

SEAC *communications*

Volume 35, Number 1, February 2019

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

PRESIDENT'S MESSAGE

Dear SEAC Members,

In a couple of weeks it is Pittcon again! And once again we have a great program to look forward to. At the Charles N. Reilley and Royce W. Murray Award Symposium and the SEAC reception we will honor Joe Wang and Alex Martinson. Many thanks to Greg Swain for organizing the award symposium. The presentations at the award symposium as well as the list of electrochemistry session at Pittcon, as compiled by Rose Clark, cover a wide range of topics, evidence for the remarkable impact of the research of SEAC members. I would like to emphasize in particular the SEAC student session on Tuesday afternoon and encourage you to attend if possible at all. Thank you Stephen Maldonado and Ryan White for your continuing efforts to organize this session. If you plan to attend the SEAC dinner organized by our long-time supporter Tim Paschkewitz, please do not forget to reserve a seat by March 1.

Last but not least, note that the SEAC board meeting will take place on Sunday, March 17, 5:30–7:30 PM (room 303A). Please welcome our new board members Mei Shen, Leslie Sombers, and Alice Suroviec, who will replace as of July our outgoing board members Erin Gross, Michael Johnson, and Tim Paschkewitz. Thank you Erin, Michael, and Tim for your service over many years.

As you can see, SEAC is only what it is because of its members. I look forward to seeing you all at Pittcon.

Phil Buhlmann
President, 2017-2019

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- Arzum Erdem
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Meetings to Come

- A Next Generation for Advanced Ion-Battery Analytics @ Pittcon 2019 (March 8, 2019)
- Electrochemical Conference on Energy and the Environment: Bioelectrochemistry and Energy Storage (ECEE 2019) (July 21 ~ 26, 2019)
- Education in Electrochemistry @ the Atlanta ECS Meeting (Oct. 13 ~ 17, 2019)
- 40 Years after @ the Atlanta ECS Meeting (Oct. 13 ~ 17, 2019)

Job Opening

- Electrochemical Engineer/Materials Scientist at Natural Fiber Welding, Inc. in conjunction with Bradley Univ.
- Postdoctoral Researcher in Supramolecular Chemistry at Kansas State Univ.

Special Thanks to Our Sponsors!

How Easy it is to Become a SEAC Member

NOMINATIONS SOUGHT FOR THE 2020 REILLEY AWARD AND MURRAY AWARD

Nominations are requested for the Charles N. Reilley Award and the Royce W. Murray Award. Deadlines for the Reilley and Murray Awards are **April 1, 2019** (no fooling!). All nomination materials requested below should be emailed as a single pdf to:

Héctor D. Abruña, E. M. Chamot Professor
Department of Chemistry and Chemical Biology
Director, Energy Materials Center at Cornell
Baker Laboratory, Cornell University
Ithaca, New York 14853-1301
e-mail: hda1@cornell.edu

More information on the awards is available at <http://electroanalytical.org/awards.html>

The Charles N. Reilley Award in Electroanalytical Chemistry is given in memory of one of the most distinguished analytical chemists of the 20th century. Reilley's interests were both fundamental and broad; he made seminal contributions not only to electroanalysis, but also optical spectroscopy, NMR, chromatography, data analysis, instrumentation, and surface analysis.

Nominations for the Reilley Award should include a letter of nomination describing the individual's significant contributions to electroanalytical chemistry, at least two seconding letters of support, and a curriculum vitae for the individual. All nomination materials will be retained by SEAC. Once nominated, any individual will be considered for the Reilley Award for three years without being re-nominated. The submission of any additional supporting information or a re-nomination is welcome at any time, however, the decision for the 2020 Award will be based upon the material that was available to the award committee by **April 1, 2019**.

The Royce W. Murray Young Investigator Award honors investigators who are within ten years of having obtained their Ph.D. or other terminal degree. Candidates may be nominated by any member of SEAC.

Nominations should include a letter describing the individual's promise in the area of electroanalytical chemistry, at least one seconding letter of support, and a curriculum vitae for the individual. All nomination materials will be retained by SEAC. Once nominated, an individual will be considered for the Murray Award without being re-nominated for three years, unless the nominee is more than ten years past awarding of their Ph.D. or other terminal degree. The retained nominations can be updated annually by the nominator as needed to best reflect the nominee's accomplishments to date. The decision for the 2020 Murray YI Award will be based upon the material that was available to the award committee by **April 1, 2019**.

SEAC ELECTION RESULTS

The new members of the SEAC Board of Directors for 2019-2024 are Mei Shen, Leslie Sombers, and Alice Suroviec. They will assume their new roles on July 15, 2019.

PITTCON 2019 – March 17 ~ 21

Pennsylvania Convention Center, Philadelphia, PA

SEAC Board of Directors Meeting, Sunday, March 17

The 2018 meeting of the SEAC Board of Directors will be held

Sunday, March 17

5:30 ~ 7:30 PM

Room 303A

All current, former and future members of the Board are invited to attend.

SEAC – Charles N. Reilley and Royce W. Murray Awards Symposium, Monday, March 18

Presentation: Monday, March 18, 1:30pm - 4:55pm

Room 123

The Reilley Award Symposium honors the groundbreaking contributions of former University of North Carolina Professors Charles N. Reilley and Royce W. Murray by recognizing excellence in the field of electrochemistry. The 2019 symposium features talks from the C. N. Reilley Awardee, **Professor Joseph Wang**, SAIC Endowed Chair and Chair in Department of Nanoengineering at University of California, San Diego (UCSD), and **Dr. Alex Martinson**, Argonne National Laboratory.

- 1:30 PM Introductory Remarks – Philippe Buhlmann, SEAC President
- 1:35 PM Presentation of the 2019 SEAC Charles N. Reilley Award to Joseph Wang, University of California, San Diego, by Greg M. Swain
- 1:40 PM Wearable Electrochemical Sensors: From Beakers to the Skin and the Mouth, Joseph Wang, University of California, San Diego
- 2:15 PM Electrochemical Generation of Nitric Oxide (NO) from Inorganic Nitrite for Biomedical Applications, Mark E. Meyerhoff, University of Michigan
- 2:50 PM Electrode Arrays with only One Connecting Wire for the Capture, Electrochemical Interrogation and Release of Rare Cells, J. Justin Gooding, Vincius R. Goncales, Jiaxin Lian, Stephen Parker, Richard D. Tilley, Ying Yang, University of New South Wales
- 3:25 PM Recess
- 3:40 PM Presentation of the 2019 SEAC Royce W Murray Award to Alex Martinson, Argonne National Laboratory, by Joseph T. Hupp
- 3:45 PM Toward Solar Fuels Electrocatalysis via Size-Selected Few-Atom Clusters, Alex Martinson, Argonne National Laboratory
- 4:20 PM Diamond and Diamond-Like Carbon: Next-Generation Electrodes for Electrochemical Sensors and Biosensors, Greg M. Swain, Kirti Bhardwaj, Borys Hinczenko, Serban M. Peteu, Michigan State University

SEAC Reception and Dinner, Monday, March 18

Monday, March 18
The Field House
1150 Filbert St.
Philadelphia, PA

Reception, 5:30 – 7:30 PM, Free Appetizers, Cash Bar

Dinner, 7:30 – 9:00 PM

Faculty, staff, affiliates, professionals: \$55

Student (Post-docs) SEAC members: \$45

Cash Bar

Pay in advance via PayPal through the SEAC Website

(<http://electroanalytical.org/membership.html> under "Contributions and other payments").

Dinner options include:

Hummus Plate

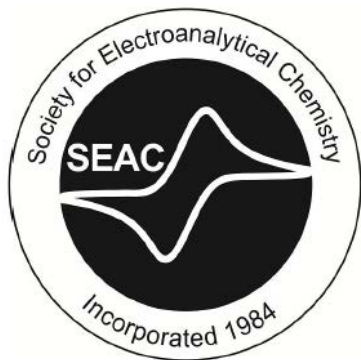
Kettle Chips or Market Salad

Roasted Chicken or Braised Short Ribs

Seared Salmon or Vegetable Risotto

Cheesecake with Caramel or Chocolate Moose Cake

Let's make this a full event. Please pay/reserve by March 1 2019.



Reception and Dinner

Monday, March 18

Reception: 5:30 - 7:30

Dinner: 7:30 - 9:00



The Field House
1150 Filbert St.
Philadelphia, PA



Join your electrochemically-inclined friends and colleagues for our annual reception following the Reiley Symposium at Pittcon.

The reception is free to attend and includes snacks, complimentary soft drinks, and a cash bar. If you are not already a member of SEAC, join at the reception!

Dinner Details

Faculty/Staff/Professionals: \$55

Students/Post-Docs: \$45

Pay and reserve in advance
at the SEAC website (via PayPal)
www.electroanalytical.org/membership.html

Limited seats available on site!
Please pay/reserve by March 1, 2018

First Course
Hummus Plate, Kettle Chips,
or Market Salad

Second Course
Roasted Chicken, Braised Short Ribs,
Seared Salmon, or Vegetable Risotto

Dessert
Cheesecake with Caramel or
Chocolate Moose Cake

Electrochemistry Sessions at Pittcon 2019 (Including Poster Sessions) (Special thanks to Rose Clark)

SUNDAY AFTERNOON, March 17

- *Session 10* Analytical Chemistry and ANYL: New Measurement Tools for Characterizing Individual Cells, Room 120A, 1:30 PM
- *Session 30* Electroanalytical Chemistry on Inexpensive Substrates, Room 115B, 1:30 PM
- *Session 70* Microanalytical Systems and Microsensors for Environmental Sensing, Room 118A, 1:30 PM
- *Session 100* Ionophore-Based Chemical Sensors, Part I, Room 122A, 1:30 PM
- *Session 130* Bioanalytical Neurochemistry, Room 121A, 1:30 PM
- *Session 210* ACS (American Chemical Society) Poster Session, Pub Pittcon, 5:30 PM
(Join us for Posters and Drinks at Pub Pittcon!)

MONDAY MORNING, March 18

- *Session 240* A Next Generation for Advanced Ion-Battery Analytics, Room 115A, 8:30 AM
- *Session 250* ACS Sensors: New Sensors and Signal Transduction Strategies for Health and Environmental Monitoring, Room 120A, 8:30 AM
- *Session 290* Pushing the Limits of In Vivo Neurotransmitter Detection, Room 117, 8:30 AM
- *Session 310* Ionophore-Based Chemical Sensors, Part II, Room 122A, 8:30 AM
- *Session 330* Characterization of Metallic Nanoparticles and Nanomaterials with Unique Applications, Room 118B, 8:30 AM
- *Session 370* Neurochemistry: Electrode and Waveform Development, Room 121A, 8:30 AM

MONDAY AFTERNOON, March 18

- *Session 440* **SEAC** - Charles N. Reilley and Royce W. Murray Awards, Room 123, 1:30 PM

TUESDAY MORNING, March 19

- *Session 700* IAEAC (International Association of Environmental Analytical Chemistry) - Nanobiosensors for Food Safety, Room 116, 8:30 AM
- *Session 720* Molecular Catalysis of Carbon Dioxide Reduction from Renewable Energy, Room 115C, 8:30 AM
- *Session 800* Bioanalytical Sensors (Half Session), Room 121B, 8:30 AM
- *Session 810* Biomedical - Neurochemistry (Half Session), Room 121B, 10:05 AM
- *Session 920* Electrochemistry – Poster Session, Expo floor, back of aisles 1500-2300, 10:00 AM
- *Session 990* Sensors – Poster Session, Expo floor, back of aisles 1500-2300, 10:00 AM

TUESDAY AFTERNOON, March 19

- *Session 1040* Every Breath You Take - Dynamic Analytical Methods to Monitor Brain Metabolism after Injury, Room 115C, 1:30 PM
- *Session 1070* Next Generation Analytical Tools for Investigating Waste to Energy Systems, Room 116, 1:30 PM
- *Session 1100* **SEAC**: A Student Session in Electroanalysis, Room 120A, 1:30 PM
- *Session 1130* Bioanalytical Electrochemistry, Room 120C, 1:30 PM
- *Session 1150* Developments in DNA Analysis (Half Session), Room 121A, 3:05 PM
- *Session 1180* Neurochemistry: Voltammetry, Room 122A, 1:30 PM
- *Session 1200* Sensors for Environmental and Security Applications, Room 123, 1:30 PM
- *Session 1260* Material Science – Poster Session, Expo floor, back of aisles 1500-2300, 2:00 PM

WEDNESDAY MORNING, March 20

- *Session 1320* Advances in Measurement Science Lectureship Awards, Room 126A, 8:30 AM
- *Session 1450* Bioanalytical Sensors and Electrochemical Methods, Room 120C, 8:30 AM
- *Session 1470* Electrochemistry - Biological Applications, Room 121B, 8:30 AM
- *Session 1500* Neurochemistry Techniques to Study Neurotransmitters and Metabolites, Room 123, 8:30 AM

- *Session 1550* Environmental - Water Analysis Poster Session, Expo floor, back of aisles 1500-2300, 10:00 AM

WEDNESDAY AFTERNOON, March 20

- *Session 1580* **SEAC** Poster Session, Expo floor, back of aisles 1500-2300, 2:00 PM
- *Session 1590* Undergraduate Poster Session, Expo floor, back of aisles 1500-2300, 2:00 PM

THURSDAY MORNING, MARCH 21

- *Session 1850* Fuels, Energy and Petrochemical Analysis – Poster Session, Expo floor, back of aisles 1500-2300, 10:00 AM
- *Session 1870* Nanoscience – Poster Session, Expo floor, back of aisles 1500-2300, 10:00 AM

THURSDAY AFTERNOON, MARCH 21

- *Session 1880* 3D Printing in Analytical Instrumentation, Room 115B, 1:30 PM
- *Session 2040* Electrochemistry and Nanotechnology (Half Session), Room 122A, 1:30 PM
- *Session 2050* Electrochemistry: Environmental and Energy, Room 122B, 1:30 PM
- *Session 2120* Electrochemistry-Bioanalytical – Poster Session, Expo floor, back of aisles 1500-2300, 2:00 PM

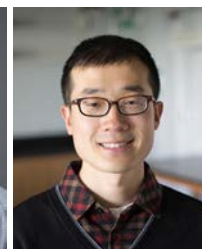
NEWS FROM MEMBERS

Allen Bard, University of Texas, Austin, will be a recipient of the 2019 King Faisal Prize, and he will be traveling to the Kingdom of Saudi Arabia to accept this award. He is sharing this honor with Professor Jean M. J. Fréchet. For further information, please see:

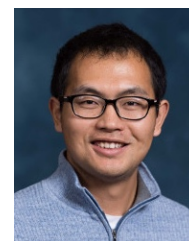
<https://kingfaisalprize.org/professor-allen-joseph-bard/>



Héctor Abruña, Cornell University, is the Director of a new Energy Frontier Research Center of the Department of Energy, the Center for Alkaline Based Energy Solutions (CABES). He also introduces Prof. Song Lin at Cornell, who is establishing a first-rate program in organic electrochemistry.



Hang Ren started a new electrochemistry lab as an assistant professor at Miami University, Ohio, in Fall 2018. His lab focuses on electrochemical processes at the nanoscale. His lab is currently looking for graduate students and postdocs.



George Luther, Univ. Delaware, was selected a Fellow of the Association for the Sciences of Limnology and Oceanography (ASLO) in November 2018.



Mohtashim Shamsi, Southern Illinois University, Carbondale, is the Chair-Elect at the Southern Illinois Section of American Chemical Society for the year 2019.



Arzum Erdem, Ege University, Turkey, was elected as a fellow of Royal Society of Chemistry (FRSC) in December 2017. She was also elected as a Special Committee member of Association of Academies and Societies of Sciences in Asia (AASSA)-Women In Science and Engineering (WISE) in August, 2017:

http://aassa.asia/about/special_committee.php



Richard Durst, Professor Emeritus of Chemistry, Cornell University, was just reelected to the Presidium of the European Academy of Sciences for a second four-year term. This has been an interesting experience that allows him to interact with colleagues in a variety of disciplines from many European countries.

In addition, he is continuing to give a special lecture on Pathological Science to chemistry and biology graduate students at the University of Regensburg (Germany). He has been giving this lecture for several years now and, since he continues to be invited back, he assumes it is well received by the students. At the Univ. Regensburg, it is a two-hour lecture covering a variety of topics ranging from the weight of the human soul to cold fusion and beyond. He gave a condensed version of this talk, "Pathological Science and the Perils of Thinking Outside of the Box", at last year's Pittcon that some of our SEAC members may have heard and hopefully enjoyed.



Maryanne Collinson, Virginia Commonwealth Univ., informed that VCU Chemistry will have an NSF sponsored REU program this summer. Please feel free to share with interested undergraduate students at your college/university.

<https://chemistry.vcu.edu/undergraduates/undergraduate-research/nsf-reu-program/>.



Andrej Wieckowski, University of Illinois, Urbana-Champaign, passed away on January 31, 2019.

<https://chemistry.illinois.edu/news/2019-02-01/memorial-dr-andrzej-wieckowski>



MEETINGS TO COME

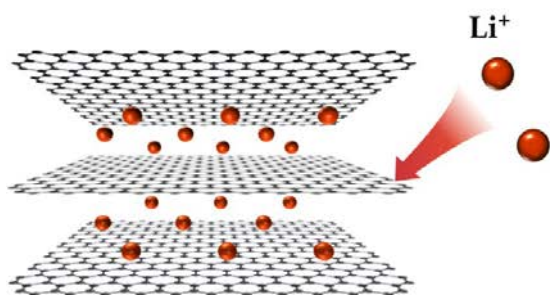
Meetings of interest to our SEAC members abound during the coming year, with symposia being organized by some among us.

Meeting	When	Where	Link for More Information
Pittcon 2019	2019, March 17-21	Philadelphia, PA	https://pittcon.org/
257 th ACS National Meeting	2019, March 31–April 4	Orlando, FL	https://www.acs.org/content/acs/en/meetings/national-meeting.html?sc=meetings_1800815_mtg_OR19_od
24 th ISE Topical Meeting: Electrochemical Assembly at the Meso, Nano and Molecular Scale	2019, April 7–10	Merida, Mexico	https://topical24.ise-online.org/
ISE Student Symposium on Electrochemistry	2019, April 29	Brisbane, Australia	https://www.raci.org.au/events/category/electrochemistry-division
21 st Australia and New Zealand Electrochemistry Symposium (21AES)	2019, April 30	Brisbane, Australia	https://www.raci.org.au/events/category/electrochemistry-division
25 th ISE Topical Meeting: New electrochemical processes for energy and the environment	2019, May 12–15	Toledo, Spain	https://topical25.ise-online.org/
13 th ECHEMS Meeting	2019, May 20–23	Oléron, France	https://echems2019.sciencesconf.org/
235 th ECS Meeting	2019, May 26–31	Dallas, TX	http://www.electrochem.org/upcoming-meetings/
7 th Regional Symposium on Electrochemistry for South-East Europe	2019, May 27–30	Split, Croatia	http://www.aseee.eu/index.php/rse-see7-home
International Symposium on Electrochemical Impedance Spectroscopy (EIS2019)	2019, June 2–7	Lège-Cap-Ferret, France	http://www.eis2019.org/
Matrafured 2019: International Conference on Electrochemical Sensors	2019, June 16–21	Visegrad, Hungary	http://www.matrafured-conference.bme.hu
Electrochemical Conference on Energy and the Environment: Bioelectrochemistry and Energy Storage (ECEE 2019)	2019, July 21–26	Glasgow, Scotland	https://www.electrochem.org/ecee2019?utm_source=Informz&utm_medium=Email&utm_campaign=ECS+Website
70 th ISE Annual Meeting: Electrochemistry: Linking Resources to Sustainable Development	2019, Aug 4–9	Durban, South Africa	http://annual70.ise-online.org/index.php
258 th ACS National Meeting	2019, Aug. 25–29	San Diego, CA	https://www.acs.org/content/acs/en/meetings/national-meeting.html

Meeting	When	Where	Link for More Information
10 th International Workshop on SECM and Related Techniques 2019	2019, Sept 29–Oct 3	Paris-Fontainebleau, France	http://www.secm-workshop.org/
236 th ECS Meeting	2019, Oct. 13–17	Atlanta, GA	http://www.electrochem.org/upcoming-meetings/
Pittcon 2020	2020, March 1–5	Chicago, IL	https://pittcon.org/
26 th ISE Topical Meeting: Metal Deposition for Semiconductor and Green Energy	2020, March 29–April 1	Tainan, Taiwan	https://www.ise-online.org/ise-conferences/next_ISE-meetings.php
237 th ECS Meeting with the 18th International Meeting on Chemical Sensors (IMCS 2020)	2020, May 10–15	Montreal, Canada	https://www.electrochem.org/upcoming-meetings/
27 th ISE Topical Meeting: Electroanalytical Chemistry and Bioelectroanalysis	2020, May 18–20	Snowbird, UT	http://www.ise-online.org/ise-conferences/next_ISE-meetings.php
71 st ISE Annual Meeting: Electrochemistry towards Excellence	2020, Aug 30–Sept 4	Belgrade, Serbia	http://www.ise-online.org/ise-conferences/next_ISE-meetings.php
PRiME 2020	2020, Oct 4–9	Honolulu, HI	https://www.electrochem.org/upcoming-meetings/
Pittcon 2021	2021, March 7-11	New Orleans, LA	https://pittcon.org/
239 th ECS Meeting	2021, May 30–June 3	Chicago, IL	https://www.electrochem.org/upcoming-meetings/
72 nd ISE Annual Meeting	2021, Aug 29–Sept 3	Jeju Island, South Korea	https://www.ise-online.org/ise-conferences/next_ISE-meetings.php
240 th ECS Meeting	2021, Oct 10–15	Orlando, FL	https://www.electrochem.org/upcoming-meetings/
Pittcon 2022	2022, March 6-10	Atlanta, GA	https://pittcon.org/

A Next Generation for Advanced Ion-Battery Analytics @ Pittcon 2019, Philadelphia PA
Monday, March 18 from 8:30 to 11:45 am, Room 115A

Do you want to learn more about the challenges of energy storage towards a sustainable world? Are you interested in the frontiers of analytical chemistry applied to lithium-ion batteries and other emerging technologies? Then join us for this symposium, designed to address questions for both experts and non-experts, and created with the intention of stimulating new ideas and approaches for the analysis of complex battery interfaces.



Featuring:

Bruce Dunn, University of California Los Angeles

Veronica Augustyn, North Carolina State University

Anne Co, The Ohio State University

Jordi Cabana, University of Illinois at Chicago

Joaquin Rodriguez-Lopez, University of Illinois

Electrochemical Conference on Energy and the Environment: Bioelectrochemistry and Energy Storage (ECEE 2019)

July 21 ~ 26, 2019 – Glasgow, Scotland, Scottish Events Campus

[Submit Abstracts-Deadline: January 18th, 2019](#)

[Exhibit and Sponsorship Opportunities](#)

The purpose of the ECEE meetings is to focus on electrochemical energy conversion/storage materials, concepts, and systems, with the intent to bring together scientists, engineers, and researchers to share results and discuss issues on these topics. Oral presentations will be scheduled from Monday through Friday with poster sessions on Monday, Tuesday, and Wednesday, and a welcome reception on Monday evening.

Education in Electrochemistry @ the Atlanta ECS Meeting (October 13 ~ 17, 2019)

While the lion's share of research is accomplished by graduate students and post-doctoral fellows, there are a number of institutions that are undergraduate only who are making significant contributions to electrochemistry. These are wonderful opportunities for the students, but certainly present additional challenges to the primary investigator not seen at the more research focused institutions. This symposium calls not just for research methods and papers from an undergraduate dominated setting, but also teaching and curriculum ideas for incorporating electrochemistry into undergraduate programs. We look for this symposium to shed some light on what has been accomplished and some thoughts on what may be. Papers on basic and applied research and teaching in all areas of electrochemistry, electrochemical systems, and physics related to solid state and electrochemical science and technology are solicited.

40 Years after @ the Atlanta ECS Meeting (October 13 ~ 17, 2019)

ECS has long supported scientists from many diverse backgrounds. This symposium, on the 40th anniversary of the first female ECS President Joan Berkowitz, seeks to celebrate ECS' past as well as look to the future. This unique symposium is designed as a venue for diverse researchers to share both technical information as well as their experiences in academia, industry and national laboratories. This symposium will consist of a mix of contributors, as we both look back at significant contributions made by female scientists to the field of electrochemistry and look forward to the future of the society. Senior and junior electrochemists and engineers will make invited presentations that include their professional experiences. We also invite unsolicited contributions from a variety of researchers, working in the electrochemical sciences.

JOB OPENING

Electrochemical Engineer/Materials Scientist at Natural Fiber Welding, Inc. in conjunction with Bradley University

Company: Natural Fiber Welding, Inc. is a start-up in Peoria, IL with 20+ employees and is bringing on new processes for the manufacturing of textiles, flexible goods, and rigid products with all-natural materials.

Partner Institution: Bradley University is a top-ranked private university in Peoria, Illinois, that offers 5,400 undergraduate and graduate students opportunities and resources of a larger university and the personal attention and exceptional learning experience of a smaller university.

Minimum Requirements: M.S. or Ph.D. (preferred) in Chemistry or Chemical Engineering with an emphasis on Polymers and/or Electrochemistry or Electrochemical Engineering. Candidate needs to display excellent conceptual understanding of polymers. Demonstrated understanding of energy storage in batteries, capacitors, and devices with complex material geometries and structures is also important. Candidate must be either a permanent resident or citizen of the United States.

Job Description: This person will be working on a team responsible for developing energy storage textiles. Specifically, this person will be bringing needed expertise to the team in the development of polymer electrolytes that have long-term stability to laundering and abrasion. This person will also be responsible for pairing specially designed yarn with the appropriate electrolyte and ensuring that the fabricated textile performs as required. This person should be able to work in a rapidly evolving work environment with input from many stakeholders. Candidate should show initiative in proposing alternative methodologies for processes and be able to conduct research to gather necessary supporting data for product design. Candidate will be expected to use basic shop tools.

Compensation: Salaried position with pay between \$48k - \$62k depending on experience and qualifications.

If interested and qualified, please email:

Aaron Amstutz – aaron.amstutz@naturalfiberwelding.com
and/or

Dr. Luke Haverhals – luke.haverhals@naturalfiberwelding.com

Postdoctoral Researcher in Supramolecular Chemistry at Kansas State University

A postdoctoral position is available in Dr. Takashi Ito's group at the Department of Chemistry, Kansas State University. The successful candidate must have a Ph.D. in Chemistry or related fields at the time of appointment. She/he will be involved in the preparation/characterization of nanoporous materials, and the quantitative evaluation of intermolecular interactions using spectroscopic and electrochemical methods. Candidates must have considerable experience, skills and knowledge in the spectrometric studies of (broadly-defined) supramolecular chemistry. Previous experience in electrochemistry research and/or the preparation, surface functionalization and characterization of nanoporous materials is preferred. This is an opportunity to participate in NSF-funded collaborative research with Prof. Amar Flood and Dr. Yi Yi at Indiana University. For information about our laboratory, please visit visit: <http://www.k-state.edu/chem/people/grad-faculty/ito/lab/index.html>.

For a full job description and to apply go to <http://careers.k-state.edu/cw/en-us/job/506562/fellow-post-doc-chemistry>. A complete online application includes a letter of interest, which should concisely summarize her/his research achievements related to the requirement, curriculum vitae, and three letters of recommendation.

SPECIAL THANKS TO OUR SPONSORS!



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.