

## New Student Chapter at Indiana University

In September 2012, an ECS Student Chapter was established at Indiana University in Bloomington, Indiana. Lane Baker and Dennis Peters serve as the faculty advisors for the new Chapter, and doctoral candidates Celeste Morris, Angela Peverly, Elizabeth Wagoner, and Kirstin Morton act as the President, Vice-President, Secretary, and Treasurer, respectively. Inaugural membership consists of over 20 chemistry graduate and undergraduate students who seek to share their interest and skills of electrochemical sciences with one another and the community. Monthly informational sessions are held to instruct Indiana University scientists and researchers on various electrochemical techniques. Chapter members also participate in biannual field trips to enhance their electrochemical education and build camaraderie within the group. The first successful event was to attend the Indiana University Cinema's showing of "The Believers" on January 28, 2013, which focused on the story of cold fusion. Following the viewing, the Chapter was able to take advantage of a question and answer session with the directors of the film. The Chapter plans to visit Argonne National Lab in the fall semester of 2014.

In addition to the instructive events for Chapter members, the group also sponsors outreach events for the non-scientific community to educate and promote electrochemistry to a younger audience. Students demonstrated basic principles of electrochemistry during Indiana University's National Chemistry week event in October

by arranging five interactive child-friendly experiments stationed within the university. One of the most popular experiments involved electroplating a copper penny with zinc so that it appeared silver and then applying heat to create a bronze layer, which allowed the penny to appear gold. At the conclusion of the experiment, an exciting souvenir for each participant was generated.

The most noteworthy event sponsored by the Chapter during its first year of establishment was a seminar on April 10, 2013, featuring Allen J. Bard—recipient of the 2011 National Medal of Science—as the inaugural ECS seminar speaker at Indiana University. His talk focused on electrochemical measurement of single particle collisions and was attended by over 80 students, faculty, and visitors. Members of this Chapter hope to sponsor other prominent electrochemists to speak at the university in 2014, and they look forward to the enhancement of electrochemistry and its applications throughout Indiana University and the Bloomington, Indiana community.

## University of Maryland Chapter Visits Congress to Advocate for Stable Science R&D Funding

The ECS University of Maryland Student Chapter participated in the Science, Engineering, & Technology Congressional Visits Day (SET-CVD), which took place March 12<sup>th</sup> and 13<sup>th</sup> in Washington, DC. See the full story on page 16.



### Benefits of ECS Student Membership

Annual Student Membership Dues Are Only \$18

- ▶ **Student Grants and Awards**  
Student awards and support for travel available from ECS Divisions
- ▶ **Student Poster Sessions**  
Present papers and participate in student poster sessions at ECS meetings
- ▶ **ECS Member Article Pack**  
100 full-text downloads from the *Journal of The Electrochemical Society* (JES), *ECS Electrochemistry Letters* (EEL), *ECS Journal of Solid State Science and Technology* (JSS), *ECS Solid State Letters* (SSL), and *ECS Transactions* (ECST)
- ▶ **Interface**  
Receive the quarterly members' magazine with topical issues, news, and events
- ▶ **Discounts on ECS Meetings**  
Valuable discounts to attend ECS spring and fall meetings
- ▶ **Discounts on ECS Transactions, Monographs, and Proceedings Volumes**  
ECS publications are a valuable resource for students

[www.electrochem.org/membership/student.html](http://www.electrochem.org/membership/student.html)

### The Electrochemical Society

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## Ohio University Student Chapter

The ECS Student Chapter at Ohio University was established in May 2011. The goal of the organization is to educate students in the field of electrochemistry and solid state science and technology and keep them informed with the latest trends in such field. The advisor for the Chapter is Gerardine Botte, who is a professor of Russ College and the director of the Center of Electrochemical Engineering Research (CEER) at Ohio University. She is also the chair for the ECS Industrial Electrochemistry and Electrochemical Engineering (IE&EE) Division.

The Chapter has invited distinguished professors and scientists to Ohio University to deliver seminars, such as Alan West (Columbia University), Robert Savinell (Case Western University), Perla Balbuena (Texas A&M University), Krishnan Rajeshwar (University of Texas Arlington and the *Interface* Editor) and Christopher Johnson (Argonne National Laboratory). The special guests have delivered various intriguing talks including: "Solar Energy," "Flow Batteries," "Environmental Remediation," "Electrochemical Engineering in Micro-Fabrication," "Prediction of Physical and Chemical Properties of Material Using Atomic-Level Simulations," and "Lithium Ion Batteries."

The activities of the Chapter give the members of the organization an opportunity to meet and discuss with eminent scholars in the field of electrochemistry, which raises the awareness in new areas and aspects of research in the field of electrochemistry and solid state science and technology. In addition, the Chapter has also organized the IE&EE Outreach Program in the fall of 2011 and fall of 2012. In this program, high school students have the privilege to learn about and operate

model fuel cell cars. This program has been rewarding for the ECS student members involved, because it provides the ECS student members the opportunity to serve as mentors for the next generation. During the program the high school students participating in the Outreach get very excited about the fuel cell car competition, with many of the students coming up after the completion to ask more questions about how the fuel cells operate, what opportunities are out there to continue doing research, what are the opportunities in electrochemistry and electrochemical engineering.

The Chapter's more recent distinguished speaker, Dr. Johnson, discussed the current development of electrode materials in lithium-ion batteries. His seminar was followed by an informal pizza reception where the members of the Chapter had the opportunity to learn more about career opportunities in national laboratories.

The current officers for the Chapter are: Wei Yan, President; Arthur Gildea, Vice-President; Fei Lu, Treasurer; and Ali Estejab, Secretary. The officers meet every week to discuss, plan, and organize events that could benefit not only its members but also other aspiring students. Gerardine Botte, who is no doubt the driving force of the Chapter, constantly motivates and encourages students to organize and participate in seminar and outreach activities to further their knowledge in science and engineering in society and enlarge the horizon of their research.

The Chapter aspires to organize more events to engage students and enhance their knowledge of electrochemistry, and the Chapter welcomes more students to join the Chapter.



The ECS Student Chapter at Ohio University recently hosted a talk by Christopher Johnson. From left to right are: MADHIVANAN MUTHUVEL, DAN WANG, BAHAR MORADI GHADI, VEDASRI VEDHARATHINAM, GERARDINE BOTTE, ARTHUR GILDEA, CHRISTOPHER JOHNSON, WEI YAN, FEI LU, RAMASAMY PALANIAPPAN, SANTOSH VIJAPUR, XIAOYOUNG XIA, and ALI ESTEJAB.

## The Ohio State University Student Chapter



The Ohio State University Student Chapter membership drive was held in November 2012. About 40 undergraduates, graduate students, and postdocs from departments and research centers across the Ohio State campus attended the annual kick-off event. Among those departments and centers were Chemistry, Materials Science, Chemical Engineering, Mechanical Engineering, Food

Science, Biology, Fontana Corrosion Center, and the Center for Automotive Research. The event recruited 28 members through the ECS Awarded Membership and Student Chapter Membership. ECS member **Anne Co** is the faculty advisor; **Danny Liu**, **Amy Casaday**, **Jared Steed**, and **Eric Coleman** serve as the President, Vice-President, Treasurer, and Webmaster, respectively.

## Looking for Student News

Visit  
[www.electrochem.org](http://www.electrochem.org)

ECS takes an active interest in the affairs of its Student Members, and is always interested in hearing from you about your interests, activities, and accomplishments.

*Send all correspondence to*

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Tel: 609.737.1902 • Fax: 609.737.2743  
E-mail: [interface@electrochem.org](mailto:interface@electrochem.org)

## The University of Texas at Austin

Since its inception in 2007, the ECS Student Chapter at The University of Texas at Austin (UT-Austin) has provided a forum for students who share common research interests in electrochemical and solid-state sciences to discuss and exchange ideas about science. The Chapter is currently comprised of 12 registered student members who represent multiple disciplines in the college of natural sciences and Cockrell School of Engineering. In addition, faculty members and unregistered students also participate in the events hosted by the ECS Student Chapter each year.

The Chapter kicked off 2013 by honoring UT's own Professors John B. Goodenough and Allen J. Bard (recent recipients of the National Medal of Science) with two informal Q&A sessions with each professor. Here, Chapter members and nonmembers alike were given the unique opportunity to hear first-hand the stories and perspectives of two highly esteemed scientists.



Lemon battery demonstration at Explore UT 2013.

In February, the Student Chapter helped with the poster session for the 5<sup>th</sup> Annual Workshop in Electrochemistry, hosted by the Center for Electrochemistry at UT Austin. Also in February, in order to promote student interactions throughout multiple departments, the Chapter organized its first ECS Student Chalk Talk presented by a senior doctoral graduate student, Jacob Goran. The chalk talk is a casual presentation without slides whereby audience members are welcome to interrupt at any time with questions and trigger interesting discussions about the research topic.

The highlight of this spring was Explore UT, a day-long event where the entire university opens its doors to the public with many events and activities scheduled throughout the day. The Chapter outreach event showcased electrochemistry for clean energy. Here, children and adults alike learned about the fundamental principles of batteries and fuel cells through fun demonstrations and activities. Demonstrations included making batteries out of lemons and a model car fueled by hydrogen and oxygen from water electrolysis. The Chapter members also shared these activities with elementary school students at the Meridian Science Day in Round Rock, TX.

The ECS Chapter at UT Austin continues to grow in membership and is currently planning more seminars and chalk talks to foster student networking. In addition, the Chapter will continue to provide outreach activities to inspire the next generation of scientists. More information about the ECS Student Chapter at the University of Texas at Austin can be found at <http://utelectrochem.org>.

### Start a Student Chapter!

ECS currently has 28 student chapters around the world, which provide students an opportunity to gain a greater understanding of electrochemical and solid-state science, to have a venue for meeting fellow students, and to receive recognition for their organized scholarly activities. Students interested in starting a student chapter may contact [dan.fatton@electrochem.org](mailto:dan.fatton@electrochem.org) for details.



UT-Austin ECS Student Chapter officers and members. From left to right are: DONALD ROBINSON, ALMA CASTANEDA, NETZAHUALCOYOTL ARROYO CURRAS, ARUMUGAM MANTHIRAM (Faculty Advisor), JASON YOO, KAREN SCIDA, JOSEPHINE CUNNINGHAM, BRENT BENNETT, and PREETHI MATHEW.

# Call for Nominations

Visit  
**www.electrochem.org**  
 and click on the “Awards” link.

For details on each award—including a list of requirements for award nominees, and in some cases, a downloadable application form—please go to the ECS website ([www.electrochem.org](http://www.electrochem.org)) and click on the “Awards” link. Awards are grouped in the following sub-categories: Society Awards, ECS Division Awards, Student Awards, and ECS Section Awards. Please see the individual award call for information about where nomination materials should be sent; or contact ECS headquarters.



The **MORRIS COHEN GRADUATE STUDENT AWARD OF THE CORROSION DIVISION** was established in 1991 to recognize outstanding graduate research in the field of corrosion science and/or engineering. The award consists of a scroll, a prize of \$1,000, and travel assistance to the meeting where the award will be presented (up to \$1,000). The next award will be presented at the ECS fall meeting in Cancun, Mexico, October 5-10, 2014.

Nominations and supporting documents should be sent to David A. Shifler, Office of Naval Research, 875 N. Randolph Street, Code 332, Arlington, VA 22203-1995, U.S.; email: [david.shifler@navy.mil](mailto:david.shifler@navy.mil). **Materials are due by December 15, 2013**



The **ELECTROCHEMICAL SCIENCE AND SOLID-STATE SCIENCE GRADUATE AWARDS OF THE ENERGY TECHNOLOGY DIVISION** were established in 2012 to recognize and reward promising young engineers and scientists in fields pertaining to the Division. The awards are intended to encourage the recipients to initiate or continue careers in this field. The award consists of a scroll, a prize of \$1,000, and complimentary registration and travel assistance to attend the meeting where the award will be presented (up to \$1,000). The next award will be presented at the ECS spring meeting in Orlando, FL, May 11-16, 2014.

Nominations and supporting documents should be sent to the award chair, Trung Van Nguyen, 4153 Learned Hall, 1530 W 15th St, Lawrence, KS 66045, U.S.; e-mail: [cptvn@ku.edu](mailto:cptvn@ku.edu). **Materials are due by September 1, 2013.**



The **H. H. DOW MEMORIAL STUDENT AWARD OF THE INDUSTRIAL ELECTROCHEMISTRY AND ELECTROCHEMICAL ENGINEERING DIVISION** was established in 1990 to recognize promising young engineers and scientists in the fields of electrochemical engineering and applied electrochemistry. The award consists of a scroll and a prize of \$1,000 for educational purposes. The next award will be presented at the ECS spring meeting in Orlando, Florida, May 11-16, 2014.

Nominations and supporting documents should be sent to John Staser, University of Puerto Rico, Cond. La Ciudadela 602, Ave. Las Cumbres #2, Guaynabo, 00969 Puerto Rico; e-mail: [staser.john@gmail.com](mailto:staser.john@gmail.com). **Materials are due by September 15, 2013.**



The **STUDENT ACHIEVEMENT AWARD OF THE INDUSTRIAL ELECTROCHEMISTRY AND ELECTROCHEMICAL ENGINEERING DIVISION** was established in 1989 to recognize promising young engineers and scientists in the field of electrochemical engineering and to encourage the recipients to initiate careers in this field. The award consists of a scroll and a prize of \$1,000 for educational purposes. More than one recipient may be named, at the discretion of the Division. The next award will be presented at the ECS spring meeting in Orlando, Florida, May 11-16, 2014.

Nominations and supporting documents should be sent to John Staser, University of Puerto Rico, Cond. La Ciudadela 602, Ave. Las Cumbres #2, Guaynabo, 00969 Puerto Rico; e-mail: [staser.john@gmail.com](mailto:staser.john@gmail.com). **Materials are due by September 1, 2013.**



## STUDENT TRAVEL GRANTS

Several of the Society's Divisions offer travel assistance to students and young faculty members presenting papers at ECS meetings. For details about travel grants for 225<sup>th</sup> ECS meeting in Orlando, Florida, U.S., please see the Orlando, Florida Call for Papers; or visit the ECS website: [www.electrochem.org/student/travelgrants.htm](http://www.electrochem.org/student/travelgrants.htm). Please be sure to e-mail the student travel grant contact as each Division requires different materials for approval. **The deadline for submission for the spring 2014 travel grants is November 15, 2013.**



## AWARDED STUDENT MEMBERSHIPS AVAILABLE

ECS Divisions are offering Awarded Student Memberships to qualified full-time students. To be eligible, students must be in their final two years of an undergraduate program or enrolled in a graduate program in science, engineering, or education (with a science or engineering degree). Postdoctoral students are not eligible. Awarded memberships are renewable for up to four years; applicants must reapply each year. Memberships include article pack access to the ECS Digital Library, and a subscription to *Interface*. To apply for an Awarded Student Membership, use the application form on page 84 or refer to the ECS website at: [www.electrochem.org/awards/applications/online/awardedmembership.asp](http://www.electrochem.org/awards/applications/online/awardedmembership.asp).