Thursday afternoon, 11 March 1999

HIGHLY SELECTIVE SEPARATION MEDIA AND SENSORS THROUGH NANOTECHNOLOGY—Henry Freiser and S. Muralidharan (*University of Arizona*), Organizers; Room 207A

***...and be sure to check out <http://www.pittcon.org/> to plan your program attendance
...just be forewarned that searching on “electrochemistry / electrode surfaces / electrodes”
brings up 137 papers!...***

Plan your attendance accordingly! Part Deux.

ICFIA '99

20-25 June 1999, Prague, The Czech Republic

GARY and SUE CHRISTIAN remind SEAC that the Tenth International Conference on Flow Injection Analysis (**ICFIA '99**) will be held at Charles University, Prague, the Czech Republic. Abstracts of 150–250 words are solicited on methods and applications in the growing fields of FIA and SIA. The deadline for abstracts is 3 May 1999. Publishers and producers of instruments, equipment, software and literature relevant to FIA are invited to exhibit.

Registration fees and deadlines*:	Before April 20, \$290	After April 20, \$330
	<i>Students:</i> Before April 20, \$130	After April 20, \$150

(*Limited grants available)

For a Registration Form, grant application, or vendor information, contact:

Sue Christian
P. O. Box 26
Medina, WA 98039-0026 USA
FAX: 425-454-9361 or 425-688-1565

Program organizing committee: Mirolsav Polasek, Petr Solich, Rolf Karlicek, *Charles University*
Hradec Kralove, Vlastimil Kuban, *Mendel University*

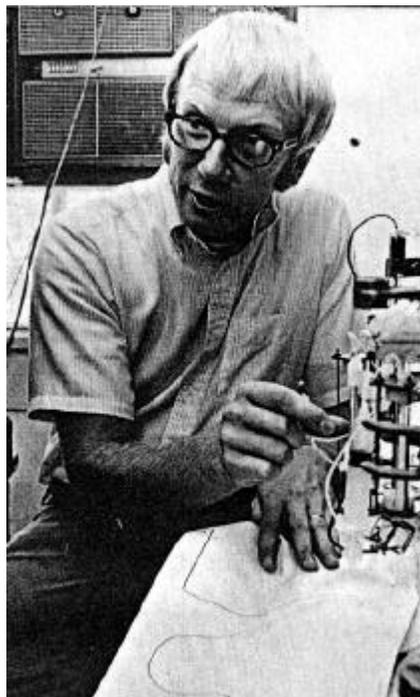
...for more particulars, please see: www.flowinjection.com

— **Name That Electrochemical Nerd*!**



Pictured below is this issue's entrant in "Name that Electrochemical Nerd". Again, the first correct guess (as determined by directly contacting the pictured-herein EN) will win an autographed copy of the EN's latest reprint.

—The first official correct guess (as determined by directly contacting the above Electrochemical Nerd, *a.k.a.* HENRY WHITE, University of Utah) was made by Iowa State's MARC PORTER, who wins an autographed copy of one of the EN's latest reprints. GERI RICHMOND (University of Oregon) also pinned down the identity of our mystery man, but, alas, told your Editor, rather than Henry (or to quote Geri exactly in her e-message of Mon, 2 Nov 1998 09:17:36 -0800: "IT'S HENRY WHITE—DO I WIN!!!!!!!!!!!!!!!!!!!!!!!!?????????????? COOL DUDE.) Marc informs *SEAC Communications* that he will cherish the reprint (once and if it arrives...)—

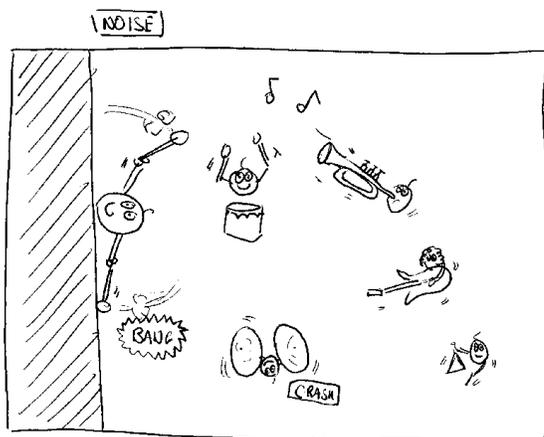
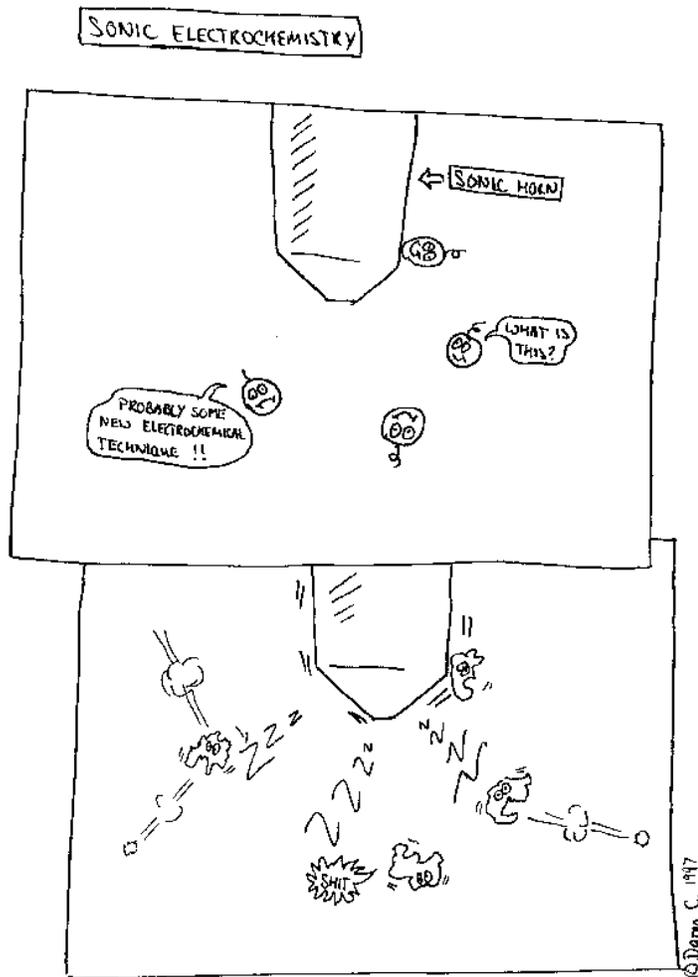


* *a.k.a.* "Loser-Electrochemist!", see *SEAC Communications*, 1998, 14(1).

—...and please send in your candidates (and mystery photographs) for next issue's entrant in "Name That Electrochemical Nerd"!!—

Special Exclusive!

Daren Caruana (uccadjc@ucl.ac.uk)—Cartoonist and Electrochemist (and Post-doctoral Associate)—returns with further adventures in the realm of electrochemical surreality for those electrochemists who prefer noisy to quiescent!



From the (E-)Mailbag

—(Some of) SEAC's Governmental and Industrial community checks in—

In message Sun, 15 Nov 1998 23:11:44 -0800, Ray Gajan writes:

Dear Debra—Please add me to your list of those wishing *SEAC Communications* e-mailed when available. I am an early member of SEAC. I have been a Polarographer since 1943. My first store-bought instrument was a Sargeant Mode XII. I retired from Food and Drug Administration in 1986.

Sincerely, *Raymond J. Gajan*

...so noted, Ray. I will also pass on your latest e-address to Andy Ewing—thanks for updating us—and thanks for that glimpse into the instrumentation from days of yore...I'm long enough in my electroanalytical career to remember seeing (though not using) the Sargeant polarographs!

In message Fri, 4 Dec 1998 14:32:23 -0600, John Szpylka writes in response to Debra Rolison's query of 21 November 1998, "Are there any words of electroanalytical wisdom you would care to impart to the members? particularly from the industrial perch of General Mills? Are you doing any electroanalytical work as part of your General Mills duties?"

In the food industry, I don't see much demand for electrochemical investigations, at least not past determining a solution's pH, monitoring relatively simple titration analyses or using electrochemical detectors in LC. When I was hired in 1991, I was developing methods to electrochemically analyze naturally occurring antioxidants, but we then found easier alternative methods to do so. Currently, I am involved in more managerial duties and in developing "wet chemistry" methods of analysis.

Ironically, General Mills hired three electrochemists in 1990—1991 (I'm the only one who is a member of SEAC, but I'm working on the other two). One is now a Quality Engineer at a cereal plant and the other is a chromatographer and computer guru. The three of us were hired because of the way we tackled chemical problems so I guess the thought process behind developing electrochemists is somewhat industry-friendly.

Just some ramblings from an electrochemist who is more chemist than electro.

John Szpylka
General Mills
9000 Plymouth Avenue North
Minneapolis, MN 55427

...thanks for the snapshot of analytical life at General Mills, John...and for acting as an ad-hoc member of the SEAC Membership Committee! And remember my personal motto: All chemistry involves electrons therefore all chemistry is electrochemistry!!

— Words of Wisdom for Winter—

In message Fri, 11 Dec 1998 10:31:53 -0400, Jiri Janata writes:

Hi Debra—I have just turned in my grades for the Instrumental Analysis class and I am a free man (for couple of weeks anyway). One gem that turned up on the Final was an explanation of the double layer by a student from Minnesota: "During the cold winters of the North, it is sometimes necessary to wear two sweaters or a pair of long underwear in addition to the pants. For warmth these are examples of practical double layers" What a joy teaching is!

Jiri (Art) Janata
School of Chemistry and Biochemistry
Georgia Tech
Atlanta, GA 30332-0400, USA

Minutes of the Meeting of the SEAC Membership Morial Convention Center, New Orleans, LA; 3 March 1998

The meeting was called to order by President MARK WIGHTMAN at 5:03 p.m. Approximately 50 members and their guests were present.

The Minutes of the 1997 Meeting of the Society were distributed by the Secretary and subsequently approved.

The Treasurer's Report was given by Treasurer JOE GORDON. The net worth of the Society now exceeds \$60,000. Of this, approximately \$25,000 is in the Reilley Award Endowment Fund. The remainder is distributed between the Life Membership Endowment Fund (\$16,800) and Working Capital (\$18,200).

Certificates of Appreciation were awarded to retiring Directors DAN BUTTRY, GARY CHRISTIAN, and ANDY EWING and retiring Treasurer JOE GORDON. Certificates were also awarded to Pittsburgh Conference President Sarah Shockey and to Conference Program Chairman John Baltrus.

The President welcomed CRAIG BRUNTLETT, JOHNA LEDDY, and DENNIS TALLMAN as new members of the Board of Directors with terms of office having begun on 1 July 1997. He then announced the results of the most recent election. Elected as Officers were STEVE WEBER, **President**, ANDY EWING, **Secretary**, and JOE MALOY, **Treasurer**. Elected as Directors for five-year terms commencing on 1 July 1998 were RICHARD BALDWIN, SUE LUNTE, and MARC PORTER.

The President then announced the appointment of the Committee Chairs for **Activities** (CRAIG BRUNTLETT); **Awards** (DICK CROOKS); and **Nominating** (JIM COX) to serve for 1998-99. Committee Chairs for Membership and for Finance are to be announced at a later date.

The President thanked Activities Chair CRAIG BRUNTLETT for his efforts in planning the SEAC social program for Pittcon®'98.

The President asked the Members to submit nominations for the Reilley Award and the SEAC Young Investigator Award (YIA) to the Awards Committee (DICK CROOKS, Chair) as soon as possible; the announced deadline for nominations is 15 March 1999. Members were reminded that there is no longer any age requirement for the YIA; however, each YIA nominee must be in her/his first 7 years of a full time professional career. Applications for SEAC Graduate Student Travel Grants should be submitted to the Awards Committee in a timely manner; the final deadline for these applications coincides with the date for submission of extended abstracts to the Pittsburgh Conference.

The meeting was adjourned at 5:07 p.m.

Respectfully submitted, Joseph T. Maloy, Secretary

Reminders to the SEAC Members

Pittcon®'99: As is our recent custom, we will not have a booth at the Pittsburgh Conference. The dissemination of SEAC information will take place in the vicinity of the meeting rooms where the electroanalytical papers will be presented. Please look for our brochures and assist in their distribution. Your help will be greatly appreciated, particularly at the Reilley Award Symposium.

Dues notices for 1999 and ballots have been mailed out under separate cover by the Secretary. All members should vote for new Directors and Officers before the specified deadline of 26 February 1999. **Ballots should be returned to the Secretary:** ANDY EWING [Department of Chemistry, 152 Davey Laboratory, Pennsylvania State University, University Park, PA 16802, USA]. **The dues notices and payments for 1999 dues (other than for those who are Life Members) should be**

sent at this time to the Treasurer: JOE MALOY [Department of Chemistry, Seton Hall University, South Orange, NJ 07079, USA].

SEAC Membership Chair, SUSAN LUNTE [Department of Pharmaceutical Chemistry, 2095 Constant Ave, University of Kansas, Lawrence, KS 66047, USA] will continue to receive all NEW MEMBERSHIP APPLICATIONS and INITIAL DUES PAYMENTS. Any new members recruited by current members should send their completed applications directly to Susan.

—Vote early...but not often!—

Candidates Standing for Election to the SEAC Board of Directors

(three candidates to be elected)

HOWARD DEWALD (*Ohio State University*)

ANDY GILICINSKI (*Air Products & Chemicals, Inc.*)

SAMUEL KOUNAVES (*Tufts University*)

WILLIAM LACOURSE (*University of Maryland Baltimore County*)

HARRY MARK, JR (*University of Cincinnati*)

ADRIAN MICHAEL (*University of Pittsburgh*)

Welcome to New Members of SEAC

New Student Members (as of 6 Feb 1999)

Ailette AGUILLA	University of North Carolina
Madhu Drakash CHATRATHI	New Mexico State University
Amish Hersh CHATURVEDI	New Mexico State University
Qingyun CHEN	Utah State University
Madalina CIOBANU	University of Memphis
Oing DENG	Northeastern University
John DOYLE	University of Idaho
Mark ENGELMANN	University of Idaho
Andrew GAWRON	University of Kansas
Susan MACHA	Loyola University
Shelley MINTER	University of Iowa
Damon OSBOURN	University of Kansas
Kris SCABOO	University of Tennessee
S. G. SIVASHANKAR	Northeastern University
Mary Beth WILLIAMS	University of North Carolina
W. Peter WUELFING	University of North Carolina

New Members (as of 6 February 1999)

Anne ANDREWS	Pennsylvania State University
Merlin BRUENING	Michigan State University
Veronica CEPAK	Naval Research Laboratory
Evan COOPER	Penn State Berks Campus
Richard GROOMER	Boeing Particle Identification Laboratory
Tina HUANG	University of Kansas
Lisa HOLLAND	University of Kansas
Mikhail PAVLOV	ECI Technology
Steven RAGSDALE	Broadley-James Corporation

Omowunmi SADIK
Jose SANTOS
Xueji ZHANG

SUNY-Binghamton
University of the Phillipines Los Banos
New Mexico State University

In Memoriam

THERESE M. COTTON, Professor of Chemistry at Iowa State University, and SEAC member, died 26 October 1998. She received her Ph.D. from Northwestern University and did postdoctoral studies, also at Northwestern, with RICK VAN DUYNÉ. Before joining the faculty at Iowa State, Therese held faculty appointments at the Illinois Institute of Technology and the University of Nebraska-Lincoln. Professor Cotton was internationally renowned for her Raman, electrochemical, and photochemical studies of biological systems. Her family, students, colleagues, and SEAC compatriots mourn her defeat by ovarian cancer, but celebrate her outstanding scientific accomplishments and her warm and valiant spirit. Two of Therese's Iowa State colleagues, MARC PORTER and ED YEUNG, have written more about Therese's life and career—you can find it in *Analytical Chemistry News & Features*, 1 Jan 1999, p. 21A.
