SEAC*communications*

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PRESIDENT'S MESSAGE

Dear SEAC Members,

I still clearly remember when I wrote my first President's message about two years ago, and now here I am writing my last message as my term ends in just a few days! It has been an absolute honor and privilege to serve you in this fascinating role, and I want to thank all of you for your support and understanding over the past two years! I especially wish to extend my gratitude to the board and various committee members for their great work and contributions to the Society, including Maryanne Collinson, David Cliffel, Takashi Ito, Tim Paschkewitz, Dick Crooks, Parry Hashemi, Lane Baker, Stephen Maldonado, Martin Edwards, and many more! These members deserve special thanks because they all have done tremendous work behind the scenes. I also want to welcome Carol Korzeniewski as our new SEAC President for the 2021-2023 term. With her ample experience in administrative roles, I feel we are all in good hands!

As usual, our members are continuously recognized for their wonderful achievements. Let me first congratulate Paul Bohn and Justin Sambur for winning the Reilley and Murray Young Investigator awards, the most prestigious awards given to SEAC members. I am sure we all hope that the next Pittcon will be held in-person so we can all come together and celebrate their achievements in Atlanta! Additionally, former Reilley Award winner Joe Hupp was recently elected to the American Academy of Arts and Sciences; Anne Andrews received the IUPAC Distinguished Woman in Chemistry Award and was elected to the American Institute for Medical and Biological Engineering College of Fellows; and several of our student members have been selected to receive SEAC Presentation Awards (Dylan Denison, Kira Rahn, Juliane Sempionatto, Junaid Ahmed, and Vignesh Sundaresan) and SEAC Poster Awards (Blaise Ostertag, Nicole Tarolla, Eliza Herrero, Johnathan Mahlum, Adolfo Romo, and Blair Troudt). Congratulations to you all!!

Also, please pay attention to these two calls for papers: the first is a SEAC special issue in *J. Electrochem. Soc.* with a deadline of September 1, 2021 and the second is a special issue in *Electroanalysis* honoring Theodore Kuwana with a deadline of August 1, 2021. Don't miss the deadlines.

Finally, let me end by thanking all of you again for your trust and support in the last two years and I hope you have a great summer!

Bo Zhang
President, 2019-2021

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Special Thanks to New Lifetime Members!
Special Thanks to Our Sponsors!
How Easy it is to Become a SEAC Member

NEW STUDENT EDITOR

Junaid Ahmed, a graduate student at Virginia Commonwealth University has agreed to serve as a new Student Editor. We appreciate Junaid for his willingness to serve as a Student Editor!

Junaid U. Ahmed is a Ph.D. candidate in analytical chemistry and an Altria fellow at Virginia Commonwealth University. He is working under the supervision of Dr. Julio C. Alvarez. His current research focuses on the study of adsorption-desorption dynamics of discrete, micrometer sized particles and their detection in the field of stochastic electrochemistry. He has served as a research mentor for ACS Project SEED and several high school students. He is an active member of the Virginia Younger Chemist Committee and Bangladesh Chemical Society. Prior to studying at VCU, he earned his BS and MS in chemistry from Jagannath University, Bangladesh. He received the SEAC Presentation Award at Pittcon 2021.

New SEAC Student Meeting:

Connect with fellow SEAC Graduate Students each month!

Come hang out + discuss pre-planned 20-minute informal research talks, recent literature with a "Faraday Discussions" format, and even learn new lab techniques! Open to graduate, undergraduate, and post-doctoral researchers.

Meetings will be held on the 4th Wednesday of each month @ 7pm EST.

Please register here: https://forms.gle/Y4zgCN1GWGAH2VGw8

Contact Milo (msuvira@uw.edu) or Peter (defnep@uw.edu) with specific questions.

NEW BOARD MEMBERS

Our new Board members - Frédérique T. Deiss, Martin Edwards, and Amy Marschilok - will assume office in July 2021 and serve until June 2026.

Dr. Frédérique T. Deiss is an Assistant Professor in the Department of Chemistry & Chemical Biology at IUPUI (Indiana University – Purdue University Indianapolis) since 2015. Her interdisciplinary research group focuses on electrochemistry and the development of analytical tools for diagnostics and preventive care, and forensic applications. Examples of current projects include: micronutrients and electrolyte quantification using paper-based devices, detection of bacteria with paper-based and microfluidics devices, collection and detection of traces of inorganic explosives and fentanyl analogues at crime scene. In 2016, Frédérique received the degree of Ingénieur from the National Engineering School of Physics and Chemistry of Bordeaux (ENSCPB), and a Science and Technology Master's degree in Chemistry from the University of Bordeaux, France. She obtained her Ph.D. in Chemistry-Physics from the University of Bordeaux in 2009 with high distinction for her research under with Dr Neso Sojic in the Analytical Nanosystems group. She developed optoelectrochemical micro- and nano-sensor arrays for bioanalytical applications at the tip of optical fiber bundles. During her doctoral research, she was also a visiting PhD student in various research groups including David R. Walt's group (Tufts University, Medford, MA, USA), Paolo Ugo's group (University of Venice, Italy), and Paolo Pastore's group (University of Padova, Italy). She pursued her research activities

as a postdoctoral fellow in the Whitesides group (Harvard University, Cambridge, MA, USA) and then in the Derda group (University of Alberta, Edmonton, AB, Canada). Her work in the different groups led to four patents and she was involved in the first phase of translation to commercialization (SyntArray) of 96-well Teflon-patterned paper for organic synthesis and bioassays. Frederique is an advocate for students (faculty-advisor founder of the IUPUI Chemistry Graduate Student honor Society, 2016-present) and participates regularly in local Women in STEM events to encourage the future generations. She is also active in other professional societies such as the ACS Indiana Local Section for which she chaired the ACS 2023 National Meeting Strategic Planning committee (2017-2019). Recently, Frederique organized the 68th Midwestern Universities Analytical Chemistry Conference (IUPUI 2019).

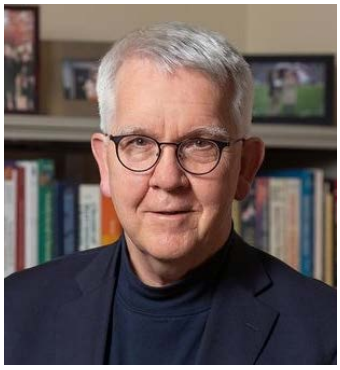
Martin Edwards joined the Department of Chemistry and Biochemistry at the University of Arkansas as an Assistant Professor in August 2020. Prior to this, he held the position of research professor in the group of Henry White (Utah). Martin received his PhD in interdisciplinary science (MOAC) at the University of Warwick, UK, supervised by Patrick Unwin. He followed this with postdoctoral research in the groups of Gabriel Gomila (IBEC, Barcelona) and Mark Wightman (UNC). His diverse research interests in electrochemistry are driven by desire to cultivate a fundamental understanding of interfacial processes occurring at the micro- and nanoscale. Using an approach that combines physical and analytical measurements with modeling (mathematical/statistical/numerical), he has tackled problems in areas ranging from neuroscience and nanoparticles through nanobubbles. A constant thread in his research has been the development of novel instrumentation and experiments, which frequently involve the development or modification of scanned probe microscopes. He was the 2020 recipient of the Royce Murray Young Investigator award from the Society of Electroanalytical Chemistry (SEAC).

Amy Marschilok is an Associate Professor in the Department of Chemistry at Stony Brook University, where she also holds an Adjunct Faculty position in the Department of Materials Science and Chemical Engineering. She holds a joint appointment as Scientist and Energy Storage Division Manager in the Interdisciplinary Science Department at Brookhaven National Laboratory. She serves as Deputy Director for the Center for Mesoscale Transport Properties (http://www.stonybrook.edu/commcms/m2m/index.html), an Energy Frontier Research Center funded by the U.S. Department of Energy. Dr. Marschilok was previously employed as a Senior Scientist in the Medical Battery Research and Development group at Greatbatch Inc., where she was recognized as a Visionary of the Year. Her current research centers on materials and electrode concepts for high power, high energy density, extended life batteries. She is also interested in electrochemistry-based approaches for materials synthesis and characterization. She has mentored over 50 student researchers and co-authored over 185 publications.

PITTCON 2022 – March 5~9, 2022

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

The highlight of the SEAC activities at Pittcon 2022 will be the presentation of the 2022 Charles N. Reilley Award to **Paul Bohn**, University of Notre Dame, and the Royce W. Murray Young Investigator Award to **Justin Sambur**, Colorado State University. These awards will be presented during the SEAC award symposium at Pittcon 2022 (https://pittcon.org/pittcon-2022/), which will be in Atlanta, Georgia. Congratulations to both Paul and Justin on this well-deserved recognition!!! A special thank you to Professor Richard Crooks and the committee for their time and all who sent in nominations. The symposium in their honor will be arranged by Richard Crooks, The University of Texas at Austin.



Paul W. Bohn is the Arthur J. Schmitt Professor of Chemical and Biomolecular Engineering and Professor of Chemistry and Biochemistry at the University of Notre Dame, as well as the Founding Director of the Institute for Precision Health. Previously, he served at Bell Laboratories (1981-83) and the University of Illinois at Urbana-Champaign (1983-2006), ending as Centennial Professor in the Chemical Sciences. Bohn's contributions in electrochemistry began with the development of in-plane potential gradients for surface mapping in the late '90's, and include the formation and study of atomic-scale junctions, and more recently electrochemical zero-mode waveguides, and nanopore electrode arrays for redox cycling, single molecule electrochemistry, and ionotronics. Among his awards are the ACS Award in Spectrochemical Analysis (1997), the Theophilus Redwood Award of the Royal Society of Chemistry (2010), and the ACS Award in Electrochemistry (2017). He is an elected Fellow of AAAS.

Justin B. Sambur is an Assistant Professor in the Chemistry Department at Colorado State University. Justin earned his B.S. degree in 2006 from the State University of New York (SUNY)-Binghamton and completed an honors thesis under the direction of David Doetschmann. Justin earned his PhD under the direction of Bruce Parkinson at Colorado State University (CSU) in the area of semiconductor photoelectrochemistry. In 2011, Justin traveled back to NY and joined Peng Chen's lab at Cornell University for NSF ACC-F Postdoctoral Fellow work in the area of single molecule photoelectrochemistry. Justin returned to CSU in 2016 as an Assistant Professor of Chemistry and started a research program that tackles fundamental problems in electrochemical energy production and storage. Sambur's lab advances light microscopy tools to study single battery particle electrochemistry and single nanosheet photoelectrochemistry. The single particle-level approach simplifies interpretation of experimental data, pin-points how and why nanoscale materials function or fail, and reveals fundamental knowledge that could not be obtained with conventional measurements. His work has been recognized with the Air Force Young Investigator Award, NSF CAREER Award, and DOE Early Career Award. Justin was also named a Scialog Fellow in Advanced Energy Storage.

PITTCON 2021 – March 8 ~ 12 (Virtual Event)

2021 SEAC Presentation Award Winners

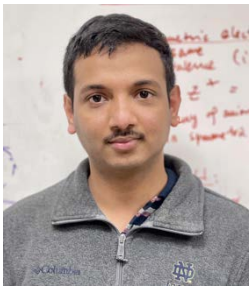
Winners of the SEAC presentation awards are **Dylan Denison**, North Carolina State University (advisor: Leslie Sombers), **Kira Rahn**, Iowa State University (advisor: Robbyn Anand), **Juliane Sempionatto**, University of California, San Diego (advisor: Joseph Wang), ***Junaid Ahmed***, Virginia Commonwealth University (advisor: Julio Alvarez), and ***Vignesh Sundaresan***, University of Notre Dame (Advisor: Paul Bohn). Congratulations to all of them! And many thanks to the SEAC members who served as poster judges.

J. Dylan Denison is a Ph.D. candidate under the direction of Dr. Leslie A. Sombers at North Carolina State University. His current work focuses on characterizing the kinetics of neuropeptide release from neuroendocrine cells and improving electroanalytical methods for detecting endogenous opioids. Prior to academic research, he worked as a HPLC quality operations analyst for Pfizer.

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 Asst. Prof. Robbyn K. Anand. Before pursuing a graduate degree, Kira obtained a B.A. in Mathematics and Chemistry from Concordia College in Moorhead, MN. Kira studies periodic voltammetric techniques applied to bipolar electrodes with electrochemiluminescent reporting reactions, as well as the employment of electrokinetic focusing to increase lateral flow assay sensitivity. She is also an active member of the planning committee for the Midwest Retreat for Diversity in Chemistry (next Retreat in May 2022!).

Juliane R. Sempionatto received her B.S. degree in chemistry from University of Sao Paulo (USP), M.S. degree in Material Science from Sao Paulo State University (Unesp), Brazil, and PhD degree in Nanoengineering from University of California, San Diego, under the supervision of Professor Joseph Wang. Her background experience ranges from electrochemistry, biosensors, analytical chemistry, advanced materials for sensing application, and flexible and stretchable electrodes. She is currently focusing on developing much needed non-invasive wearable electrochemical biosensors for real-life applications toward prevention and monitoring of diseases. Her research has broadened the field of wearable sensors with her significant contribution and innovation. During her PhD, Juliane published more than 20 peer reviewed papers, and received the prestigious Siebel 2021 scholar award. Juliane is current a postdoctoral researcher at California Institute of Technology (Caltech) where she continues the work on electrochemical sensors for wearable health sensors under the supervision of Professor Wei Gao.

Junaid U. Ahmed is introduced as a new Student Editor (see above).



Vignesh Sundaresan received his bachelor's degree in chemical and electrochemical engineering from CSIR-Central Electrochemical Research Institute, India. In 2018, he received his Ph.D. from Temple University under the mentorship of Prof. Katherine A. Willets. Currently, he is working as a postdoctoral research associate in Prof. Paul Bohn's research group at the University of Notre Dame. His research focuses on single-entity electrochemistry, which includes studying the electrochemical behavior of single molecules, nanoparticles, enzymes, and bacteria using coupled optical and electrochemical techniques.

2021 SEAC Poster Session Award Winners

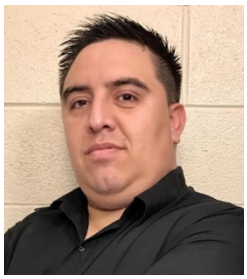
Winners of the SEAC poster session awards are **Blaise Ostertag**, University of Cincinnati (advisor: Ashley Ross), **Nicole Tarolla**, University of North Carolina, Chapel Hill (advisor: Jeffrey Dick), **Eliza Herrero**, University of Minnesota (advisor: Philippe Buhlmann), **Jonathan Mahlum**, Johns Hopkins University (advisor: Netz Arroyo), **Adolfo Romo**, University of Illinois, Urbana-Champaign (advisor: Joaquin Rodríguez-López), **Blair Troudt**, University of Minnesota (advisor: Philippe Buhlmann). Congratulations to all of them!

Blaise Ostertag is a 3rd year analytical chemistry graduate student at the University of Cincinnati working under the direction of Dr. Ashley Ross. Prior to attending UC, he received his BS from Thomas More University. Blaise is currently researching material modifications and fiber fabrication for fast-scan cyclic voltammetry applications to improve sensitivity and electron transfer kinetics of neurotransmitter detection through the introduction of nanoporous frameworks to electrode materials.

Nicole Tarolla received her undergraduate degree from Rollins College where she then went on to obtain her Master of Science in Analytical Chemistry from the University of North Carolina at Chapel Hill where she worked under the direction of Dr. Jeffrey E. Dick. Her research focused on nanomaterials, particularly the synthesis and characterization of copper nanoparticles. She studied their fundamental, reversible behavior and rate kinetics using nanodroplet-mediated electrodeposition from an inverse emulsion, while also developing COMSOL Multiphysics simulations to be used for electrocatalysis applications.

Eliza Herrero is a PhD candidate at the University of Minnesota, where she works under the supervision of Dr. Philippe Buhlmann. Her research focuses on the translation of traditional ion-selective electrodes into miniaturized platforms on novel substrates for point-of-care usage. She graduated from the University of Notre Dame with a BSc in Chemistry and Sociology, where she worked with Dr. Marya Lieberman on the development of paper analytical devices for the detection of counterfeit pharmaceuticals

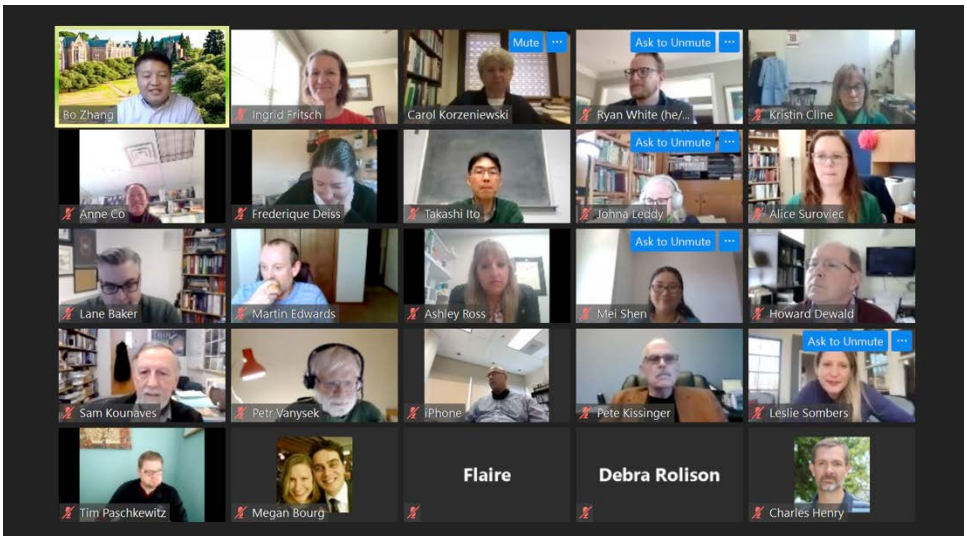
J. D. Mahlum is a Chemical-Biology PhD student at Johns Hopkins University studying under the tutelage of Dr. Netz Arroyo. Prior to attending Hopkins, J.D. received his BS in Biochemistry from Seattle Pacific University. His current project in the Arroyo Lab focuses on using cyclic voltammetry to investigate small molecule-DNA interactions on the surface of an electrode.

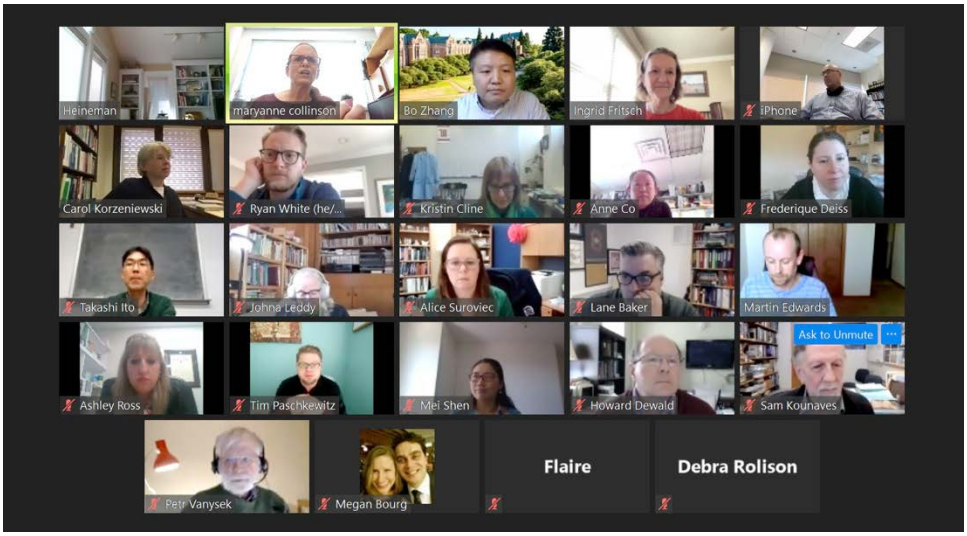


Adolfo I. B. Romo is an Inorganic Chemist. He completed his undergraduate at the Universidad de Santiago de Chile, obtaining the bachelor's degree in chemistry (2012) and the professional title of Chemistry (2013). He completed his M.Sc. (2015) and PhD (2019) in northeast Brazil, at the Universidade Federal do Ceara, under the supervision of Dr. Izaura Cirino Nogueira Diogenes. During this time, he worked on the generation of reactive oxygen species (ROS) by copper complexes in different gold surfaces. Currently, Adolfo is a postdoc in the Rodríguez-López group at the University of Illinois at Urbana-Champaign (UIUC) where his research focuses on synthesis, electrochemical characterization, and applications of new metallo-polymers and inorganic complexes in energy storage.

Blair Troudt is a PhD candidate in Philippe Buhlmann's group at the University of Minnesota. Her current research focuses on the design of improved liquid junction reference electrodes, fluorous ion-transfer voltammetry, and analyte probe design for biomarkers of disease. Prior to joining the UMN Department of Chemistry, she worked at Central Visual and Performing Arts High School in St. Louis, MO as a chemistry and anatomy teacher. She received her Master of Arts in Education from the University of Missouri-St. Louis in 2016 and a Bachelor of Science in chemistry from Pacific Lutheran University in 2014. After earning her PhD, she hopes to get back into teaching and continue honing her skills as an educator.

Screenshots from SEAC BOD Meeting at Pittcon 2021 (March 4, 2021)
Taken by Maryanne Collinson





SEAC SPECIAL ISSUE IN *J. ELECTROCHEM. SOC.*

Modern Electroanalytical Research in the Society for Electroanalytical Chemistry (SEAC)

This focus issue of the *Journal of The Electrochemical Society* is a collection of papers on cutting-edge research by members of the Society for Electroanalytical Chemistry (SEAC). SEAC members work in diverse fields of electrochemistry including the fundamental study of the electrochemical interface, nanoelectrochemistry, electrochemical sensors, spectroelectrochemistry, electrochemical imaging, in-vivo and in-vitro analysis, and energy conversion and storage. The Society, founded in 1984, is dedicated to promoting advances in both basic and applied research in electroanalysis; providing a venue for the exchange of ideas among researchers from academia, industry, and government; and recognizing the achievements and contributions of scientists who work in the field of electroanalytical chemistry. Exciting cutting-edge research papers at the frontier of modern electroanalytical chemistry will be published in this focus issue.

This virtual issue focuses on papers covering the following topics:

- New theory and modeling in electroanalytical chemistry. Fundamental investigations at the electrode/solution interface.
- New electroanalytical methods for studying single entities, such as single molecules, nanoparticles, and cells.
- Fundamental and applied studies of electrochemical methods for organic synthesis.
- Materials electrochemistry. Electrochemical methods for fabrication and characterization of nanomaterials for energy applications, catalysis, and sensing.
- The development and application of highly sensitive, highly resolving electrochemical imaging methods.
- Energy electrochemistry. This may include new strategies, theories, electrode materials, and analysis tools and methods for understanding batteries, fuel cells, photovoltaics, and other energy conversion and storage systems.
- New electroanalytical strategies (e.g., amperometric, voltammetric, and potentiometric sensors) for understanding various biological systems, such as protein-protein interactions, cell release, and cell-cell communication in the brain.

Reviews, critical reviews, and perspective papers are welcomed.

Accepting Submissions: June 3, 2021 | Submission Deadline: September 1, 2021

Special Issue Honoring the Career and Contributions to Electroanalytical Chemistry by Theodore Kuwana

We cordially invite you to contribute a Minireview, Critical Review, Short Communication, or Full Paper to the special issue "Honoring the Career and Contributions to Electroanalytical Chemistry by Theodore Kuwana" intended to appear in *Electroanalysis*.

This special issue will be dedicated to Theodore “TK” Kuwana in recognition of his 50+ years of seminal contributions to the field of electroanalytical chemistry, spectroelectrochemistry, analytical and bioanalytical chemistry, and analytical chemistry education. The SI will feature articles from TK’s former students, postdoctoral associates, and many colleagues. There will be a focus on spectroelectrochemistry – past and present. Other possible article topics include carbon electrodes, chemically modified electrodes, bioelectrochemistry, and analytical instrumentation. The plan is also to include a perspective article documenting the early days of spectroelectrochemistry, specifically the pioneering work of TK, Robert Osteryoung, Wilford Hansen, and others. In addition to highlighting important past and current scientific works, the SI will also honor TK’s contributions to education, mentoring and international partnerships. The goal is to have at least 30 papers that cover these topics as well as more recent research aimed at interrogating chemical, physical, and biological process in electrochemistry.

We plan to include a collection of short stories from the contributors about TK’s impact on their scientific training, career, and personnel development, which we will organize as part of the SI’s dedication article.

Electroanalysis is an international, peer-reviewed journal containing Reviews, Short Communications and Full Papers, devoted to fundamental and practical aspects of electroanalysis. It is published by Wiley-VCH and led by the editorial team of Greg Swain, I-Ming Hsing, Yoon-Bo Shim, Susana Campuzano, and José Pingarrón, together with a highly international advisory board. The journal covers all areas of electroanalysis, sensors, bioelectronic devices, electrode materials, as well as electrochemical characterization of energy-related materials and technologies.

Instructions for submission:

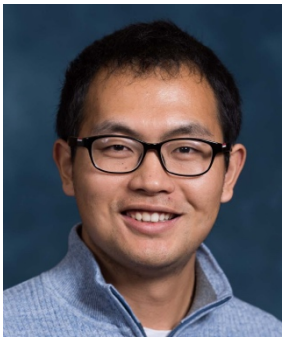
1. Submission: **From 1 March 2021 with deadline 1 August 2021.** Any papers submitted and accepted ahead of schedule will be published in Early View. As the articles are submitted and start to get published, they would be added to a dedicated page builder. This process will produce a growing table of contents.
2. Please submit manuscripts via the following address: https://mc.manuscriptcentral.com/elan.
3. Formal aspects of manuscript submission and a description of all available article types are included in the Author Guidelines. The papers will be reviewed according to the usual high standards of Electroanalysis.
4. Please select "SI: Honoring the Career and Contributions to Electroanalytical Chemistry by Theodore Kuwana (M. D. Porter and G. M. Swain)" as the ‘Article Type’.

MEMBER NEWS

Joe Hupp, 2014 Reilley Award winner, Northwestern University, was elected to the American Academy of Arts and Sciences.

Anne Andrews, University of California, Los Angeles, received the International Union of Pure & Applied Chemistry Distinguished Women in Chemistry Award (https://iupac.org/iupac-2021-distinguished-women/) and was elected a Fellow of the American Institute for Medical and Biological Engineering College (https://aimbe.org/2021-aimbe-fellows/).

Hang Ren has moved from Miami University to The University of Texas at Austin, as an Assistant Professor of Chemistry.



Mohtashim Shamsi, Southern Illinois University, Carbondale, has received tenure and promotion to Associate Professor. He also received a grant from Neurodegenerative Research Inc. to develop low-cost technology for ALS disease bioomarkers. Furthermore, his former student, ***Ahmad Qamar*** (right), has obtained a tenure-track position in the University of Central Arkansas.

https://uca.edu/chemistry/facultystaff/muntaha-yousef/

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 Measurement	2021, Aug. 16–20	Online	https://chemistry.case.edu/research/yces/
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://annual72.ise-online.org/
ISEAC41 Environmental and Food Monitoring	2021, Sept 13–17	Regensburg, Germany	http://www.iseac-conferences.org/
3rd International Workshop on Functional Nanostructured Materials	2021, Oct. 6–8	Krakow, Poland	http://www.funam.confer.uj.edu.pl/en_GB/start
240th ECS Meeting	2021, Oct 10–14	Orlando, FL	https://www.electrochem.org/240
11th International Frumkin Symposium on Electrochemistry	2021, Oct 18–22	Moscow, Russia	http://frumkinsymp.ru/
The 10th Workshop on Surface Modification for Chemical and Biochemical Sensing, SMCBS'2021	2021, Nov 5–9	Warsaw, Poland	http://www.smcbs.pl/
Pacifichem 2021: A Creative Vision for the Future	2021, Dec 16–21	Honolulu, HI	https://pacifichem.org/
Gordon Research Seminar – Electrochemistry	2022, Jan 8–9	Ventura, CA	https://www.grc.org/electrochemistry-grs-conference/2022/
Gordon Research Conference – Electrochemistry	2022, Jan 9–14	Ventura, CA	https://www.grc.org/electrochemistry-conference/2022/
Pittcon 2022	2022, March 5–9	Atlanta, GA	https://pittcon.org/
ACS National Meeting & Expo – Bonding Through Chemistry	2022, March 20–24	San Diego, CA	https://www.acs.org/content/acs/en/meetings/national-meeting/about/future-meetings.html
31st ISE Topical Meeting "Theory and Computation in Electrochemistry: Seeking Synergies in Methods, Materials and Systems"	2022, May 15–19	Aachen, Germany	https://www.ise-online.org/ise-conferences/next_ISE-meetings.php
241st ECS Meeting	2022, May 29 – June 2	Vancouver, BC, Canada	https://www.electrochem.org/upcoming-meetings/

Meeting	*When*	*Where*	*Link for More Information*
Matrafured International Meeting on Chemical Sensors	2022, June 12–17	Visegrad, Hungary	https://matrafured.ch/
Gordon Research Seminar – Bioanalytical Sensors	2022, June 25–26	Newport, RI	https://www.grc.org/bioanalytical-sensors-grs-conference/2022/
Gordon Research Conference – Bioanalytical Sensors	2022, June 26–July 1	Newport, RI	https://www.grc.org/bioanalytical-sensors-conference/2022/
ACS National Meeting & Expo – Sustainability in a Changing World	2022, Aug 22–25	Chicago, IL	https://www.acs.org/content/acs/en/meetings/national-meeting/about/future-meetings.html
Journées de Chimie Analytique 2022 JCA2022	2022, Aug 26–28	Libreville, Gabon	https://jca-2021.sciencesconf.org/?forward-action=index&forward-controller=index&lang=en
242nd ECS Meeting	2022, Oct 9–13	Atlanta Hilton	https://www.electrochem.org/upcoming-meetings/
73rd ISE Annual Meeting	2022, Oct 23–28	Xiamen, China	https://www.ise-online.org/ise-conferences/next_ISE-meetings.php
33rd ISE Topical Meeting "Challenges in Molecular Electrochemistry and Surface Reactivity"	2022, Nov 27–30	Santiago, Chile	https://www.ise-online.org/ise-conferences/next_ISE-meetings.php

Gordon Research Conference – Electrochemistry — Jan. 9-14, 2022

Fundamental to Applied Electrochemistry: New Frontiers in Charge Transfer Theory, Electrocatalysis, Materials for Energy Conversion/Storage, Sensing and Separations

Chair: Stephen Maldonado
Vice Chair: Francis P. Zamborini

The 2022 Electrochemistry Gordon Research Conference is the 51st installment of the preeminent meeting on advances in fundamental and applied electrochemical research. This meeting will continue the tradition of lively discussions and debates on the latest ideas that push the boundaries of electrochemistry.

This meeting will focus on new frontiers in electrochemistry. Sessions topics will include bioorganic, organic, and inorganic electrocatalytic transformations, advances in in-operando methods to study electrode processes, new electrode architectures and materials for energy conversion/storage, complex electrochemical interfaces, new strategies in electroanalytical methods, unconventional electrochemical separations, electrochemistry at the nanoscale, and advances in charge-transfer theories.

In addition to oral presentations with extended discussion periods, this meeting will also include multiple poster sessions, an open session for short talks from any attendee, a GRC Power Hour which will focus on professional development, and a separate, student-run meeting (Gordon Research Seminar on Electrochemistry) held the weekend immediately preceding the start of this meeting. These components will facilitate networking between seasoned researchers in electrochemistry and new investigators in electrochemical research.

https://www.grc.org/electrochemistry-conference/2022/

Annual Workshop on Electrochemical Measurement (Virtual) — Aug. 16-20, 2021

Theory and Hands-on Experiments

Principal lecturers

Daniel A. Scherson
Professor
Case Western
University

Henry S. White
Professor
University of Utah

Guest lecturers

- **Prof. Uziel Landau,** Case Western Reserve University
- **Prof. Mark E. Orazem,** University of Florida, Gainesville, FL
- **Prof. Gerald Frankel,** Ohio State University
- **Prof. Robert Savinell,** Case Western Reserve University

Lecture topics

- Basic Electrochemical Relationships
- Fundamental Measurements in Electrochemistry
- Electrode Kinetics
- Electroanalytical Techniques
- Experimental Design Considerations
- The Electrochemical Double Layer
- Microelectrodes
- AC Impedance
- Fuel Cells, Batteries and Supercapacitors
- Electrochemical Engineering
- In situ Measurements
- Corrosion and Passivation

Lab sessions

- Rotating Disk Electrode
- Microelectrodes
- AC Impedance
- Cyclic Voltammetry

Lab demonstrations

- Battery Testing
- Energy Storage- Energy Conversion Device
- Corrosion
- Current Distribution Modeling
- Electrocatalysis

Dates

August 16-20, 2021

Registration

Fee: $1,300
Open to the public; ECS membership is not required
Pre-registration required through **ECS My Account**
*Don't have one? It's easy to create; visit **Create an Account** now*
Contact: phone 216.409.4568 or email **dxs16@case.edu**

JOB OPENING

Senior Biosensor Scientist at Cibus Biotechnologies

Cibus Biotechnologies, located in Salt Lake City, Utah, is seeking an experienced biosensor electrochemist with the drive to deliver results in the point of care diagnostics arena for the rapid detection of pathogens in humans and animals. The successful candidate will join a close-knit, diverse team and be responsible for the design, manufacturing, and assessment of a next-generation diagnostic platform that couples sample collection with electrochemical detection in support of the Company's core businesses. The candidate will work alongside our growing R&D team to transition the platform from the design stage to product development.

Duties and Responsibilities

- Design, evaluate, optimize and manufacture voltammetric biosensors for the detection of genomic markers of pathogens
- Develop and optimize methods for the immobilization and stabilization of biorecognition elements at electrified interfaces
- Design and executing electrochemical experiments to demonstrate viability of new biosensor/diagnostic platforms
- Develop and expand Company's proprietary sample collection process for tissue, saliva, serum, blood, and other body fluid specimens
- Implement statistical analysis of data for platform validation
- Optimize platform for manufacturing with respect to cost and performance
- Implement product development process leading to viable product specifications and requirements and establishment of QC methods in a statistically significant manner
- Generate documentation and traceability measures to meet regulatory requirements established by OIE, FDA, ISO, and other regulatory and compliance organization
- Contribute to the Company's growing IP portfolio

Education, Experience and Key Skills

- MS or PhD degree in Chemistry, Chemical Engineering, Biomedical Engineering, or related field (PhD preferred)
- Minimum of 4 years' experience for MS or 2 years' experience for PhD in electroanalytical chemistry, surface chemistry, and electrochemical biosensors
- Background in surface chemistry specifically methods used to validate the binding of analytes to surfaces
- Strong knowledge of processes used in disposable test strips for diagnostics
- Familiarity with data analysis tools (*i.e.*, Excel, Matlab, R); solid background in statistical analysis
- Ability to interface with management, engineering staff and multidisciplinary R&D team
- Capacity to manage multiple projects and communicate clearly to the team; excellence in written and verbal communication skills
- Demonstrated experience in biosensors arena by peer-reviewed publications and/or IP record
- Independent, self-motivated individual with high scientific standards, coupled with ability to work effectively in a team environment

Interested applicants should submit their CV/resume to jobs@cibusbiotechnologies.com. Our website is at https://cibusbiotechnologies.com.

Postdoctoral Scientists in Microfluidic and Electrochemical Biosensors at Southern Illinois University, Carbondale

Description: The laboratory of Dr. Mohtashim Shamsi is seeking to fill one postdoctoral scientist position immediately. The field of Microfluidic Electrochemical Biosensors has flourished in recent years and will revolutionize point-of-care health diagnostics in many different ways. The new direction in the field is to fabricate ultra-low-cost diagnostic chips using printing methods. The successful applicant will join a well-equipped and vibrant research group for developing low-cost and sensitive sensors for the detection of neurodegenerative diseases biomarkers.

Eligibility: A PhD in chemistry or chemical engineering (or a university certificate stating that all requirements for the corresponding PhD degree have been met). Experience with at least two of the following areas is highly preferred and will be judged by publications: (a) device fabrication, (b) electrochemical sensing/biosensing, (c) surface chemistry, (d) protein assays, and (e) nucleic acid assays. Candidate must have publications in the area of research.

Position Responsibilities: Specific responsibilities will be to develop simple and sensitive electrochemical bioassays for the detection of disease biomarkers, test biological samples, design and fabricate devices by inkjet printing. Successful candidates must be able to work both individually and as part of a collaborative team and must be willing to mentor both graduate and undergraduate students. Successful candidate will also be encouraged to start own new project as well as help PI in grants and paper writing, and present work in national/international conferences. Start date is as soon as possible, but preference is given to earlier dates of availability. Position is for one year (potentially renewable for second year, depending on the satisfactory progress in the project).

Candidates should send a detailed CV (including lists of publications, presentations, and professional references) and a cover letter describing their research interests (attention Dr. Mohtashim Shamsi) to: mshamsi@chem.siu.edu. Additional information about the group can be found at: ww.mshamsi.com.

SIU Carbondale is an Affirmative Action/Equal Opportunity Employer of disabilities and protected illnesses that strives to enhance its ability to develop a diverse faculty and staff and to increase its potential to serve a diverse student population. All applications are welcomed and encouraged and will receive consideration.

Electrochemist at Blink Science

Blink Science is looking for an Electrochemist to conduct lab experiments to measure signaling for affinity binding detection of fluids like saliva on a novel electrochemical diagnostic platform. A full-time position working in Jacksonville Florida is preferred, but with the right experience and flexible support, a part-time or remote with periodic commuting to the working lab in Jacksonville will be considered.

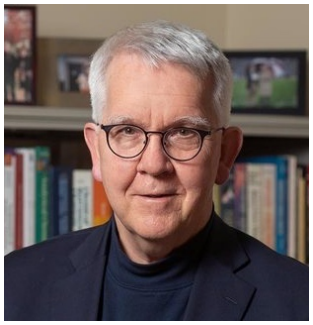
Qualification Requirements:

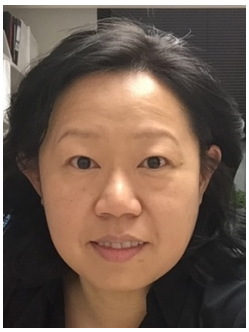
- Expert in electrochemistry and electrochemical techniques used in screen printed electrodes, with the ability to develop and validate several theoretical models of interest.
- Knowledge and understanding of substrate influences, electrode depletion and regeneration, and biologically compatible redox chemistry.
- Experience with antibody and aptamer biological systems is a plus.
- Communication of project status, risk and recommendations to the science team.
- Ability to troubleshoot and validate.
- Data analysis and interpretation.
- PhD with strong experience in Electrochemistry is desirable.
- Masters Degree in electrochemistry is required but Bachelors with significant work experience will be considered.
- Experience with square wave voltammetry is desirable.
- Materials Science would be considered based on relevant experience.
- Must have experience working in a lab setting.

Interested applicants should contact: Kevin Pegg, Ph.D., Blink Science Special Advisor
Phone: 904-766-6736; Email: kevinpegg@blinkscience.com

SPECIAL THANKS TO NEW LIFETIME MEMBERS!

Special thanks go to ***Paul Bohn*** (Arthur J. Schmitt Professor of Chemical and Biomolecular Engineering and Professor of Chemistry and Biochemistry, University of Notre Dame), ***Anne Co*** (Associate Professor, Department of Chemistry, Ohio State University), ***Ariel Furst*** (Assistant Professor, Department of Chemical Engineering, Massachusetts Institute of Technology), ***Zhe Wang*** (Assistant Professor, Department of Chemistry, Oakland University), who have contributed with installments towards lifetime membership!


Paul Bohn


Anne Co

Ariel Furst

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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.