SEAC*communications*

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PRESIDENT'S MESSAGE

Dear SEAC Members,

I hope all of you and your families are safe and well in this COVID-19 pandemic. Many of you are probably like me, working from home while taking care of the kids. I wish we can all get through this challenging time and resume our normal life and research in the near future.

Time really does fly fast, and it is already halfway through my two-year presidency! Let me start by thanking Takashi Ito for his dedicated, excellent work in putting up our SEAC newsletters so we can all be up to date on our electrochemistry friends and the SEAC community! There have been a lot of exciting things happening in our SEAC community, especially at Pittcon just a couple of months ago. There, we recognized our two outstanding friends, Shelley Minteer and Martin Edwards, for their 2020 Reilley and Murray awards, respectively! We also recognized the eight student travel award winners and three poster award winners. Big congratulations to all of you! We also had our inaugural SEAC Student Group Meeting organized by Lane Baker. Such a huge success! Many thanks, Lane!!

Let me also congratulate Keith Stevenson (Skolkovo Institute for Science and Technology) and Robbyn Anand (Iowa State University) for winning the 2021 SEAC Reilley and Murray awards!! An award symposium is being organized by Henry White at the next Pittcon in New Orleans. In this issue, you will also find short bios for our newly elected officers for our Society, Carol Korzeniewski (President Elect), Maryanne Collinson (Secretary), David Cliffel (Treasurer) and our new Board members, Michael Johnson, Ashley Ross, and Tim Paschkewitz. Special thanks go to Tim!! In the last few months, Tim has been working hard to make a brand-new website for SEAC, which I believe will be up and running soon. We really appreciate your hard work, Tim!!

Sincerely,

Bo Zhang
President, 2019-2021

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Job Opening
- Chief Analytical Chemist at the Connecticut Agricultural Experiment Station
- Postdoc positions at UIUC, Georgia State University and UCLA

Potentiostat Wanted – EI400 Potentiostats
Special Thanks to Our Sponsors & a Generous Contribution!
How Easy it is to Become a SEAC Member

NEW OFFICERS AND BOARD MEMBERS

Carol Korzeniewski is our President Elect from July 2020-June 2021. She will serve as President July 2021-June 2023, and then will serve as Immediate Past-President from July 2023-2024. Maryanne Collinson and David Cliffel keep being our Secretary and Treasurer, respectively, in July 2020-June 2022. Our new Board members - Michael Johnson, Ashley Ross, and Tim Paschkewitz - will assume office in July 2020 and serve until June 2025.

Carol Korzeniewski is a Professor of Chemistry at Texas Tech University. Her research impacts the areas of electrocatalysis and surface electrochemistry. Work in her group centers on adapting vibrational spectroscopic techniques to probe chemical structure and composition at electrode-solution interfaces. Single crystal electrochemistry, surface infrared spectroscopy and Raman imaging techniques are applied in the study of small molecule transformations that impact energy transfer in polymer electrolyte fuel cells. Her B.S. and Ph.D. degrees are from Oakland University (Peter Schmidt) and the University of Utah (Stan Pons), respectively. She explored problems in surface and interfacial electrochemistry as a postdoctoral researcher at the University of Texas (Alan Campion) and in recent years through faculty sabbaticals with Juan Feliu at the University of Alicante (2009) and Joel Harris at the University of Utah (2015-2016). She served as a program officer (rotator) within the Chemistry Division of the National Science Foundation from 2003-2005 and as Chemistry Department Chair at Texas Tech between 2010-2014. She is currently a member of the advisory committee for the Pacific Northwest National Laboratory Chemical Transformations Initiative and a co-director for the Lubbock Branch of the American Association of University Women. She is a lifetime SEAC member and served on the Board of Directors during 2006-2011.

Maryanne Collinson is the John B. Fenn Professor of Chemistry at Virginia Commonwealth University. She received a B.S. degree in chemistry and forensic science from the University of Central Florida and a Ph.D. degree in analytical chemistry from North Carolina State University under the direction of Ed Bowden. She continued her studies as a postdoctoral research associate in Professor Mark Wightman's laboratory at the University of North Carolina at Chapel Hill. Her academic career began at Kansas State University. She moved to Virginia Commonwealth University in 2005. Her research program lies at the interface of nanoscience, materials chemistry, and analytical chemistry with a focus on the fabrication of stationary phase gradients for chromatography and high-surface area metal and metal alloys for electrochemical analysis. She currently serves as Secretary for SEAC.

David E. Cliffel, Cornelius Vanderbilt Professor, Department of Chemistry, Vanderbilt University, directs an innovative research effort in instrumental design and electroanalytical methods applied to nanotechnology and biotechnology. He is the deputy director in the Vanderbilt Institute for Integrative Biosystems Research and Education (VIIBRE), and the Technical Editor for Physical and Analytical Electrochemistry, Electrocatalysis and Photoelectrochemistry for the *Journal of the Electrochemical Society*. He was a member of the Board of Directors for SEAC from 2011-2016. He received his Ph.D. in analytical chemistry under the direction of Allen J. Bard in 1998, was a post-doctoral assistant with Royce W. Murray at UNC-Chapel Hill, and joined Vanderbilt University in September 2000. David currently serves as Treasurer for SEAC.

Michael Johnson entered the United States Air Force Academy (Colorado Springs, CO) out of high school as a recruited intercollegiate football player. After graduating from the Academy in 1988, he embarked on an Air Force flying career in which he attained the rank of Captain and Senior Pilot, flying missions throughout the Middle East during the Gulf War. While in the Air Force, he obtained an M.S.

degree in Chemistry under the guidance of Prof. Donald Zapien, at the University of Colorado, Denver, where he used cyclic voltammetry and infrared spectroelectrochemistry to study the direct electron transfer of proteins at bare gold electrodes. After leaving the military in 1997, he attended graduate school at the University of Virginia, where he received his Ph.D. in Chemistry in 2002 under the mentorship of Prof. Tim Macdonald. While at UVa, he used electrospray ionization mass spectrometry to study the role of small molecule metabolism in Lou Gehrig's disease. He then joined the laboratory of R. Mark Wightman as a Hereditary Disease Foundation postdoctoral researcher at The University of North Carolina, Chapel Hill, where he used fast-scan cyclic voltammetry to study dopamine release and uptake mechanisms in Huntington's disease model mice. In 2005, he joined the faculty at the Department of Chemistry, University of Kansas as an Assistant Professor and attained the rank of Associate Professor in 2012. Prof. Johnson's research endeavors span from electrochemistry to behavioral neuroscience. His work includes the study of neurotransmitter release mechanisms in neurological disorders, such as Huntington's disease and chemobrain, as well as the development of methods that facilitate the electrochemical analysis of living systems, such as caged compound photoactivation and microfluidic devices. In his spare time, Prof. Johnson enjoys cycling and woodworking.

Ashley Ross is an Assistant Professor of Chemistry at the University of Cincinnati and a faculty member in the Neuroscience Graduate Program and Center for Pediatric Neuroscience at UC. She earned her Ph.D. in 2014 from the University of Virginia under the guidance of Dr. Jill Venton, and completed her post-doctoral training in Dr. Rebecca Pompano's lab at the University of Virginia where she was an American Association of Immunology Careers in Immunology Fellow from 2016-2017. Ashley began her independent career at UC in 2017. Her labs' research areas are diverse which include developing tailored carbon surfaces for improved neurochemical detection in the brain and immune system, fundamental studies of the electrode-analyte interface, and designing microfluidic and microengineered platforms to probe neurochemical-regulated signaling between the nervous system and immune system. Her group has published papers ranging from new electrochemical methods to probe subsecond lymph node signaling for the first time to fundamental studies on the extent to which the electrode and analyte structure and chemistry impacts the electrode-analyte interface. Her work is highlighted in the *Analyst* Emerging Investigator Series, the upcoming 2020 *ChemComm* Emerging Investigator issue, and in the *Analytical Bioanalytical Chemistry* themed collection on Female Role Models in Analytical Chemistry. In early 2020, Ashley was selected as a 2020 Fellow for the Scialog on Microbiome, Neurobiology, and Disease sponsored by the RCSA and was also named a finalist for the Bioanalysis Zone Rising Star Award. Ashley also serves on the Advisory Board for the Features Panel of ACS *Analytical Chemistry*. Outside of work, she enjoys spending time with her two kids, cooking, singing, and working on University-level initiatives for improving equity and inclusion in STEM.

Tim Paschkewitz earned his Ph.D. in electrochemistry under Dr. Johna Leddy at the University of Iowa in 2012. While in her group, his grant proposal to study ammonia production by a bioelectrocatalytic process from immobilized cyanobacteria, was funded and this project provided years of developmental graduate work, resulting in both his dissertation and a US patent. Having always enjoyed teaching and technical development, it was natural that he transitioned into industry following graduate school. He has been with Pine Research Instrumentation since leaving the University of Iowa, where he enjoys wearing many hats including electrochemical product development, technical support, product documentation, marketing, and customer service. He leads the FSCV product line at Pine Research and can be seen at many conferences engaging with his tribe (that's you!). Tim served on SEAC Board of Directors from 2014 - 2019 and currently serves as the chair of the SEAC Activities Committee. He is eager to continue working with the society to improve its appeal and interest to new members, primarily through website and social media updates.

PITTCON 2021 – March 6~10, 2021

Charles N. Reilley and Royce W. Murray Young Investigator Awards

The highlight of the SEAC activities at Pittcon 2021 will be the presentation of the 2021 Charles N. Reilley Award to **Keith Stevenson**, Skolkovo Institute for Science and Technology, Russia, and the Royce W. Murray Young Investigator Award to **Robbyn Anand**, Iowa State University. The symposium in their honor will be arranged by Henry White, University of Utah.

Keith Stevenson received his Ph.D. in 1997 from the University of Utah under the supervision of Professor Henry White. Subsequently, he held a postdoctoral appointment at Northwestern University (1997-2000); and a professorial appointment from 2000-2015 at the University of Texas at Austin. At present, he is leading the development of a new graduate level university (Skolkovo Institute for Science and Technology) in Moscow, Russia where he is the Provost, Full Faculty and founder of the Center for Energy Science and Technology (CEST).

Stevenson's research interests are aimed at elucidating and controlling chemistry at solid/liquid interfaces vital to many emerging energy storage and energy conversion technologies. To date he has published over 225 peer-reviewed publications, five patents, and six book chapters in this field. He is a recipient of a NSF CAREER award (2002), the Conference of Southern Graduate Schools New Scholar Award (2004), the Society of Electroanalytical Chemistry Young Investigator Award (2006), and Kavli Fellow (2012).

Stevenson has been extremely innovative in pursuing major research and educational initiatives in materials chemistry and nanotechnology areas. This includes serving as the faculty advisor for the Doctoral Portfolio Program of the Center for Nano- and Molecular Science and Technology (CNM) that produced a successful cadre of more than 120 well-trained scientists and engineers from 14 different academic departments since its inception in 2002 (now defunct in 2015). He also managed several shared instrumentation facilities, which totaled over $20M in housing state-of-the-art equipment including $4M+ of resources acquired by US federal funds and private foundation grants. On the educational side, he was the State Director of the Welch Foundation Summer Scholar Program (2008-2015) which funded summer research activities for high school students across the state of Texas, with over 1600 students served. He is also a founding faculty member of UT-Austin's federally funded Undergraduate Freshman Research Initiative (FRI). The FRI program currently involves over 25 research faculty and >800 undergraduate researchers per year and is transforming the way undergraduate research is conducted at large tier one research universities.

At present, he is leading the development of Skolkovo Institute for Science and Technology (Skoltech) in Moscow, Russia. He has successfully built new centers in research, education and innovation (CREIs) that support technology diversification and graduate educational reform in Russia. Skoltech is one of the fastest growing graduate universities in the world. In 2019, Skoltech became the youngest university globally, and the only university in the Russian Federation, to be ranked in the 100 Nature Index of Top Young Universities.

Robbyn K. Anand is the Suresh Faculty Fellow at Iowa State University where she joined the Department of Chemistry as an Assistant Professor in August 2015. The Anand research group has advanced methodologies for selective capture and analysis of single circulating tumor cells, which delivers critical information needed to tailor cancer therapy, and for electric field-driven separations in complex media. Her contributions to bipolar electrochemistry include AC and ohmic loss-based voltammetric methods that allow for information-rich electrochemical measurements to be made in resource-limited settings. Finally, she most recently led the development of a method that leverages ion concentration polarization for enrichment, separation and cation exchange in water-in-oil droplets. This method is anticipated to improve speed and sensitivity in biotechnological applications of droplet microfluidics. During this time, Prof. Anand founded the Midwest Women Chemists Retreat - an annual event aimed at the retention of women in the chemical enterprise.

PITTCON 2020 – March 1 ~ 5

Charles N. Reilley and Royce W. Murray Young Investigator Awards Symposium

The highlight of the SEAC activities at Pittcon was the presentation of the 2020 C. N. Reilley Award to **Shelley Minteer**, University of Utah, and the Royce W. Murray Award to **Martin Edwards**, University of Utah. The symposium in their honor was arranged by Henry White, University of Utah, and was held at 1:30 – 4:55 PM on Monday, March 2, 2020, in McCormick Place Convention Center, Chicago, IL.

Bo Zhang and Shelley Minteer

Bo Zhang and Martin Edwards

Martin Edwards and Shelley Minteer

(top row) Charles Henry, Henry White, Bo Zhang
(bottom row) Janine Mauzeroll, Shelley Minteer, Martin Edwards

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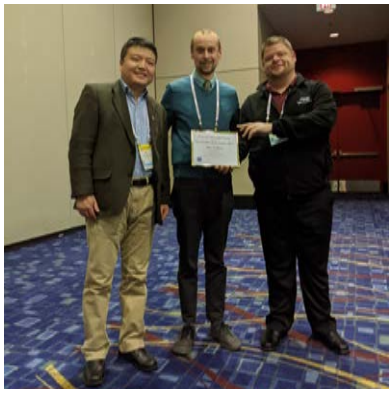
(by Bo Zhang)



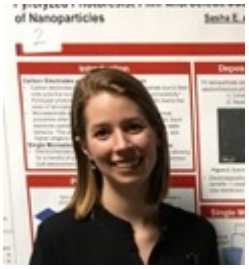
(By Tim Paschkewitz)

2020 SEAC Student Travel Award Winners

Winners of the student travel awards are **Kira Rahn**, Iowa State University (advisor: Robbyn Anand), **Sam Barlow**, University of Washington (advisor: Bo Zhang), **Sasha Alden**, Indiana University, Bloomington (advisor: Lane Baker), **Mike Cryan**, University of Cincinnati (advisor: Ashley Ross), **Ryan Balla**, University of Pittsburgh (advisor: Shigeru Amemiya), **Daniel Parr**, University of Iowa (advisor: Johna Leddy), **Badri P. Mainali**, University of Louisville (advisor: Francis Zamborini) and **Sommer Osman**, Iowa State University (advisor: Robbyn Anand). Congratulations to all of them!

Kira L. Rahn is a Ph.D. candidate at Iowa State University in the Analytical Chemistry division of the Department of Chemistry, where she is advised by Prof. Robbyn K. Anand. Before pursuing a graduate degree, Kira obtained a B.A. in Mathematics and Chemistry from Concordia College in Moorhead, MN. Currently, she is studying AC voltammetric techniques applied to bipolar electrodes with electrochemiluminescent reporting reactions. She is also an active member of the planning committee for the Midwest Retreat for Diversity in Chemistry.

Samuel Barlow is a graduate student in analytical chemistry at the University of Washington, where he works under the direction of Prof. Bo Zhang. Prior to his admission to UW, he received his BSc from Loyola University Chicago. At UW, Sam is developing novel tools for electroanalytical measurement of neurotransmitter exocytosis. His current work focuses on a new methodology for rapid, simultaneous measurement of size and redox molecule content in liposomes, a platform which should be useful for high throughput measurement of neurotransmitter concentration in isolated biological vesicles.



Sasha E. Alden is a graduate student in analytical chemistry at Indiana University, working in Prof. Lane A. Baker's lab. Her research focuses on a recently developed technique in the Baker lab, the array microcell method (AMCM). AMCM employs a movable borosilicate micropipette and a microelectrode array, where a hanging droplet at the tip of the pipette can address individual electrodes within the array electrochemically. This method has proved useful for single-entity analysis and high through-put parameter vetting for shape-controlled platinum nanoparticles. Previously, Sasha graduated from Western Washington University where she worked with Prof. David Rider on fabrication of semiconductor electrodes for water splitting and analysis of polymer microspheres for SERS applications.

Michael T. Cryan is a PhD candidate studying under the direction of Dr. Ashley E. Ross in the analytical division of the Department of Chemistry at the University of Cincinnati. Combining electrochemistry and neuroscience, his research focuses on real-time detection of purines using fast-scan cyclic voltammetry and using microfluidics to chemically stimulate brain tissue with high resolution. Prior to studying at UC, he received his BS from Bridgewater State University, earning his degree in biochemistry.

Ryan J. Balla is a PhD candidate in the Department of Chemistry at the University of Pittsburgh, under the supervision of Professor Shigeru Amemiya. Preceding his time there he obtained his BS at Penn State University and worked as an analytical technician at PPG industries. Ryan is developing a novel imaging method for scanning electrochemical microscopy (SECM) to simultaneously obtain topography and reactivity images of complicated substrates at the nanometer scale. Additionally, his research interests include the development of new SECM instrumentation and nanoscale electrochemical probes for fundamental electrochemistry.

Daniel L. Parr IV is a Ph.D. candidate at the University of Iowa in the analytical chemistry division of the Department of Chemistry, advised by Dr. Johna Leddy. He is also an M.S. candidate in the department of Mathematics. Daniel received his B.S. in chemistry and mathematics from Bradley University in Peoria, Illinois under research advisor Dr. Luke Haverhals. At present, his research focuses on optimization of electrochemical separations and thin-layer sonochemistry with mathematical modeling.

Badri P. Mainali was born in Nepal, a small Himalayan country in south Asia. He received his BS degree from Tribhuvan University, Kathmandu, Nepal, and his MS degree from Middle Tennessee State University, TN, in 2015. Then he moved to University of Louisville, KY, in Fall 2015. Since then, he is pursuing his PhD degree under the supervision of Dr. Francis P. Zamborini and is graduating soon. He has published several papers during the course of his PhD study. His research interests include size-controlled synthesis of ultra-small weakly stabilized metal nanoclusters and the electrochemical study of their stability and reactivity, and applications for catalysis and sensing.

Sommer Osman is an analytical chemistry graduate student at Iowa State University under the supervision of Prof. Robbyn K. Anand. Sommer received her BSc from the University of Louisiana at Lafayette. Her current research focuses on integrating electrokinetic pre-concentration and voltammetric detection methods in paper fluidic devices for better diagnostics at the point-of-care. Other research interests include leveraging AC-based techniques for the isolation of circulating tumor cells from blood.

2020 SEAC Poster Session Award Winners

Winners of the SEAC Poster Session awards are **Dipobrato Sarbapalli**, University of Illinois, Urbana-Champaign (advisor: Joaquín Rodriguez-Lopez), **Kira Rahn**, Iowa State University (advisor: Robbyn Anand), and **Blair Troudt**, University of Minnesota (advisor: Phil Buhlmann). Congratulations to all of them! And many thanks to the 11 SEAC members who served as poster judges.

Dipobrato Sarbapalli is a doctoral student under Prof. Joaquín Rodríguez-López at the University of Illinois at Urbana Champaign (UIUC). He is currently working on understanding how graphitic interfaces influence energy storage devices such as Li-ion and redox-flow batteries. Specifically, he investigates the effects of surface modification of graphene anodes in Li-ion batteries and characterizing interfacial reactivity between graphene and redox-active organic molecules. He obtained his M.S. degree from the Department of Civil and Environmental Engineering at UIUC in 2018 while studying nucleation kinetics and reaction mechanisms of alternative aluminosilicate binder materials. He received his B.Tech degree from the Department of Civil Engineering at the National Institute of Technology, Tiruchirappalli (India) in 2015.

Kira Rahn is introduced as a 2020 SEAC Travel Award winner (see above).

Blair Troudt is a Ph.D. candidate in the University of Minnesota chemistry department under the supervision of Prof. Philippe Buhlmann. Prior to her admission at UMN, she received her BS in chemistry at Pacific Lutheran University and her M. Ed. in secondary education at the University of Missouri in Saint Louis, where she taught high school science and ACT test prep for three years. Her current research focuses on the development of probes for electrochemical detection of analytes in human breath, the improvement of reference electrodes, and the development of electrodes for the detection of perfluorinated ions in solution.

Inaugural SEAC Student Group Meeting Cultivates New Connections at Pittcon 2020 on February 29, 2020 (By Charles Ault, Student Editor)

This year's Pittcon kicked off with a new opportunity for students to present and discuss their research with peers during the first SEAC Student Group Meeting (SEAC-SGM).

The meeting drew thirty-seven electroanalytical chemists from seventeen different universities across the country, with the added twist that the audience and the presenters were made-up entirely of students, including several advanced undergraduates.

Students were also asked to shirk formal attire and instead to wear apparel indicating their academic affiliation. The result was a colorful session with a more relaxed atmosphere that helped students easily identify and network with each other.

Participants in the 2020 SEAC Student Group Meeting.

All who attended were asked to prepare a presentation in advance of attending the meeting. Speakers were drawn at random to determine who would present and in what order. The session's program requested that the work presented be ongoing, not fully fleshed out, or at a roadblock. This allowed presenters to discuss research that they might not normally be prepared to show at a conference and encouraged the audience to collaborate and discuss spontaneously.

The session kicked off with opening statements by Lane Baker of Indiana University. "You will want to get to the meat of the problem quickly – think of this like a big group meeting. The points of these talks are discussion, critical thought, cross-fertilization and challenging your presently held beliefs," Baker said. After this initial introduction convened the meeting, Baker turned the meeting over to the students, who ran the rest of the session. Several faculty were present to observe, but they did not interject or participate in any of the discussions.

Students lucky enough to have their name drawn were given 30 minutes to present and discuss their work with the audience. A total of 10 students, from 10 different groups presented their research. Presentation topics spanned a wide swath of electrochemistry, covering topics that included scanning probe microscopy, advanced noise reduction techniques, *in vivo* electrochemistry, isolation and lysis of single cells via electrochemical methods, among others.

After the working part of the day concluded students had the opportunity to grab a drink together at a local bar, continue to discuss their research, and socialize.

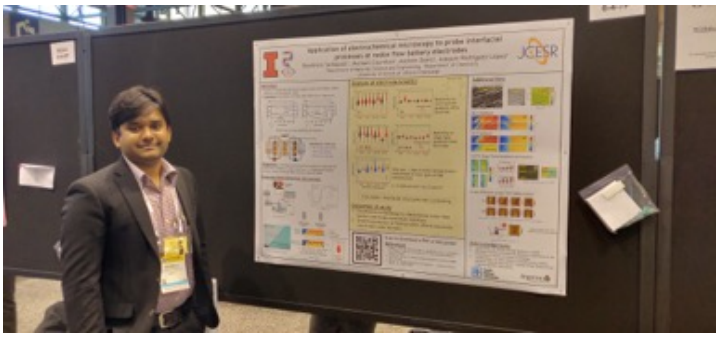
Opportunities for students to present less formally to an audience composed entirely of peers from other institutions are uncommon, and this session felt different than typical scientific meetings. both to the participants and the audience. Presenters commented they felt more comfortable discussing ideas that were not fully fleshed-out when they are in front of a less intimidating audience, and the audience felt more free to interject and engage in a give and take discussion. The student network built up through the SEAC-SGM persisted through the rest of Pittcon, letting students interact more at poster sessions and the SEAC reception, a welcome add-on effect. The meeting was well-received by the student participants and there were many good ideas to improve the meeting if it will be continued. Overall, this meeting was a good opportunity to build the student community in SEAC and to cultivate the professional bonds essential to the growth of the next generation of electroanalytical chemists.

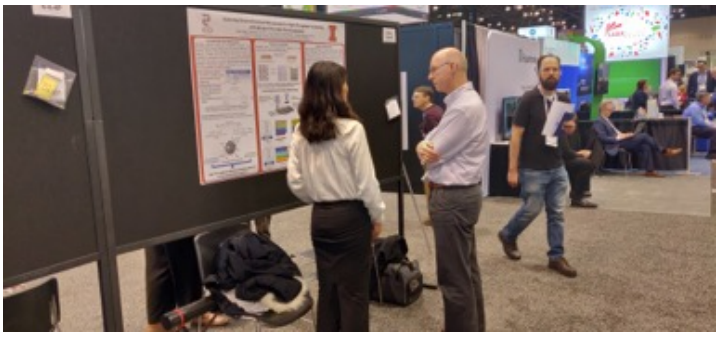
A SEAC Student Group Meeting will be held in 2021 at Pittcon New Orleans, so register for Pittcon and plan to come to the SEAC Student Group Meeting.

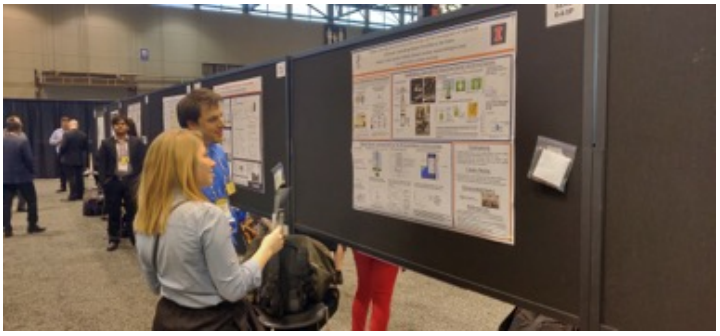
SEAC: Student Session in Electroanalysis (By Stephen Maldonado, Organizer)

We had a great set of speakers for the 'SEAC: Student Session in Electroanalysis". The talks were great and we had really good attendance. In conjunction with the new "SEAC student group meeting", there is a really nice development program in place for our (future) student members at Pittcon.

Photos at 2020 SEAC Poster Session (By Joaquín Rodríguez-López)







"Pushing the Boundaries of Brain Detection" Session Full of SEAC Women Electrochemists – March 4

Richard M. Crooks Festschrift

ChemElectroChem has hosted a special issue honoring Richard Crooks. The issue was guest edited by former students Lane Baker (Indiana University), Li Sun (Pine Research Instrumentation), Frank Zamborini (University of Louisville), Wei Zhan (Auburn University), and myself. As a guest editorial team, we are very pleased with the 45 exciting articles contributed to the issue by many whose scientific careers have been influenced by his leadership in the field of electrochemistry and those who have been fortunate to know him as a mentor, collaborator, and friend. An open access editorial piece "A Tribute to Richard M. Crooks on the Occasion of his 65th Birthday" highlights his key contributions and accomplishments while also reminiscing on some of the experiences and personal attributes that make him truly remarkable.

The special issue can be found at:
https://chemistry-europe.onlinelibrary.wiley.com/doi/toc/10.1002/(ISSN)2196-0216.RichardMCrooksFestschrift

Enjoy the read!

Robbyn Anand (Iowa State University)

ONE MORE SEAC MEMBER ON 2019 POWER LIST

SEAC congratulates Joel Harris for making it on the 2019 Power List, published in *The Analytical Scientist*, 2019; https://theanalyticalscientist.com/powerlist/2019

OBITUARY OF DENNIS PETERS

A Contribution by Lane Baker

Dennis G. Peters, Herman T. Briscoe Professor of Chemistry at Indiana University, Bloomington, died on April 13, 2020, a few days short of his 83rd birthday.

Born in Eagle Rock, CA, in 1937, Peters pursued Chemistry first at Caltech, receiving a B.S. in 1958. He then attended Harvard, where he obtained a doctorate in 1963. He immediately began his academic career at Indiana University, where he has served since.

Peters was renowned as a chemical educator, having received all the local awards for education available on the Bloomington campus. In addition, he won a host of national awards, including the Chemical Manufacturers Association National Catalyst Award in 1988 and the ACS Analytical Chemistry Division Award for Excellence in Teaching in 1990. He was the 2001 recipient of the James Flack Norris Award, presented by the Northeastern Section of the ACS, for Outstanding Achievement in the Teaching of Chemistry and the 2002 winner of the Henry B. Linford Award, presented by The Electrochemical Society, for Distinguished Teaching. Most recently, he was presented the 2020 Roland F. Hirsch Award for Distinguished Service in the Advancement of Analytical Chemistry by ACS Division of Analytical Chemistry.

One former PhD student of Dennis Peters is William Carroll, who served as President of the American Chemical Society in 2005 and Chair of the ACS Board from 2012-14. Carroll remarks, “Dennis Peters was a great mentor and a wonderful man. He loved teaching his tens of thousands of students over 57 years“.

Peters was the principal author and driving force behind the highly regarded text “*Chemical Separations and Measurements: Theory and Practice of Analytical Chemistry*”, one of his five textbooks that in total have sold more than 120,000 copies.

Research pursued by Peters and his 119 graduated research-group members centered on organic electrochemistry, most recently involving metal-salen complexes. These studies resulted in more than 215 publications, many of which featured undergraduate authors, and were recognized by The Electrochemical Society in 2012 with the Manuel M. Baizer Award in Organic Electrochemistry.

C&EN article
https://cen.acs.org/people/obituaries/Covid-19-claims-life-beloved/98/web/2020/04?utm_source=Newsletter&utm_medium=Newsletter&utm_campaign=CEN

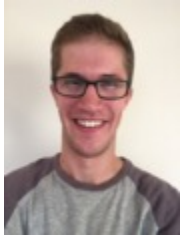
MEMBER NEWS

Martin Edwards, the 2020 Royce W. Murray Young Investigator Award recipient, will join the University of Arkansas as an Assistant Professor in Fall 2020. Martin is joining from the University of Utah, where he is a research professor in the group of Henry S. White. Martin's group will continue to develop tools, techniques and theoretical understanding of nanoscale, single-entity electrochemistry and electrochemical imaging. Applying them to a range of fundamental and applied electrochemical systems, including in the areas of energy and electrocatalysis.

Stephen Weber introduces ***Yangguang Ou***, known as "O.U.", who will start as a tenure-track Assistant Professor in Chemistry at the University of Vermont in the fall this year (https://www.uvm.edu/cas/chemistry/profiles/yangguang-ou). She received her PhD from Prof. Steve Weber's lab at Pitt in 2017, having made significant contributions to the theory and application of electroosmotic push-pull perfusion in brain tissue. She then postdoc'ed for Prof. Parry Hashemi at the University of South Carolina, where she used electrochemical methods to understand the neurochemistry of depression.

Joaquín Rodríguez-López, Associate Professor of Chemistry, University of Illinois, Urbana-Champaign, will receive the 2020 Arthur F. Findeis Award for Achievements by a Young Analytical Scientist, by the American Chemical Society Division of Analytical Chemistry in the upcoming ACS Meeting.

Alice Suroviec has been named the Dean of the School of Mathematical and Natural Sciences at Berry College to start July 1, 2020. She was selected following a national search that attracted a robust pool of candidates. Dr. Suroviec joined Berry in the fall of 2007, and was promoted to Full Professor in 2019. She has served as Chair of the Department of Chemistry and Biochemistry since 2016. Dr. Suroviec is the recipient of the First Year Advocate Award as well as the Dave and Lu Garrett Award for Meritorious Teaching. She has published 11 articles in peer-reviewed journals and 3 book chapters while at Berry. Dr. Suroviec has broad service experience at Berry including service on the MNS Promotion and Tenure Committee, chairing the Institutional Effectiveness Committee and the Foundations Curriculum Committee, as well as serving as Vice Chair and Chair of the Faculty Assembly. She has also co-led efforts to assist other academic departments in improving their Institutional Effectiveness Plans as part of the college's compliance with SACSCOC. Dr. Suroviec has been active in the Electrochemical Society, and currently serves as Associate Editor of the Journal of the Electrochemical Society and Chair of the Committee on Diversity and Inclusivity. Dr. Suroviec participated in the Association of American Colleges & University STEM Leadership Institute and the Georgia Independent Colleges Association Developing Leaders Program.



Mike Cryan, a graduate student in Ashley Ross' group at University of Cincinnati and a 2020 SEAC Student Travel Award winner (see above), received the 2020 ACS Division of Analytical Chemistry Summer Graduate Fellowship sponsored by Eastman Chemical Company. He received this fellowship to continue his work on developing a microfluidic platform coupled to fast-scan cyclic voltammetry to measure purine signaling at the site of focal ischemia in the brain.

Royce Engstrom retired this spring from the University of Montana where he served as Professor of Chemistry. Royce received his BS degree in Chemistry for the University of Nebraska-Omaha (1975) and his Ph.D. degree in Analytical Chemistry (1979) at the University of Wisconsin-Madison under the direction of the late Professor Walter Blaedel. At UW Madison, Royce overlapped with Joe Wang, Distinguished Professor at the Univ. of Calf. San Diego, who was a post-doctoral fellow in the Blaedel group.

Royce Engstrom began his academic career at the University of South Dakota in the Fall 1979. He rose through the academic ranks to become Professor of Chemistry. He was Chair of the Department for 11 years and directed numerous undergraduate and master's students in his research program which focused on the development of analytical techniques to probe electrode heterogeneity in terms of electron transfer. He deployed iontophoresis and ultramicroelectrodes to raster electroactive surfaces with respect to electron transfer activity and used electrogenerated chemiluminescence to visualize and map electrochemical activity at the microscopic level. His collaborators included Professors Mark Wightman (Univ. of North Carolina Chapel Hill) and Richard McCreery (Univ. of Alberta).

Royce Engstrom was an enthusiastic participant in undergraduate research, first as a student, then as a mentor, and finally as an administrator working to develop undergraduate research programs. He was a Past-President of the Council on Undergraduate Research (the first from a public institution) and was active in the Experimental Program to Stimulate Competitive Research, a federal program designed to help states build their research infrastructure and competitiveness. He served as Chair of the National EPSCoR Coalition and the National EPSCoR Foundation.

At USD he became Vice President for Research and Dean of the Graduate School and then Provost and Vice President for Academic Affairs. In 2007, he left USD to become Provost and Vice President for Academic Affairs at the University of Montana Missoula. From 2010 through 2016, Dr. Engstrom became President Engstrom serving as Montana's 17th President.

In retirement, Royce will continue to investigate the wonder and beauty of the Montana outdoors as well pursuing his avocation as a canoe builder. To reach Royce, you can email him at: Royce.Engstrom@mso.umt.edu

Miles Koppang retired this spring from the University of South Dakota Chemistry Department after 34 years of teaching and research. Miles earned his BA with majors in Chemistry and Mathematics at Mayville State College in 1979. He then taught junior high and high school mathematics (and coached basketball) for one year before going to the University of North Dakota. He earned his Ph.D. in Analytical Chemistry under the direction of Professor Duane Bartak in the area of elucidation of organic reaction mechanisms using electrochemical methods. He served as a post-doctoral associate at the Center for Bioanalytical Research at the University of Kansas under the direction of Professor Ted Kuwana. He became an Assistant Professor at the University of South Dakota in the Fall of 1986. The chair of the department at that time was Professor Royce Engstrom. His research program included directing undergraduate and master's students in the area of electrochemical detection coupled with liquid chromatography of biogenic amines and amino acids. He had research collaborations with Professor Engstrom and with Professor Greg Swain (Michigan State University) in the area of thin film diamond electrodes. He rose through the ranks to become Professor of Chemistry and served as Department Chair for six years, succeeding Professor Engstrom.

From his high school teaching experience, Miles Koppang had a strong interest in outreach for high school students and their teachers. He along with a colleague developed "Not So Late Night Chemistry with USD" which included a top ten list of reasons to attend the program and hands-on work with departmental instrumentation (and pizza). He was director of the Master's of Natural Science program, a USD degree which provided content-based coursework in chemistry and physics for the high school teacher whose undergraduate degree was in another discipline. i.e., biology majors teaching high school chemistry.

Miles is looking forward to pursuing the elusive walleye and improving his skills on cleaning and producing boneless northern pike fillets. He can be reached at: miles.koppang@usd.edu

Keith Stevenson informed that ***Olja Simoska***, his last PhD student from University of Texas, Austin, won prestigious postdoctoral fellowship.

FOR IMMEDIATE RELEASE
(6/12/2020)

American Chemical Society Awards Thirteenth Irving S. Sigal Postdoctoral Fellowship

The American Chemical Society, the world's largest scientific society, has awarded the 13th Irving S. Sigal Postdoctoral Fellowship (2020-2022) to Dr. Olja Simoska.

Olja completed her doctoral studies in December of 2019, under the supervision of Prof. Keith J. Stevenson at the University of Texas at Austin. Her doctoral dissertation is titled "*Real-time Monitoring of the Dynamic Metabolism and Responses of Pathogenic Bacteria using Electroanalytical Methods*." The electrochemical results from her doctoral research provide a strong qualitative basis for understanding microbial infections and virulence mechanisms in very complex biological systems. She has very impressive academic accomplishments, awards/honors, and publications/presentations lists.

For her Irving S. Sigal Postdoctoral Fellowship, Olja's research will focus on methodically exploring genetic engineering approaches to improve electron transfer and performance of microbial fuel cells. Her postdoctoral research will be under the supervision of Prof. Shelley D. Minteer at the Chemistry Department at the University of Utah, Salt Lake City.

SPECIAL THANKS TO NEW LIFETIME MEMBERS! (February 2020 ~ June 2020)

Special thanks go to ***Martin Edwards*** (Assistant Professor, Department of Chemistry and Biochemistry, University of Arkansas), ***Netz Arroyo Curras*** (Assistant Professor, Department of Pharmacology and Molecular Sciences, Johns Hopkins University), and ***Justin Sambur*** (Assistant Professor, Department of Chemistry, Colorado State University), who has contributed with installments towards lifetime membership!

Martin Edwards

Netz Arroyo Curras

Justin Sambur

MEETINGS TO COME

Meetings of interest to our SEAC members abound during the coming year, with symposia being organized by some among us.

Meeting	***When***	***Where***	***Link for More Information***
Annual Workshop on Electrochemical Measurements XLII	2020, Aug 10–14	Online	https://chemistry.case.edu/research/yces/
ACS Fall Virtual Meeting & Expo	2020, Aug 17–20	Online	https://www.acs.org/content/acs/en/meetings/national-meeting.html
71st ISE Annual Meeting: Electrochemistry towards Excellence	2020, Aug 30–Sept 4	Online	https://annual71.ise-online.org/
PRiME 2020	2020, Oct 4–9	Honolulu, HI	https://www.electrochem.org/prime2020
Nanopore Electrochemistry Meeting	2020, Oct 10–12	Nanjing, China	http://hysz.nju.edu.cn/ytlong/Data/List/meeting
11th International Frumkin Symposium on Electrochemistry	2020, Oct 19–23	Moscow, Russia	http://frumkinsymp.ru/
Pacifichem 2020: A Creative Vision for the Future	2020, Dec 15–20	Honolulu, HI	https://pacifichem.org/
Pittcon 2021 w/ SEAC Student Group Meeting	2021, March 6–10	New Orleans, LA	https://pittcon.org/
ACS National Meeting & Expo – Macromolecular Chemistry: The Second Century	2021, March 21–25	San Antonio, TX	https://www.acs.org/content/acs/en/meetings/national-meeting/about/future-meetings.html

Meeting	*When*	*Where*	*Link for More Information*
28th ISE Topical Meeting "Challenges in Molecular Electrochemistry and Surface Reactivity"	2021, March 29–April 1	Santiago, Chile	https://www.ise-online.org/ise-conferences/next_ISE-meetings.php
29th ISE Topical Meeting "Energy and Water: Electrochemistry in Securing the Sustainable Society Development"	2021, April 18–21	Mikulov, Czech Republic	https://www.ise-online.org/ise-conferences/next_ISE-meetings.php
239th ECS Meeting	2021, May 30–June 3	Chicago, IL	https://www.electrochem.org/239
18th International Meeting on Chemical Sensors (IMCS)	2021, May 30–June 3	Chicago, IL	https://imcs2020.gatech.edu/
Gordon Research Conference – Electrochemical Interfaces in Energy Conversion and Storage: Understanding Electrochemical Interfaces at the Atomic Scale	2021, June 27–July 2	Ventura, CA	https://www.grc.org/electrochemical-interfaces-in-energy-conversion-and-storage-conference/2021/
Gordon Research Conference – Electrochemical Interfaces in Energy Conversion and Storage: Electrochemical Interfaces in Energy Conversion and Storage (rescheduled from 2020)	2021, July 18–23	Hong Kong, China	https://www.grc.org/electrochemical-interfaces-in-energy-conversion-and-storage-conference/2020/
ACS National Meeting & Expo – Resilience of Chemistry	2021, Aug 22–26	Atlanta, GA	https://www.acs.org/content/acs/en/meetings/national-meeting/about/future-meetings.html
72nd ISE Annual Meeting	2021, Aug 29–Sept 3	Jeju Island, South Korea	https://www.ise-online.org/ise-conferences/next_ISE-meetings.php
ISEAC41 Environmental and Food Monitoring	2021, Sept 13–17	Regensburg, Germany	http://www.iseac-conferences.org/
240th ECS Meeting	2021, Oct 10–15	Orlando, FL	https://www.electrochem.org/240

SEAC Student Group Meeting in Pittcon 2021 — March 5, 2021

A SEAC Student Group Meeting will be held in 2021 at Pittcon New Orleans, so register for Pittcon and plan to come to the SEAC Student Group Meeting. For details, please contact ***Dr. Lane Baker***, Professor, Department of Chemistry, Indiana University, Bloomington (lanbaker@indiana.edu).

18th International Meeting on Chemical Sensors (IMCS) — May 30 ~ June 3, 2021

18th International Meeting on Chemical Sensors (IMCS) is rescheduled to May 30 – June 3rd 2021. The call for papers will be posted in July and abstracts are due by December 4th, 2020. The location of the meeting is the Hilton Hotel, on the lake front in Chicago. The Open Source Focus Issue of Journal of the Electrochemical Society is currently accepting papers based upon abstracts accepted to IMCS 2020. The Focus issue deadline for papers is August 12th, 2020. There will be a second volume of the Focus issue for 18th IMCS in the Spring 2021, to coincide with the 18th IMCS meeting in May 2021 in Chicago, IL, USA.

For details, please contact ***Dr. Xiangqun Zeng***, Distinguished Professor, Department of Chemistry, Oakland University (zeng@oakland.edu).

Call for Papers: Focus Issue on IMCS 2020 *in Journal of The Electrochemical Society*

https://www.electrochem.org/publications/cfp-imcs-2020

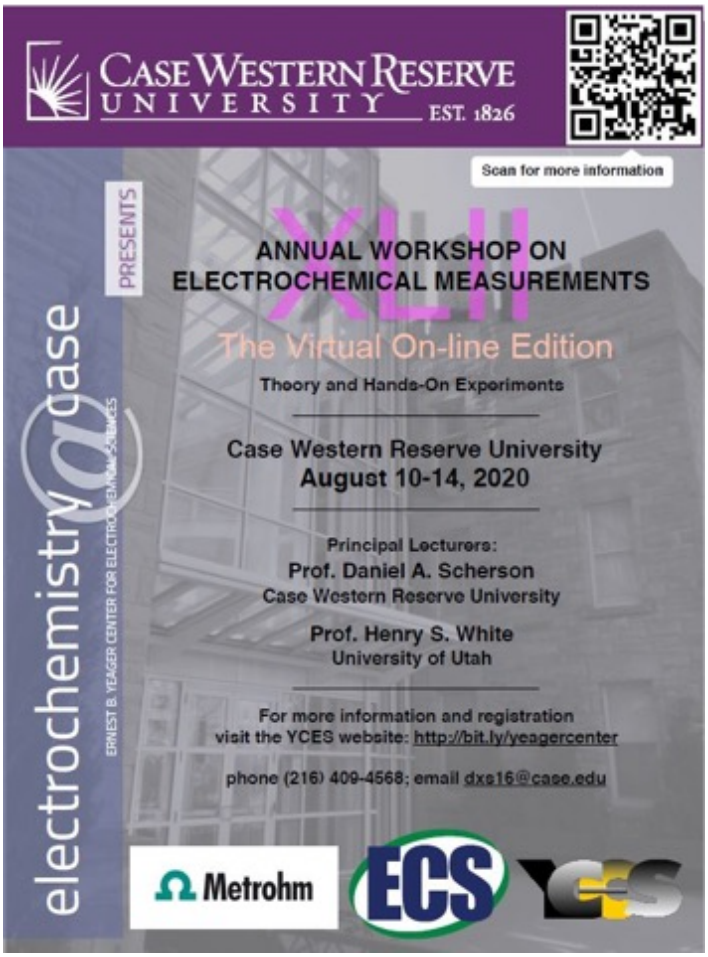
Volume one of Focus Issue on IMCS 2020 is a collection of papers accepted to the International Meeting on Chemical Sensors (IMCS) which has been postponed to 2021. As it is known, IMCS is a conference series that organizes every two years. Volume two of this focus issue will open for papers next year when the meeting will take place in 2021. Having started in 1983 in Fukuoka, Japan, this meeting is the largest and most-renowned conference in scientific area of chemical sensors. IMCS meeting provides an excellent opportunity to network with leaders in the field and with companies commercializing chemical sensors for the environment, medical, healthcare, industry, and food safety application.

NEW FOR 2020: If selected at submission, accepted papers will be published online in the ECS Digital Library within 24 hours of final acceptance. The version of record will be published online within approximately 10 days of final acceptance.

All papers published in this focus issue will be OPEN ACCESS at NO COST to the authors. The issue will be created online as the articles are accepted, with the final article published by January 2021.

Accepting Submissions: May 4, 2020 | Submission Deadline: August 12, 2020

Annual Workshop on Electrochemical Measurements XLII — August 10~14, 2020



JOB OPENING

Chief Analytical Chemist at the Connecticut Agricultural Experiment Station

The Connecticut Agricultural Experiment Station

123 HUNTINGTON STREET, P.O. BOX 1106, NEW HAVEN, CONNECTICUT 06504

Putting Science to Work for Society
Protecting Agriculture, Public Health, and the Environment

Founded 1875

March 26, 2020

Chief Analytical Chemist

The Connecticut Agricultural Experiment Station, the Nation's first Agricultural Experiment Station, is seeking a new Head of the Department of Analytical Chemistry. The Analytical Chemistry Department (https://portal.ct.gov/CAES/ABOUT-CAES/Departments/Analytical-Chemistry) has a current staff of 9 Ph.D.-level scientists (5 full time permanent; 4 Post-doctoral Associates) and 5 research technicians, including a Quality Manager, and has a competitive funding portfolio exceeding $3.5 million. The Department has a range of both regulatory and research responsibilities; these programs are not mutually exclusive, and all are overseen and managed by the Chief Analytical Chemist. The regulatory work includes conducting chemical analyses on a broad range of sample types for other state agencies, such as the Department of Consumer Protection (DCP), Department of Agriculture (DoAg), Department of Energy and Environmental Protection (DEEP), and the Department of Public Health (DPH). The Department also several programs with the US FDA, including being a funded member of the Food Emergency Response Network (FERN) Chemistry Cooperative Agreement Program (cCAP). The Department also serves as the state Hemp Testing laboratory and as the state's EPA FIFRA laboratory. The Department is currently accredited to ISO/IEC 17025:2017 for two FDA Programs related to food safety; the Manufactured Food Regulatory Program Standard (MFRPS) and the Animal Food Regulatory Program Standard (AFRPS) (https://www.a2la.org/scopepdf/4133-01.pdf). All non-accredited Department programs are conducted in a manner that conforms to ISO 17025.

The Department's portfolio of current research programs includes a number of topics related to food safety, agriculture and environmental contamination, including nanotechnology-enabled agriculture, nanotoxicology and the food supply, pesticides and pollinator decline, and detection and fate of emerging contaminants such as PFAS and micro-/nanoplastics. The Chief Analytical Chemist is expected to maintain an internationally recognized and competitively funded research program of their own, as well as to oversee the research programs of full-time permanent staff scientists.

Applicants must have a Ph.D. in Chemistry or a closely related discipline. Candidates should have research programs that are internationally recognized and must: have extensive experience in analytical chemistry, a strong familiarity with ISO 17025 accreditation, a demonstrated ability to acquire and manage competitive funding, significant administrative experience managing scientific staff, demonstrate effective oral and written communication skills, be able to present a coherent and well organized PowerPoint presentation, have a exceptional publication record in high quality journals, and have a strong willingness to interact with members of the general public, including both elected and regulatory officials. The starting salary is commensurate with experience and includes competitive medical and dental benefits. Interested candidates should submit the following by 5/1/2020: resume/c.v., cover letter summarizing qualifications, and a statement of research interests/vision. The applicant should have 3 letters of recommendation sent to Jason C. White, Ph.D., Director, The Connecticut Agricultural Experiment Station, 123 Huntington Street, New Haven, CT 06504, tel. 203-974-8523, fax. 203-974-8502, Jason.White@ct.gov.

The Connecticut Agricultural Experiment Station (CAES) prohibits discrimination in all of its programs and activities on the basis of race, color, religious creed, age, sex, marital status, veteran status, sexual orientation, gender identity, gender expression, national origin, ancestry, criminal conviction record, genetic information, learning disability, present or past history of mental disability, intellectual or physical disability, including, but not limited to blindness, of an applicant for employment or an employee, unless the mental disability or physical disability prevents adequate performance. To file a complaint of discrimination, contact Dr. Jason White, Vice Director, The Connecticut Agricultural Experiment Station, P.O. Box 1106, New Haven, CT 06504, (203) 974-8523 (voice), or Jason.White@ct.gov (e-mail). CAES is an affirmative action/equal opportunity provider and employer. Persons with disabilities who require alternate means of communication of program information should contact the Chief of Services, Michael Last at (203) 974-8442 (voice), (203) 974-8502 (FAX), or Michael.Last@ct.gov (e-mail).

Postdoc Position at the Department of Chemistry, University of Illinois, Urbana-Champaign

Joaquín Rodríguez-López is looking for a post-doc. The project involves the microscale characterization of redox-active fluids for flow battery applications. The ideal candidate will have background in electrode measurement, microfabrication, and instrument development. The postdoc is expected to interact strongly with other team participants and to demonstrate a collaborative spirit. The start date would be this coming Fall. More information, please contact Prof. Joaquin Rodriguez-Lopez at joaquinr@illinois.edu

Postdoc Position at the Department of Chemistry, Georgia State University

A postdoc position is available at Gangli Wang's group at Georgia State University in Atlanta GA. The research project requires fundamental electrochemistry training, in particular in depth understanding on the kinetics of charge/mass transfer. The PD will work with PI and students on the selective transport of matter, nucleation and phase transitions at nanoscale solid-liquid interfaces in ordered porous nanostructures. Experiences with mesoporous materials, redox polymers, or Comsol Multiphysics would be a plus. Synergy with other ongoing projects such as the development of echem sensors boosted by redox cycling and the electronic structures in atomically precise metal nanoclusters can be expected. Interested candidate should send CV to glwang@gsu.edu in inquire further details.

Three Postdoc Positions at the Department of Chemistry & Biochemistry, UCLA

Prof. Chong Liu at the Department of Chemistry & Biochemistry, UCLA, is looking for 3 postdocs whose expertise fall into the following areas:

(1) Gas-diffusion electrodes, electrochemical flow reactor
(2) Ultramicroelectrode, analytical electrochemistry
(3) Device fabrication, microfluidics, MEMS
(4) Biofilms & microbiota, confocal microscopy imaging

Preferred start date: Fall 2020 or Winter 2021.

For people who are interested in this position, they can email chongliu@chem.ucla.edu for more details.

POTENTIOSTAT WANTED – OLD EI400 POTENTIOSTATS

Anne Milasincic Andrews, Professor of Psychiatry and Chemistry & Biochemistry at UCLA, is seeking old EI400 potentiostats in working condition. Please contact her (AAndrews@mednet.ucla.edu) if you want to sell (or offload) ones.

SPECIAL THANKS TO OUR SPONSORS!

SPECIAL THANKS FOR A GENEROUS CONTRIBUTION!

Adrian Michael ($250, February 2020)

Thank you, Adrian!

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, fill out the downloadable membership form to pay by check, or renew on-line by credit card.