# **SEAC**communications

Volume 27, Number 2, June 2011

#### **Editor**

#### Philippe Buhlmann

Department of Chemistry University of Minnesota Minneapolis, MN buhlmann@umn.edu

#### **Regional Editors**

#### Alan Bond

Professor Alan M. Bond School of Chemistry Monash University Victoria 3800, Australia a.bond@sci.monash.edu.au

#### Karl Cammann

Westfälische Wilhelms Universität D-4400 Münster, Germany Cammann@uni-muenster.de

#### Yoshio Umezawa

Research Institute of Pharmaceutical Sciences Musashino University 1-1-20 Shinmachi, Nishitokyo-shi Tokyo 202-8585, Japan umezawa@musashino-u.ac.jp

## **SEAC Web Editor**

#### Samuel Kounaves

Department of Chemistry Tufts University Medford, MA 02155 samuel.kounaves@tufts.edu



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

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

## PRESIDENT'S MESSAGE

Let me take this opportunity to congratulate Debra Rolison on her selection to receive the 2012 Reillev Award and Lane Baker who will receive the Young Investigator Award. They will receive these awards at Pittcon 2012 in Orlando, Florida. More about these awardees appears in this issue.

This is my last Newsletter message as I complete my two-year term as SEAC president. It has been an honor and a privilege to serve you and to work alongside so many talented and dedicated officers and committee chairs. These two years have passed very quickly for me, and I hope my efforts have left the Society with some improvements. We continue to try to increase the membership rolls by providing useful services to the membership, primarily via this Newsletter and our annual awards symposium. With your support, the Society will continue to grow and prosper.

With this final message, I want to take the opportunity to thank the officers, the Board of Directors and the committee chairs who have carried the majority of the workload while I basked in the limelight of their efforts. These people include our former treasurer, Johna Leddy, and our former Newsletter editor, Faye Rubinson, who have performed these vital operational functions for the Society. And I also thank Petr Vanysek and Phil Buhlmann for offering their services as the new treasurer and editor, respectively. Thanks, too, go to Sam Kounaves, our very important web editor. I especially want to thank Jon Howell, our secretary, who has been our key go-to-guy and who has performed yeoman's duty on our behalf. In addition, many thanks go out to the committee chairs who help organize and run the various SEAC activities at Pittcon.

Finally, to all SEAC members, as I said above, thank you for the opportunity to have served you. In my new position as past president, I will continue to assist our Society in any way that I can.

Dick Durst

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## PITTCON 2012

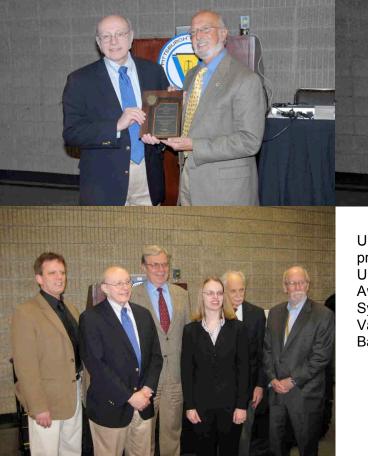
SEAC will again be sponsoring a poster session at PITTCON 2012. In addition to the research presented, we will recognize the contributions of our Student Travel Award winners. Make sure that you designate any poster abstracts for the SEAC poster session.

SEAC will also hold its Reilley and Young Investigator Award Symposium. See the feature on our 2012 awardees, Debra Rolison (U.S. Naval Research Laboratory) and Lane Baker (Indiana University, Bloomington), in this issue of the Newsletter. We all look forward to celebrating their accomplishments. More details of the program will appear in upcoming issues.

## **WRAP-UP PITTCON 2011**

## Charles N. Reilley and Young Investigator Awards Symposium

On March 14, 2011, the Society gathered at PITTCON for the presentation of the 2011 C. N. Reilley Award to Professor Richard Van Duyne of Northwestern University and the Young Investigator Award to Jill Venton of University of Virginia. The symposium in their honor was arranged by Andrew Ewing, University of Gothenburg, and included besides presentations by the awardees themselves also talks by Allen Bard (University of Texas at Austin), Royce Murray (University of North Carolina), and Robert Wightman (University of North Carolina).



Upper left: SEAC President Dick Durst presents Reilley Award to Richard Van Duyne. Upper right: Dick with Young Investigator Awardee Jill Venton. Left (from L to R): Symposium organizer Andrew Ewing, Richard Van Duyne, Mark Wightman, Jill Venton, Allen Bard, and Royce Murray.

Abstract deadline: 8/12

#### Student Travel Awardees

Four students were awarded travel grants to present their work at PITTCON. This year's awardees were Ms. Chiao-Chen Chen (Dept. of Chemistry, Indiana University, advisor: Lane A. Baker), Ms. Melissa Maurer-Jones (Dept. of Chemistry, University of Minnesota; Christy Hanes), Ms. Leyda Z. Lugo-Morales (Dept. of Chemistry, N. Carolina State University; Leslie Sombers), Mr. Paul Walsh (Dept. of Chemistry, University of North Carolina-Chapel Hill; Mark Wightman), and Ms. Trisha Vickrey (Dept. of Chemistry, University of Virginia; Jill Venton). The students, who received \$400 toward their meeting expenses, presented their work in various sessions at Pittcon.

## **Board of Directors Meeting**

The complete minutes of the meeting will be published in this newsletter upon approval by the BOD. What follows here is, therefore, only a very brief summary. Richard Durst recognized the retiring Board members Carol Korzeniewski, Rick Van Duyne, and Mary Beth Williams for their contributions to SEAC. Also recognized were J. Faye Rubinson for her service as editor of the SEAC Communications newsletter and Johna Leddy for her years of service as Treasurer. New board members for the period from 2011-2016 are David Cliffel, David Cunningham, and Jill Venton. Petr Vanysek presented the report for the fiscal year 2010, and the 2012 budget was approved. The committee chairs reported on activities in the Nominations, Awards, Actvities, Web Site and Newsletter Committees. SEAC membership has increased from 2008 to 2010 by 6% to 259 members. Carol Korzeniewski's term on the board is expiring, thus Frank Zamborini, who has served on the Membership Committee, has agreed to succeed her as chair of the Membership Committee. All other committee chairs agreed to continue to serve. Further issues discussed included the storage of the SEAC archives, advertising in the newsletter, manuals for SEAC officers, interactions with the ASDL, the SEAC web site, student involvement in SEAC activities, and the need for more monetary contributions to SEAC.

## **General Membership Meeting**

The general meeting of the Society took place on Monday, March 14 following the Reilley Award Symposium. The minutes from the prior year were approved and a summary of the results from the BOD meeting was presented. The meeting was adjourned and celebration followed at the Gordon Biersch Brewery and Restaurant.

Sights to Remember from Pittcon 2011



## **SEAC AWARDS**

The Charles N. Reilley Award in Electroanalytical Chemistry is given in memory of one of the most distinguished analytical chemists of the 20th century. This 2012 award goes to Debra Rolison, US Naval Research Laboratory. The 2012 Young Investigator Award goes to Lane Baker, Department of Chemistry, Indiana University. Both awards will be presented at Pittcon 2012.

## Charles N. Reilley Award to Debra Rolison



Debra Rolison heads the Advanced Electrochemical Materials section (also known as the U.S. Navy's nanoarchitectural firm) at the U.S. Naval Research Laboratory in Washington, DC, where her research focuses on multifunctional nanoarchitectures for rate-critical applications with an emphasis on catalytic chemistries, energy storage and conversion, biomolecular composites, porous magnets, and sensors. Along with Bruce Dunn (UCLA), Jeffrey Long (NRL), and Henry White (University of Utah), she established a new sub-discipline in electrochemical science: threedimensional (3-D) electrochemical energy storage. Rolison was a Faculty Scholar at Florida Atlantic University (1972-1975), where she worked with Frank Schultz on nonaqueous ion-selective electrodes electrochemistry of *m*-sulfido molybdenum complexes before receiving her B.S. in Chemistry in 1975. She then moseyed north to the University of North Carolina at Chapel Hill, where she joined the group of Royce Murray just as chemically modified electrodes were being invented. She received her Ph.D. in Chemistry from UNC in 1980 after helping to establish polymer-modified electrodes and frequent pick-up games of killer volleyball; she then immediately joined the NRL as a staff scientist.

Rolison is renowned for her emphasis on bringing the importance of nothing and disorder to materials chemistry, particularly for improving performance in energy-relevant interphases using nanometric control of the requisite multifunctional processes and for bringing an architectural perspective to the design of ultraporous solids. In 1987, she co-authored Ultramicroelectrodes, the first text on this still-active area with Martin Fleischmann, Stanley Pons, and Peter Schmidt. She quest edited (with H.S. White) an issue of Langmuir devoted to "Electrochemistry of Nanostructured Materials" (February 1999), a Festschrift in honor of Royce Murray (with R.L. McCarley and R. M. Wightman) in the Journal of Physical Chemistry (September 2001), a volume of the Journal of Non-Crystalline Solids devoted to the S&T of nanoarchitectures (December 2004), and an issue of MRS Bulletin (with L.F. Nazar) on "Electrochemical Energy Storage to Power the 21st Century" (July 2011). Her Editorial Advisory Board service includes Analytical Chemistry, Langmuir, Journal of Electroanalytical Chemistry, and inaugural board membership at Nano Letters, the Encyclopedia of Nanoscience and Nanotechnology, and Annual Review in Analytical Chemistry. She was a member of the Board of Directors of SEAC (1996-2001) and served as Editor of SEAC Communications (1997-2002). She chaired the 2001 Gordon Research Conference on Electrochemistry, the 2003 International Symposium on Aerogels, and co-chaired the 12<sup>th</sup>-15<sup>th</sup> NSF Materials Chemistry Workshops (2004-2008).

Rolison is an Adjunct Professor of Chemistry at the University of Utah (2000–present) and a Fellow of the American Association for the Advancement of Science, the Association for Women in Science, and the Materials Research Society (inaugural class). She received the 2011 ACS Award in the Chemistry of Materials and remains (alas) the only woman to receive the Award in Pure Science from the NRL Edison Chapter of Sigma Xi (awarded since 1955). The author of over 200 scientific articles, she holds

24 patents and also writes and lectures widely on issues affecting women in science, including proposing Title IX assessments of science and engineering departments.





Baker received his BS in Chemistry from Missouri State University in 1996. He completed graduate studies at Texas A&M University under the guidance of Prof. Richard M. Crooks, working on electro and photoactive dendrimers. He was then a National Research Council Postdoctoral Fellow at the Naval Research Laboratory working with Dr. Lloyd J. Whitman in the Surface Nanoscience and Sensor Section where he studied UHV-STM of silicon surfaces. He also completed a second postdoctoral appointment at the University of Florida, working with Prof. Charles R. Martin on nanopore sensors.

Baker has been at Indiana University, Bloomington, since 2006, where he focuses on applications of scanning ion conductance microscopy, electrochemical atomic

force microscopy, and nanopore-hydrogel sensing platforms. In a broader sense, his group is interested in developing new tools and techniques for measuring and manipulating ion currents at small length scales. He is the recipient of a NSF CAREER award, a Cottrell Scholar's Award and The Society of Analytical Chemists of Pittsburgh Starter Grant.

## **MEETINGS TO COME**

Meetings of interest to our SEAC members abound during the coming year. If you are aware of any other upcoming events that should be listed, let the editor know for the next newsletter.

Meeting	When	Where	Link for More Information
43rd IUPAC World Chemistry Congress 2011	2011, July 30–August 7	Puerto Rico, San Juan, USA	http://www.iupac2011.org
13 <sup>th</sup> International Symposium on Electroanalytical Chemistry (ISEAC)	2011, August 19–24	Changchun, China	http://iseac.ciac.jl.cn
American Chemical Society Fall Meeting	2011, August 28– September 1	Colorado, CO, USA	http://portal.acs.org/
Electrochemical Horizons 2011	2011, Sept. 5&6	Bath, United Kingdom	http://www.bath.ac.uk/chemistry/people/marke n/Flyer_5_Electrochem_2011decs.pdf
62nd Annual ISE Meeting	2011, Sept. 11–16	Niigata, Japan	http://event11.ise-online.org/
Renewable Energy and Materials Tailoring	2011, Sept. 18&19	Kyoto, Japan	http://www.echem.energy.kyoto- u.ac.jp/REMT2011_first_circular.pdf
Electrophoretic Deposition IV:Fundamentals and Applications	2011, October 2–7	Puerto Vallarta, Mexico	http://www.engconfintl.org/11ab.html
220th ECS Meeting	2011, October, 9– 14	Boston, MA, USA	http://www.electrochem.org/meetings/biannual/fut_mtgs.htm
The 5th International Workshop on Surface Modification for Chemical and Biochemical Sensing, SMCBS 2011	2011, November 4– 8	Lochow (near Warsaw), Poland	http://www.science24.com/event/smcbs2011

Meeting   W	/hen	Where	Link for More Information
	012,	Ventura, CA,	http://www.grc.org/programs.aspx?year=2012
Electrochemistry Ja	anuary 8–13	USA	&program=elecchem
	012, March	Orlando, FL,	http://www.pittcon.org/
	1–16	USA	
	012, March	San Diego, CA,	http://portal.acs.org/
7 1 0	5–29	USA	
	012, April	Perth, Australia	Contact Damien Arrigan
chemistry Symposium 15	5		(D.Arrigan@curtin.edu.au) for further details.
(preceding 10 <sup>th</sup> ISE Spring			
Meeting)			
	012, April	Perth, Australia	http://www.ise-
	6–19		online.org/annmeet/next_meetings.php
_	012, May,	Seattle, WA,	http://www.electrochem.org/meetings/biannual
	-11	USA	<u>/fut_mtgs.htm</u>
11th ISE Spring Meeting 20	012, May	Washington DC,	http://www.ise-
	3–25	USA	online.org/annmeet/next_meetings.php
	012, July 1–	Lucca (Barga),	http://www.grc.org/programs.aspx?year=2012
Bioelectrochemistry 6		Italy	<u>&amp;program=bioelec</u>
	012, July	New London,	http://www.grc.org/programs.aspx?year=2012
	9-August 3	NH, USA	&program=elecdep
American Chemical 20	012, August	Philadelphia,	http://portal.acs.org/
Society Fall Meeting 19	9–23	PA, USA	
63rd Annual ISE Meeting 20	012, August	Prague, Czech	http://www.ise-
19	9-24	Republic	online.org/annmeet/next_meetings.php
Electrochemistry 2012 20	012, Sept.	Munich,	http://www.gdch.de/vas/tagungen/gdchvas.ht
	7–19	Germany	<u>m</u>
PRiME 2012 (ECS 222nd 20	012,	Honolulu, HI,	http://www.electrochem.org/meetings/guidelin
	ctober 7–12	USA	es/plan_cal.htm
	013, March	Philadelphia,	http://www.pittcon.org/
17	7–22	PA, USA	
	013, April	New Orleans,	http://portal.acs.org/
7 1 0	-11	LA, USA	
	013, May	Toronto,	http://www.electrochem.org/meetings/biannual
	2–17	Ontario, Canada	<u>/fut_mtgs.htm</u>
American Chemical 20	013, Sept.	Indianapolis, IN,	http://portal.acs.org/
	-12	USA	
12 <sup>th</sup> ISE Spring Meeting 20	013, March	Bochum,	http://www.ise-
17	7–21	Germany	online.org/annmeet/next_meetings.php
13 <sup>th</sup> ISE Spring Meeting 20	013, April	Pretoria, South	http://www.ise-
	<b>-11</b>	Africa	online.org/annmeet/next_meetings.php
	013,	Santiago de	http://annual64.ise-online.org/
Se	eptember	Querétaro,	
8-	-13	Mexico	
224th ECS Fall meeting 20	013, Oct.	San Francisco,	http://www.electrochem.org/meetings/biannual
27	7–Nov. 1	CA, USA	/fut mtgs.htm

## The 18<sup>th</sup> Australian Electrochemistry Symposium (April 15<sup>th</sup> 2012 at Curtin University, Perth, Australia)

The Electrochemical Division of the Royal Australian Chemical Institute organizes the 18<sup>th</sup> Australian Electrochemistry Symposium, which will precede the 10<sup>th</sup> ISE Spring Meeting, April 15<sup>th</sup> - 18<sup>th</sup> 2012, Perth, Australia. Speakers will include the Breyer medallist Joseph Wang (Department of Nanoengineering, University of California San Diego), and the R. H. Stokes and A. M. Bond medallists (to be announced) will also speak.

- Opening date for abstract submission: September 10<sup>th</sup>, 2011
- Deadline for submission of abstracts for oral and poster presentations: November 11<sup>th</sup>, 2011.

Contact Damien Arrigan (D.Arrigan@curtin.edu.au) for further details.

## **JOB OPENINGS**

University of Virginia: Rapid capillary electrophoresis measurements of neurotransmitters

A postdoctoral position is available in Jill Venton's lab at the University of Virginia for postdoctoral fellows with or nearing completion of a Ph.D. in chemistry, neuroscience, or bioengineering. Priority will be given to individuals with research experience in capillary electrophoresis. The position focuses on developing and utilizing rapid capillary electrophoresis (with laser-induced fluorescence or electrochemical detection) methods for separation of multiple neurotransmitters from microdialysis samples. The goal is to develop rapid methods to determine the effects of drugs of abuse in the brain of rats. Instruments are home built, so experience constructing and using custom instrumentation and/or LabView software is a plus. A CV and contact information for professional references should be forwarded to Professor B. Jill Venton at <a href="mailto:jventon@virginia.edu">jventon@virginia.edu</a>. A letter of application, briefly highlighting relevant skills, past achievements, and future research goals along with information on citizenship and/or U.S. visa status, should be included. Position is available now and preferably the postdoctoral fellow would start no later than summer 2011.

#### **MEMBER NEWS**

**Andy Gilicinski** reports that he changed job. As of 5/23 he is VP, Product Development at Georgia-Pacific, responsible for their entire \$10B consumer retail business. Note that Andy is also participating in the ACS Webinar series on chemical entrepreneurship (see below).

**Ryan White** reports that after his graduate work with Henry White at Utah and a NIH postdoctoral fellowship with Kevin Plaxco at UCSB, he will be moving to the chemistry and biochemistry at UMBC (University of Maryland Baltimore County) as an assistant professor this fall. He will continue to work with nanoscale electrochemical methods to study the interface of chemistry and biology.

Graduate student *Trisha Vickrey* from the lab of SEAC member Jill Venton at the University of Virginia was awarded one of the 2011 ACS Division of Analytical Chemistry fellowships (sponsored by Eastman Kodak). Congratulations!

#### **NEW MEMBERS**

#### **New Student Members**

Natalie Bjorge, University of North Carolina, Chapel Hill Li Chen, University of Minnesota Jonathan T. Cox, University of Washington Alessa Gambardella, University of North Carolina, Chapel Hill Dulan Gunasekara, University of Kansas Xuefei Guo, University of Cincinnati (Vera) Sue Myers, University of Texas, Austin Tyler Shogren, University of Wisconsin, Stevens Point Michael Weir, University of Texas, Austin Joshua Young, University of Toledo Tianxia Zhu, University of Toledo

#### **New Regular Members**

Frederique Deiss, Harvard University Thomas Hamann, Michigan State University Pete Peterson, Ivium Maarten Van Brussel, Metrohm Autolab Jill Venton, University of Virginia Gregory Webster, Abbott Labs

**New member – Started Lifetime Installments** Anthony Kammerich, Georgetown University

Lifetime Membership Completed Jacob Ketter, Gamry

## **ACS WEBINARS: CHEMICAL ENTREPRENEURSHIP SERIES**

Dare to dream! Many people dream of starting their own businesses, or being a part of the exciting start-up culture. But do you know what it takes to succeed? A successful business, large or small, takes careful and strategic planning, knowledge of the industry, financial resources, fiscal know-how, legal savvy, and guts. Join our speakers to learn the A-to-Z of being an entrepreneur, finding the right resources, and the challenges/rewards of start-ups. Join the webinar series every 3rd Thursday until October at 2-3 pm EST! To register, go to <a href="http://acswebinars.org/chemical-entrepreneurship">http://acswebinars.org/chemical-entrepreneurship</a>.

July 21, 2011 - "Who's Around the Corner? Performing Technology Scouting and Market Feasibility Analysis."

Aug 18, 2011 - "The Science of Selling: Selling Science to Non-Scientists."

Sept 15, 2011 - "Writing a Winning Executive Summary and Business Plan." with Dr. Dan Daly, Alabama Innovation and Mentoring of Entrepreneurs, and moderator Dr. Richard Swatloski, Licensing Associate, University of Alabama, Technology Transfer Office.

Oct 20, 2011 - "The Art in Startups: Getting Funded." with Joseph Steig, Director, NCIIA VentureWell, and CFO, Long River Ventures.

#### SEAC MEMBERS ON TOP-100-CHEMISTS LIST

Thomson Reuters released data identifying the world's top 100 chemists over the past 10 years as ranked by the impact of their published research. The list is intended to celebrate the achievements of chemists who achieved the highest citation impact scores for chemistry papers (articles and reviews) published since 2000. (<a href="http://www.sciencewatch.com/dr/sci/misc/Top100Chemists2000-10/">http://www.sciencewatch.com/dr/sci/misc/Top100Chemists2000-10/</a>). Thomson Reuters published the table in support of the International Year of Chemistry. The list includes SEAC members *Rick Van Duyne* and *Chuck Martin*.

## HOW EASY IT IS TO BECOME A SEAC MEMBER

Any individual with an interest in electroanalytical chemistry is invited to join SEAC. Regular one-year membership dues are \$30. Student dues are \$10. Dues are payable on January 1 of each year. A lifetime membership option is available for \$300, payable either as a lump sum or in three annual, nonrefundable installments of \$100.

To become a new member of SEAC, go to http://electroanalytical.org/membership.html and fill out the downloadable membership form. For all students the first year of membership is free.