# Industrial Electrochemistry & Electrochemical Engineering Division Awards

## H. H. Dow Memorial Student Achievement Award

**Long Cai** obtained his bachelor's degree in chemical engineering from Harbin Engineering University, Harbin, China, and his master's degree in chemical machinery from Dalian University of Technology, Dalian, China. His thesis focused on experiments on and modeling of the gas lift bioreactor with inner loop. After completing his master's study, Cai was employed with Dalian Institute of Chemical Physics, Dalian, China, as a research assistant in the area of the modeling of the solid oxide fuel cell and the computational fluid dynamics simulation of the singlet oxygen generator.

In 2005, Cai began his doctoral study supervised by Ralph E. White in the Department of Chemical Engineering at the University of South Carolina. His dissertation aimed at the efficient modeling of lithium ion batteries with and without thermal effects by using the method of the proper orthogonal decomposition and the orthogonal collocation on finite elements. Cai finished his doctoral study in December 2010, and now is working as a post-doctoral researcher with Dr. White at the University of South Carolina. Currently, Cai's research focuses on the life prediction for lithium ion batteries, and the modeling of lithium ion batteries with volume change and stress effects.

## Student Achievement Award

**Venkatasailanathan Ramadesigan** is currently pursuing his PhD in the Department of Energy, Environmental and Chemical Engineering at Washington University, St. Louis (WU), under the guidance of Venkat R. Subramanian. He received his bachelor's degree in chemical and electrochemical engineering from the Central Electrochemical Research Institute (CECRI), India and obtained his master's degree from the Department of Chemical Engineering at University of South Carolina, Columbia.

Mr. Ramadesigan's research involves parameter estimation and capacity fade analysis, optimization studies to develop optimal operating strategies and material properties and architecture on lithium-ion batteries, for minimized capacity fade, maximum utilization, and minimal thermal losses. He is currently working on model based optimal design of electrode material properties for lithium-ion batteries and experimental validation of design and optimization results.

Mr. Ramadesigan has published six peer-reviewed journal articles (five of them in the *Journal of The Electrochemical Society*) so far and is currently working on three more manuscripts. He has received travel grant awards from ECS, and has given more than ten oral presentations in international conferences including ECS meetings and annual AICHE meetings. He has also been an active participant in the IE&EE Division's outreach program held during the past four ECS meetings held at San Francisco, Vienna, Vancouver, and Las Vegas. Mr. Ramadesigan may be reached by email at vramadesigan@wustl.edu.

# 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.

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

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 spring meeting in Seattle, Washington, May 6-11, 2012.

Nominations and supporting documents should be sent to Venkat Subramanian, Dept. of Energy, Environmental, and Chemical Engineering, Washington University in St. Louis, One Brookings Dr., Box 1180, Office Location: Cupples II, Room 222, St. Louis, Missouri 63130, USA; e-mail: vsubramanian@seas.wush.edu. **Materials are due by September 15, 2011.**

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. The next award will be presented at the ECS spring meeting in Seattle, Washington, May 6-11, 2012.

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## 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 221st ECS Meeting in Boston, Massachusetts, (October 9-14, 2011), please see the Boston, Massachusetts, Call for Papers; 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 2011 travel grants is April 29, 2011.**

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