

SEAC *communications*

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PRESIDENT'S MESSAGE

This post-PITTCON edition of the SEAC Communications is chock full of interesting vignettes and photos from the conference and elsewhere. Faye Rubinson is to be congratulated for putting together one of our most comprehensive editions. Among other things, I find the newsletter to be a very useful means of tracking friends and colleagues. For example, I see that my young friend George Wilson turned 70 (Welcome to the young-at-heart generation, George.), and Eric Bakker is finally returning to Switzerland (Why would anyone want to live in a country with no flat spots?).

But I digress. I especially want to congratulate our newest SEAC awardees-to-be. Rick Van Duyne was selected by the Awards Committee to be the 2011 recipient of the Reilley Award and Jill Venton of the University of Virginia will be presented with the Young Investigator Award at PITTCON in Atlanta next year. Today I was reading in C&EN that Rick was also just elected to the National Academy of Sciences to add to his many recent awards. Congratulations, Rick, this is almost as prestigious as winning the Reilley Award. By the way, unless my memory deceives me (which would not be too surprising), Rick's mentor, Charlie Reilley, was the second analytical chemist to be elected to the NAS (after I. M. Kolthoff), to be followed by several other SEAC notables (including Bard, Anson and Murray). So, Rick, you're in really good company. This issue also contains the names of several other SEAC members who

have recently received awards and honors.

Congratulations to you all.

I note that one conference in the Upcoming Meetings list is one that I first organized more than 20 years ago – the Gordon Research Conference on Bioanalytical Sensors. But don't bother applying. Applications were closed when it reached the capacity limit of 150 participants. I'm proud to have started such a successful conference with the able assistance of the vice chair, Ted Kuwana. This meeting, by the way, is being chaired by one of our own – Antje Baeumner, a new member of the SEAC Board of Directors.

Finally, although I could go on and on, let me end on a note of thanks to the many individuals who are making SEAC such a successful organization – the officers, committee chairs and members, sponsors and all off you who participate and contribute to our activities.

PITTCON 2010 WRAPUP

Reilley Award Symposium

On Monday, March 1, 2010, the Society (and other interested parties) gathered for the Charles N. Reilley Award Symposium to recognize the excellence in research exhibited by two of our members – Richard Crooks of University of Texas. Austin, and Christy Haynes of University of Minnesota. The symposium, organized by Allen Bard (also of UT-Austin) included presentations by

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...and looking forward to Pittcon 2011

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- Kudos from professional Organizations – Joe Wang, Yuehe Lin, Kathy Ayers

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- Pepex Biomedical

Mark Wightman (Christy's postdoctoral mentor) and Keith Stevenson (Dick's colleague at Texas)

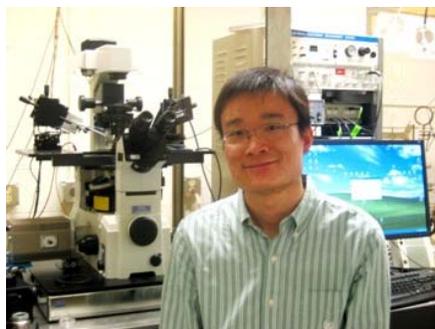


Upper left: SEAC President Dick Durst presents Reiley Award to Dick Crooks. Upper right: Dick with Young Investigator Awardee, Christy Haynes. Left: Speakers at the Symposium were (L to R) Keith Stevenson, Mark Wightman, Christy, Dick and Allen Bard.

Student Travel Awardees

Four students were awarded travel grants to present their work at PITTCON. This year's awardees were Richard Keithley, Monique Makos, Shencheng Ge, and Yogesh Singh. The

students, who received \$500 toward their meeting expenses, presented their work in the SEAC Symposium on Sunday afternoon.



Shencheng Ge (Mentor: Christy Haynes, University of Minnesota) - "An Electrochemical Study of the Role of Membrane Cholesterol in Exocytosis." Shencheng's project focuses on the secretion process from platelets. Blood platelets are secretory cells, efficiently delivering signaling molecules important in blood clotting; however, it has remained virtually unexplored how the critical secretion process proceeds. He has used carbon-fiber microelectrochemistry to reveal critical aspects of platelet secretion by monitoring released serotonin. So far his work

has demonstrated "quantal" secretion with single granule resolution and revealed that critical factors, such as membrane cholesterol content, modulate the delivery of signaling molecules from platelets. This work has provided insight into the function of both normal and dysfunctional blood platelets.

Monique Makos (Mentor: Andy Ewing, Pennsylvania State University). Monique presented her work on "Quantifying Real-Time Neurotransmitter Changes in the Central Nervous System of *Drosophila melanogaster* using Fast-Scan Cyclic Voltammetry." As part of her research in the Ewing lab, she has developed *in vivo* electrochemical techniques to monitor dopamine changes in the brains of adult fruit flies. The effects of several commonly abused drugs on the *Drosophila*

General Membership Meeting

The general meeting of the Society took place on Monday, March 1 following the Reilley Award Symposium. The minutes from the prior year were approved and a summary of the results from the BOD meeting were presented. The meeting was adjourned and celebration shortly followed at the Ming Court Restaurant.

Sights to Remember from PITTCON 2010

This year's Reilley Award and Young investigator Awardees, Richard Crooks and Christy Haynes, held Court (yes, pun definitely intended) at Ming Court Restaurant just up the road from the Convention Center.

The patio was filled to capacity (and a bit more) with current and former awardees, as well as their colleagues, their former and current students, and multitudes of well-wishers.



Last year's Reilley Awardee Chuck Martin (above left) met up with some of his former postdocs. Shown are Lane Baker, Chuck, Zuzanna Siwy, and Punit Koli. Dick Crooks, this year's Reilley awardee looks on in the background.



Dick also took time out to pose (above right) with his graduate student, Susie Myers (left) and his undergraduate student Maria Cabezas (far right), as well as with your erstwhile editor.

This year's Young Investigator awardee, Christy Haynes, poses at left with her PhD mentor and next year's Reilley Awardee, Rick Van Duyne, and with Royce Murray.



On the exhibit floor, Proton Energy had a visit from Eva LaRue from CSI Miami (shown above right with Kathy Ayers – far right – and Kathy’s colleagues). As a result, Kathy says by the SEAC dinner that night she was fairly infamous.

SEAC Members also had their share of fun at Universal Studios. Gary Christian (above right) gave us a glimpse of his wild side as he tested out a Harley at Universal Studios. Look out, Evel Knievel!

...AND LOOKING FORWARD TO PITTCON 2011!

As we gather next year in Atlanta, it will be time to honor our 2011 Awardees. Our 2011 C.N. Reilly Awardee is Professor Richard Van Duyne of Northwestern University, and our Young Investigator Award will be presented to Jill Venton of the University of Virginia. More info on our new awardees in our next issue!

Keep an eye out for the Call for Papers, due to arrive in the very near future!

OTHER RECENT MEETINGS AND SYMPOSIA

George Wilson, 70?



George and Bev Wilson

George Wilson was honored last September on his 70th birthday with a symposium, dinner and reception organized by the Department of Chemistry and the Adams Institute at the University of Kansas. George, a long-time and very active member of SEAC, received his A.B. from Princeton and his Ph.D. from the University of Illinois. After stints at Illinois and Arizona, George arrived at University of Kansas where he now holds the professorship and recently held the Office of Associate Vice Provost for Research and Graduate Studies and Vice President of the University of Kansas Center for Research, Inc.

The symposium in George's honor recognized his impact on the fields of redox biochemistry, in-vivo measurements with biosensors, analysis of chromosome structure, and development of analytical reagents based on biological recognition. Speakers, which included former students, postdocs, colleagues and noted research scientists in electroanalytical chemistry, hailed from across the globe, and included Diana S. Aga, Binodh De Silva, Professor Richard S. Glass, Geetha Hewawasam, Kenji Kano, Bruce Neri, Dr. Gerard Reach, Jean-Michel Saveant, Mark Schoenfish, and Christian Schoneich.

Congratulations, George (and Bev, too, of course!)

RECENT HONORS, AWARDS AND THE LIKE

Christy Haynes (in addition to our own Young Investigator Award) received the 2010 Findeis Award for Achievements by a Young Scientist from the ACS Division of Analytical Chemistry. Last year's Reilley Awardee, **Chuck Martin** received the DAC's Electrochemistry Award. Last, but DEFINITELY not least, **Royce Murray** has been awarded the DAC award for Distinguished Service in the Advancement of Analytical Chemistry. See below for details on the Symposium to be held in Royce's honor at the Fall Meeting of the ACS.

Yuehe Lin has been named an AAAS Fellow.

Joe Wang of UCSD was elected as a Fellow of American Institute of Medical and Biological Engineers (AIMBE) for 'his pioneering research in biosensors, biomaterials, nanomachines, bioelectronics, bionanotechnology, and bioelectrochemistry, education and service to biotechnology community'. Recipients of this honor have been recognized for their outstanding achievements in medical and biological engineering. A formal induction ceremony was held during the Institute's Annual Event at the Corcoran Gallery of Art in Washington, D.C. on February 22, 2010.

Hubert Girault is now Associate Editor for Chemical Science (Analytical Chemistry and Electrochemistry).

Kathy Ayers was recently nominated by the folks at Proton Energy for a Connecticut Women in Innovation Award and was named a finalist in the competition. Kathy commented with regard to the awards banquet that it was "inspiring to see so many women in science and business in one place."

David Cunningham and **Julie Stenken** have recently published a new book, *In Vivo Glucose Sensing* (Wiley, 2010). The book provides a comprehensive introductory chapter on glucose sensing by Reilley Award winner **George Wilson**. The biological barriers that have impeded commercialization of accurate systems are discussed and both invasive and non-invasive approaches are described.

MEMBER NEWS

New Members

New Student Members

Lloyd Horne, University of Florida
Danielle Kimmel, Vanderbilt University

Leslie Hiatt, Vanderbilt University
Joseph Basore, Indiana University

New Regular Members

Stephen Moldanado, Univ. of Michigan
Rod Sides, AMETEK-Princeton Applied
Research

Lifetime Membership

Kristin Cline, Wittenberg University

Goings and Comings

From Eric Bakker: After close to three years in Perth, Australia, Eric will move on June 1st to the University of Geneva in Switzerland to assume the succession of Jacques Buffle as Chair of Analytical Chemistry. It will be exciting to come back to my home country after an absence of 17 years. Erik is also co-organizer (with Koji Suzuki and Philippe Buhlmann) of a symposium at Pacificchem (see calendar below) on sensors and biosensors

UPCOMING MEETINGS

Meeting	When	Where	Link for More Information
8th ISE Spring Meeting	2010, May 3-6	Columbus, OH, USA	http://spring10.ise-online.org/
2nd Regional Symposium on Electrochemistry - SE Europe	2010, June 6-10	Belgrade, Serbia,	http://rse-see.net
8th International Symposium on Electrochemical Impedance Spectroscopy	2010, June 6-12	Algarve, Portugal	http://www.eis2010.org/
6th ECHEMS Meeting: Electrochemistry in Interfacial Nanoscience	2010, June 20-23	Sandbjerg Estate, Denmark	http://www.chem.au.dk/echems/Meeting-6.html
13 th International Conference on Electro-analysis ESEAC 2010	2010, June 20-24	Gijon, Spain	http://www.esac2010.com/
Gordon Research Conference – Bioanalytical Sensors	2010, June 20-25	New London, NH USA	http://www.grc.org/programs.aspx?year=2010&program=biosens
International Conference on Electrified Interfaces	2010, June 20-25	Geneva, NY, USA	http://www.eis2010.org/
Gordon Research Conference- Bioelectrochemistry	2010, July 10-16	Biddeford, ME, USA	http://www.grc.org/meetings.aspx?year=2010
8th International Symposium on New Materials and Nano-Materials for Electrochemical Systems	2010, July 11-15	Shanghai, China	http://www.polytml.ca/newmaterials/eng/index.html
Gordon Research Conference-Corrosion Aqueous	2010, July 25-30	New London, NH, USA	http://www.grc.org/meetings.aspx?year=2010
Gordon Research Conference-Electrodeposition	2010, August 1-6	New London, NH, USA	http://www.grc.org/meetings.aspx?year=2010

Faraday Discussion 149: Analysis for Healthcare Diagnostics and Theranostics	2010, August 6-8	University of Edinburgh, UK	http://www.rsc.org/ConferencesAndEvents/RSCConferences/FD149/index.asp
American Chemical Society Fall Meeting	2010, August 22-26	Boston, MA, USA	http://portal.acs.org/
International Symposium on Electrocatalysis: Molecular Level Approach to Modern Applications	2010, August 22-25	Kloster Irsee, Germany	http://www.uni-ulm.de/electrocatalysis/
Int'l Symposium on Polymer Electrolytes	2010, August 29-September 3	Padova Italy	http://www.chimica.unipd.it/ispe12/
Electrochemistry: From Microscopic Understanding to Global Impact	2010, September 13-15	Bochum, Germany	http://www.gdch.de/electrochemistry2010
Electrochem 2010: Electrochemistry and Sustainability	2010, September 14-15	Univ. Wolverhampton, UK	http://www.rsc.org/ConferencesAndEvents/conference/alldetails.cfm?evid=105717
EMNT 2010	2010, September 21-24	Cannes-Mandelieu, France	http://www.chimie-paristech.fr/emnt2010
61st Annual ISE Meeting	2010, September 26-October 1	Nice, France	http://event10.ise-online.org/ (includes Electrochemistry on a Local Scale)
6th Workshop on Scanning Electrochemical Microscopy	2010, October 3-7	Frejus, France	philippe.hapiot@univ-rennes1.fr
218th ECS Meeting	2010, October 10-15	Las Vegas, NV, USA	http://www.electrochem.org/meetings/biannual/218/218.htm
9th International Frumkin Symposium "Electrochemical Technologies and Materials for 21 st Century"	2010, October 24-29	Moscow, Russia	http://www.elchem.ac.ru
<u>Pacificchem 2010</u>	2010, December 15-20	Honolulu, HI, USA	http://www.pacificchem.org/
3 rd Annual Workshop on Electrochemistry	2011, February 19-20	Austin, TX, USA	http://cec.cm.utexas.edu/events (also note details below)
Pittcon 2011	2011, March 13-18	Atlanta, GA, USA	http://www.pittcon.org/
American Chemical Society Spring Meeting	2011, March 27-31	Anaheim, CA, USA	http://portal.acs.org/
219th ECS Meeting	2011, May, 1-6	Montreal, Canada	
9th ISE Spring Meeting	2011, May 8-11	Turku, Finland	http://spring11.ise-online.org/
Matrafured 2011 Conference on Electrochemical Sensors	2011, June 19 - 24	Dobogokö, Hungary	http://www.pretsch.ethz.ch/matrafured/

American Chemical Society Fall Meeting	2011, August 28-September 1	Colorado, CO, USA	http://portal.acs.org/
62nd Annual ISE Meeting	2011, September 11-16	Niigata, Japan	http://event11.ise-online.org/
220th ECS Meeting	2011, October, 9-14	Boston, MA, USA	
Pittcon 2012	2012, March 11-16	Orlando, FL, USA	http://www.pittcon.org/
221st ECS Meeting	2012, May, 6-11	Seattle, WA, USA	
63rd Annual ISE Meeting	2012, August 19-24	Prague, Czech Republic	

More details on some of the above

A Half-Century at the Crossroads of Chemistry: In Honor of Royce Murray's 50 Years at Carolina.

Royce Murray will be honored at the 240th Meeting of the American Chemical Society (22–26 August 2010) The symposium, organized by Debra Rolison, Robin McCarley, R. Mark Wightman, and Mary Beth Williams will take place beginning on Wednesday morning and will comprise four half-day sessions, as listed below.

Analytical Chemistry at the Crossroads

Wednesday morning. *Presiding: Henry Blount and Debra Rolison*

Speakers: Henry Blount, George Whitesides, Rick Van Duynes, Royce Murray, R. Mark Wightman, Henry White, Andy Ewing

Materials Chemistry & Nanoscience at the Crossroads

Wednesday afternoon. *Presiding: Mary Beth Williams and Robin McCarley*

Speakers: Rob Whetten, Hannu Hakkinen, Mark Ratner, Joe Hupp, Tom Mallouk, Debra Rolison

Energy & Sustainability at the Crossroads

Thursday morning, *Presiding: Robert Nowak and Debra Rolison*

Speakers: Robert Nowak, Héctor Abruña, Jeanne Pemberton, Steve Creager, Jeffrey Long, Esther Takeuchi, Leonard Tender

Look Where the Crossroads Led Us

Thursday afternoon, *Presiding: Mark Wightman and Henry White*

Speakers: Bill Heineman, Mike Elliott, Joe Tracy, Dave Cliffl, Ryan White, Robin McCarley

Save the Date for the 2011 Workshop on Electrochemistry

From Bob Villwock (Associate Director, Center for Electrochemistry, The University of Texas at Austin)

Each year in Austin, Texas, the Workshop on Electrochemistry brings together experts in fields of engineering, materials, and electrochemistry to focus on a topic in an important

area of research. Participants address specific challenges in the field, exchange ideas and information, and catch up with colleagues from around the world. The date for the third annual Workshop has been set for February 19-20, 2011. The workshop is hosted by the Center for Electrochemistry. Specific topics will be announced later this year, and more information is available at <http://cec.cm.utexas.edu/events>.

These exclusive workshops feature scientists and researchers from top universities, national laboratories, and electrochemical industries discussing cutting-edge electrochemical science, and addressing issues with respect to the mechanisms of electron transfer. Each workshop features technical presentations and posters from several different perspectives covering areas ranging from electrocatalysis, electrochemical sensors, and electroanalysis. The workshops are held at the AT&T Executive Education and Conference Center on the campus of the University of Texas at Austin. The meeting venue includes state-of-the-art technology and communication services, comfortable accommodations, high speed internet access, digital TV programming, and access to the fitness center.

The workshop location is near to the many recreational and cultural attractions of the Austin Hill Country. The Austin campus is the site of 17 libraries and several world-class museums, and just a short walk or ride away from central Austin attractions: the Bob Bullock Texas History Museum, the Texas State Capitol, Congress Avenue, and the 6th Street and Warehouse shopping and entertainment districts. Known as "The Live Music Capital of the World," Austin is a vibrant mix of Texas friendliness and cosmopolitan sophistication, with opportunities for outdoor recreation activities. The weather in Austin during February can be cool, but is generally mild: the average high is 65 F (18 °C) and the average low is 44 F (7 °C).



The previous Workshop on Electrochemistry, entitled Mechanistic Electrochemistry and Electroanalysis, was held in February. The speakers included, from left to right, Richard Crooks (University of Texas at Austin), Héctor Abruña (Cornell University), Juan Felú (Universidad de Alicante), Charles Martin (University of Florida), William Geiger (The University of Vermont), Ernö Pretsch, ETH Zürich (Swiss Federal Institute of Technology), Jean-Michel

Savéant (Université Paris Diderot), Andrew Bocarsly (Princeton University), William Heineman (University of Cincinnati), Hubert Girault (École Polytechnique Fédérale de Lausanne), and Serge Lemay (Delft University of Technology).

Just in from Alan Bond, our Correspondent in Australia...

The Australian Electrochemistry Group had just been advised that the International Society of Electrochemistry Spring Meeting on the topic "Electrochemical Science and Technology in the Solution of Real Life Problems - New Approaches to Nanostructuring Electrodes for Electroanalysis and Energy Storage" will be held in Perth, Western Australia on April 16-19, 2012. This is the first time an ISE Meeting has been held in Australia and it is quite some

time since any International meeting on electrochemistry has been held Down Under. To celebrate this occasion, the Royal Australian Chemical Institute. Electrochemistry Division will also hold a one day meeting in Perth on Sunday April 16 to run back-to-back with the ISE Meeting. It has been sometime since SEAC members have had the chance to attend an Electrochemistry Conference in Australia and I hope we may see some of you in Perth in 2012. For further information, you should contact Dr Manikam Minakshi Sundaram, Murdoch University, Murdoch, WA 6150; Ph: +618 93606784; Email: minakshi@murdoch.edu.au <mailto:minakshi@murdoch.edu.au> or Prof Justin Gooding, School of Chemistry, University of New South Wales, Sydney, NSW 2052; Ph: +61-2-9385 5384; Email: justin.gooding@unsw.edu.au <mailto:justin.gooding@unsw.edu.au>

ESEAC 2010

As has been the case every two years since 1986, the European Society for Electroanalytical Chemistry is pleased to announce the 13th Conference on Electroanalysis that will be held in Gijón (Asturias-Spain) on June 20-24, 2010. This is the second time that Spain, and specifically Gijón, is the venue for this well-established Conference that joins electroanalytical chemists from all over the world. Given that we are celebrating 20 years from that event that was the onset of the Electroanalytical Society, the Scientific and Organizing Committees have decided to honor some of the colleagues who actively participated in that Conference and decisively contributed to the development of our discipline but, unfortunately, will not be with us anymore. The meeting will provide a forum for the discussion of the most recent advances in our discipline. The Conference is structured in four symposia, each one associated to one of the main topics indicated below.

<p>Prof. Robert A. Osteryoung Memorial Symposium <i>"Theory, methods, new materials and nanostructures for electrochemical devices"</i></p>		<p>Prof. Georges G. Guilbault Memorial Symposium <i>"Biological and biomimetic receptors for electrochemical devices"</i></p>	
<p>Prof. G. J. Patriarche Memorial Symposium <i>"Pharmaceutical and biomedical electroanalysis"</i></p>		<p>Prof. J. M. Pinilla Macías Memorial Symposium <i>"Environmental and food science electroanalysis"</i></p>	

May 20, 2010: Deadline for early registration.

June 10, 2010: Deadline for registration.

June 20, 2010: Conference start

Although these four main topics will be emphasized during the Conference, all aspects of modern Electroanalytical Chemistry are welcome. On behalf of both scientific and organizing committees of ESEAC 2010, we cordially invite you to contribute to this meeting. We are sure this meeting will be a great opportunity to strengthen links or create new ones in order to find novel ideas and improve further our discipline.

JOB OPENINGS

Pepex Biomedical

Pepex Biomedical is seeking a Senior Research Scientist to develop novel electrochemical biosensors. The scientists will be expected to design sensor architecture, develop reagent formulations, construct sensors and test the performance of the sensors.

It is critical that the candidate possess industry experience with disposable glucose sensor development and manufacturing.

The ideal candidate will possess • a minimum of a BS in chemistry, biochemistry, pharmaceutical chemistry or related discipline • industry experience in biosensor development • skills and/or knowledge of glucose monitors, electrochemistry, polymers, reagent formulation, FDA submissions, cGMP. • the capability of designing and executing experiments to support milestone objectives • the capacity for clear thinking and self motivation to achieve technical success. The position is located in Saint Louis Missouri.

For consideration please submit resumes to mark.vreeke@pepex-biomed.com

University of Wyoming

Postdoctoral positions in the area of photoelectrochemical and electrochemical energy conversion are available in the laboratory of Professor Bruce Parkinson at the Department of Chemistry and the School of Energy Resources at the University of Wyoming. For one position, candidates with expertise in inorganic coordination chemistry with some electrochemical experience or electrochemists with some experience in coordination chemistry are especially encouraged. Additional positions are available for candidates with experience in materials chemistry, photovoltaics or semiconductor physics. Please send a letter of application, curriculum vitae and the names of three references to Professor Bruce Parkinson at bparkin1@uwyo.edu. Competitive salaries will be paid to candidates with excellent credentials.

For additional employment opportunities please see:

<http://electroanalytical.org/employment.html>