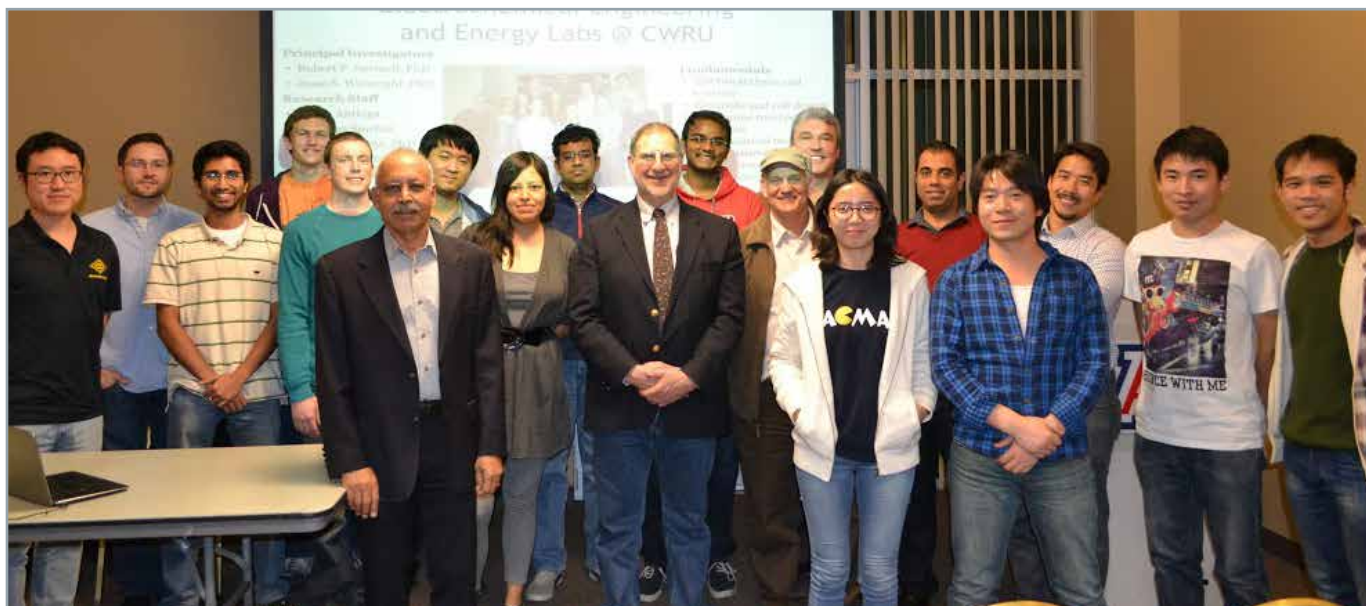


Arizona Section

The winter/spring meeting of the ECS ARIZONA SECTION was held on January 26, 2015 at The University of Arizona. A total of twenty faculty and students from The University of Arizona and Arizona State University attended the meeting. After a brief networking reception, Srinu Raghavan, Vice-Chair of the Arizona Chapter, introduced the guest speaker of the evening, Robert Savinell, Professor of Chemical Engineering at Case Western Reserve University. Following a brief description of the activities of ECS, Dr. Savinell gave a very informative talk on Iron-Based Flow Batteries for Grid-Scale Energy Storage.



A group chat after the presentation. From left to right: MANISH KESWANI, SRINU RAGHAVAN, ROBERT SAVINELL, DOMINIC GERVASIO, and KRISHNA MURALIDHARAN.



A group picture of the participants at the Arizona Section meeting.

Looking for
Section News

We welcome the opportunity to share with our membership, the scientific advances and activity news from your Section.

Send your news to:
ecs@electrochem.org

Visit www.electrochem.org

India Section

Riding on the phenomenal success of its three earlier annual schools, the **ECS INDIA SECTION** organized its fourth school between March 3 and 7, 2015 at Sastra University, Tanjore, Tamil Nadu, India. The five-day school on *Photoelectrochemistry and Related Aspects: From Fundamentals to Applications* was conducted by Krishnan Rajeshwar, Distinguished University Professor, University of Texas, Arlington and a Vice-President of The Electrochemical Society.

Participation in the school, as usual, was by invitation, which meant only acknowledged researchers and students could participate. A total of 67 participants drawn from across the country benefited from the School. The event was formally inaugurated by G. Balachandran, Registrar, Sastra University. The others who spoke on that occasion were Vijayamohan K. Pillai, Director, Central Electrochemical Research Institute and Vice-Chair of the India Section, T. Prem Kumar, Section Counsellor and D. Jeyakumar, Section Secretary.

The school was a riveting discourse on a wide spectrum of topics in photoelectrochemistry, with emphasis laid on such topics as materials chemistry underpinning photoelectrochemistry; band structure and opto-electronic properties; photo-induced charge transfer; deactivation pathways; bio-inspired devices for charge rectification and energy transfer; artificial photosynthesis; current-potential profiles in the dark for metal and semiconductor electrode-electrolyte interfaces; electrocatalysis; photoelectrochemical stability of semiconductor surfaces; semiconductor surface protection; opto-electronic behavior of quantum dots; colloidal semiconductor suspensions; modelling the electrochemical behavior of semiconductor colloidal particles by Wagner diagram; solar photovoltaic cells; photovoltaic cells based on dye- and quantum dot-semiconductor sensitization; organic perovskites; photo-splitting of water and carbon dioxide; photoelectrochemical conversion of nitrogen to ammonia, mineralization of organic pollutants and immobilization of toxic metal ions; inactivating microorganisms; defogging; sterilization; metallization, and photoelectrochemical etching; thin film fabrication; cathodic and anodic electrodeposition of elemental and compound semiconductor thin films; photocatalytic deposition of metal nanoclusters; carbon-based composites containing semiconductor nanoparticles; and application to electro- and photocatalysis of above hybrid assemblies.

A highlight of the school was a friendly competition aimed at audience participation, in which the students presented a problem and solutions to it within the general realm of solar photoelectrochemistry. The students were divided into three teams of about 20 each and were named the “Michael Graetzel,” “Martin Green,” and “Henry Snaith” teams in line with the chosen problem areas. The teams were mentored by senior scientists of the Central Electrochemical Research Institute. A panel comprising Krishnan Rajeshwar, Prem Kumar and Dr. Jeyakumar evaluated the 45-minute PowerPoint presentations followed by Q&A sessions. The Snaith team, followed by the Graetzel and Green teams, won the first prize. There was also a demonstration session on photoelectrochemical water splitting. The spectacular success of the school should prod other sections of the ECS to organize similar schools in other parts of the world to disseminate electrochemical knowledge and to nurture a new generation of researchers. The event came to a close with encomiums poured on Professor Rajeshwar for his Herculean efforts. ■



KRISHNAN RAJESHWAR responding to a question during a session at the ECS India Section meeting.



Demonstration of photoelectrochemical splitting of water.



KRISHNAN RAJESHWAR (center) at the concluding session with Section Counsellor T. PREM KUMAR (left) and Section Secretary D. JEYAKUMAR (right).

Korea Section

The ECS KOREA SECTION Symposium (Organizers: Yung-Eun Sung, Soo-Kil Kim, and Byoung Koun Min) was held on April 2, 2015 at the Kimdaejung Convention Center in Gwangju, Korea. This year, the event was held as a Joint Symposium with the Korea Institute of Science and Technology, with the title "ECS Korea Section-KIST Joint Symposium on Electrochemical CO₂ Conversion." It was composed of seven talks on electrocatalysts and systems for electrochemical reduction of CO₂. At the end of the symposium, Minah Lee received the 2015 Student Award of the Korea Section of The Electrochemical Society with a cash prize of \$500 from the Society. She presented at the symposium her recent work titled "Biologically Inspired Redox Centers for Sustainable and High Performance Rechargeable Batteries." She recently received her PhD from the Department of Materials Science and Engineering, Korea Advanced Institute of Science and Technology, Korea. Her current research interest is in the area of secondary batteries and light harvesting.

The next award will be presented at the spring symposium of the Section in 2016. ■



MINAH LEE (right) receiving the 2015 Student Award of the ECS Korea Section from KEE-SUK NAHM (left), the 9th president of the Korean Electrochemical Society.



Opening of the ECS Korea Section-KIST Joint Symposium on Electrochemical CO₂ Conversion in Gwangju, South Korea.