IE&EE Division H. H. Dow Student Achievement Awards

Sunil Roy is a doctoral candidate working under the direction of Prof. Mark E. Orazem in the Department of Chemical Engineering at the University of Florida. His doctoral research, sponsored by NASA, involves the performance and durability analysis of PEM fuel cells using electrochemical techniques coupled with microstructural characterization. The research investigates side reactions and intermediates to the overall reaction of the fuel cell responsible for degradation in the performance and lifetime, which is one of the major hurdles in the commercialization of the fuel cell. His research also includes the use of impedance spectroscopy to investigate the onset of flooding and to identify operating conditions for safe operation of the fuel cell. Prior to his PhD work, he received an MS degree in 2004 from the Department of Chemical Engineering of Indian Institute of Technology (IIT), Kharagpur, India. In his master's research, he designed a spray dryer to dehydrate aloe vera gel, characterized the gel, and dried powder to constitute skin care products. The research was sponsored by Emami Inc., India. He received a bachelor's degree in chemical engineering from the National Institute of Technology, Surat, India in the summer of 2002.

Sunil has published four journal articles and three proceeding papers. He has served as a referee to the *Journal of The Electrochemical Society*. Sunil was elected President of the ECS student chapter at the University of Florida for 2006-07. Sunil may be contacted by e-mail at sunil01@ufl.edu.

Vinten Dewikar obtained his bachelor of engineering degree in bhemical engineering from Bangalore University (now Visvesvaraya Technological University), Bangalore, India. After completing his undergraduate degree, he worked as a research assistant at the Indian Institute of Science (IISc), Bangalore, India, for two years. At IISc he worked under Prof. Ashok K. Shukla in the Solid State and Structural Chemistry Unit (SSCU), and under Mahesh Varadarajan at the Centre for Electronics Design and Technology (CEDT). He obtained a master's degree in chemical engineering at Tennessee Technological University (TTU), Cookeville, Tennessee, under the guidance of Dr. Venkat Subramanian in the fall of 2004. He is currently a PhD candidate at TTU under the guidance of Dr. Venkat Subramanian and is expected to graduate in the summer of 2008.

His dissertation focuses on mathematical model reformulation and simulation issues for electrochemical power sources, namely, lithium ion battery systems and polymer electrolyte membrane fuel cells. Apart from these systems he has also worked on modeling and simulation of electrodeposition processes, impedance modeling, and corrosion systems. He is also interested in the fundamental aspects of other applied and industrial electrochemical systems. He has previously received two travel grant awards from ECS to present at ECS conferences, and he has published five peer-reviewed scientific papers so far and has approximately 15 presentations.

DC PEMFC 7 Symposium Presents Student Awards

The **PEM Fuel Cells 7 Symposium** at the ECS fall meeting in Washington, DC presented three awards to the best presentations made by a student or post doc. One prize was awarded in each of the three sessions by the organizers: T. Fuller, C. Bock, S. Cleghorn, H. A. Gasteiger, A. Haug, C. Lamy, T. V. Nguyen, K. Ota, P. Pintauro, V. Ramani, and T. Zhao. A certificate and a $500 check were presented to each of the following recipients.

Sarah L. Hudson, Abstract 396 (Durability Session), for the paper, "Mechanisms of Activity Loss in PtCo Alloy Systems" (*ECS Transactions*, Vol. 11, Issue No. 1, p. 1247).

Jong-Won Lee, Abstract 516 (Systems Session), for the paper, "Effect of PTFE Content in Microporous Layer on Water Management" (*ECS Transactions*, Vol. 11, Issue No. 1, p. 623).

Koichi Matsuzawa, Abstract 623 (Materials Session), for the paper, "Preparation of Cubic Pt Nanoparticles of Different Sizes and Their Electrochemical Properties" (*ECS Transactions*, Vol. 11, Issue No. 1, p. 181).

Sarah L. Hudson

Jong Won Lee

Koichi Matsuzawa

Dr. **David Stanbury** *(left) and Dr.* **Jeff Fergus** *(right) of Auburn University review a poster on SOFC during the school's first ECS Student Chapter meeting.*

Auburn University Holds First Student Chapter Meeting

The Auburn University ECS Student Chapter held its first meeting on January 18, 2008. The 35 attendees included students, faculty, and other researchers from Auburn University and Columbus State University. After an introduction from ECS Director of Membership and Development, Amir Zaman, eight faculty members from chemistry and engineering (materials, chemical, and mechanical) gave brief overviews on their electrochemistry-related research and educational interests. Following the oral presentations, additional details on the electrochemical research activities were presented in a poster session at which participants had the opportunity to discuss their research and become acquainted.

The electrochemical research activities at Auburn University are spread throughout the campus. While some of those with electrochemical interests have been working together for years, others had not even met, so the primary objective of this first meeting was to begin to develop a community among these researchers at Auburn University, as well as those in nearby institutions, such as Columbus State University. The meeting accomplished this objective and should lead to fruitful interactions among participants and interesting future programs.

Throughout the year, ECS student chapters hold events, such as guest lecture series, poster session contests, one-day symposia, collaborative events with local ECS Sections, to promote electrochemical and solid-state science. Funds are available to support chapter activities, and all you need to start is a petition signed by six students and a faculty advisor, all of whom must be members of ECS. If you have an interest in starting an ECS Student Chapter at your university, please contact Amir Zaman, Director of Membership and Development, at amir.zaman@electrochem.org.

call for nominations

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) 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 **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 prize of $1,000 for educational purposes. The next award will be presented at the ECS spring meeting in San Francisco, CA, USA, May 14-29, 2009. Nominations and supporting documents should be sent to Dennie T. Mah, DuPont, 2609 Majestic Drive, Wilmington, DE 19810-2430, USA; e-mail: doctor_electro@msn.com. **Materials are due by September 15, 2008**.

The **Student the 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 prized of $1,000. The next award will be presented at the ECS spring meeting in San Francisco, CA, USA, May 24-29, 2009. Nominations and supporting documents should be sent to Dennie T. Mah, DuPont, 2609 Majestic Drive, Wilmington, DE 19810-2430, USA; e-mail: doctor_electro@msn.com. **Materials are due by September 15, 2008**.

Visit **www. electrochem.org** and click on ***"Awards" link***.

Looking for Student News

Send all correspondence to

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Fax: 609.737.2743
E-mail: interface@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.

www.electrochem.org

Student Travel Grants

Several of the Society's Divisions offer travel assistance to students presenting papers at ECS meetings. For details about travel grants for PRiME 2008 (the joint international meeting in Honolulu, Hawaii, October 12-17, 2008), please see page 87 of this issue of *Interface*; or visit the ECS website: 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 fall 2008 travel grants is May 30, 2008**.

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 subscriptions to the *Journal of The Electrochemical Society* online, *Electrochemical and Solid-State Letters* online, and *Interface*. To apply for an Awarded Student Membership, use the application form on the next page or refer to the ECS website at: www.electrochem.org/awards/student/student_awards.htm#a.

Awarded Membership Application

ECS Divisions are offering Awarded Student Memberships to qualified fulltime students. To be eligible, students must be in their final two years of an undergraduate program or be 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 subscriptions to the *Journal of The Electrochemical Society* online, *Electrochemical and Solid-State Letters* online, *Interface*, and a CD-ROM of the *Journal* and *Letters*.

Personal Information

Name: _____ Date of Birth:_____

Home Address: _____

_____

Phone:_____ Fax: _____

Email: _____

School Information

School: _____

(please include Division and Department)

Address: _____

_____

Undergraduate Year (U) or Graduate Year (G) - circle one: U3 U4 G1 G2 G3 G4 G5

Major Subject: _____ Grade Point Average: _____ out of possible:

Have you ever won this award before? ☐ YES ☐ NO If yes, how many times?_____

Signatures

Student Signature: _____ Date:

Faculty member attesting to eligibility of full time student:

Faculty Member: _____ Dept.: _____

E-mail Address: _____ Date: _____

Divisions (please select only one):

- ☐ Battery
- ☐ Corrosion
- ☐ Dielectric Science & Technology
- ☐ Electrodeposition
- ☐ Electronics and Photonics
- ☐ Energy Technology
- ☐ Fullerenes, Nanotubes, and Carbon Materials
- ☐ High Temperature Materials
- ☐ Industrial Electrochemistry & Electrochemical Engineering
- ☐ Luminescence & Display Materials
- ☐ Organic & Biological Electrochemistry
- ☐ Physical and Analytical Electrochemistry
- ☐ Sensor