## STUDENT NEWS





Venkat R. Subramanian is currently a research assistant professor in the department of chemical engineering at the University of South Carolina. He obtained his PhD at the University of South Carolina under the direction of Professor Ralph E. White in 2001. He obtained a bachelor's degree in chemical and electrochemical engineering at the Central Electrochemical Research

Institute (CECRI), India in 1997.

Venkat developed a novel semianalytical method for predicting primary and secondary current density distributions in electrochemical cells with linear and nonlinear kinetics for both finite and semi-infinite domains. He has extended this technique to predict the growing deposit during electrodeposition of metals and for predicting nanoscale deposition and analyze micro/thin film batteries. He has developed analytical solutions for the electrodeposition of copper in sub-micron wenches and optimized the operating conditions for avoiding the void formation. Venkat has modeled the cathodic protection of three-dimensional offshore structures with the boundary element method. In addition, he has developed several efficient models for battery electrodes and electrochemical systems. Venkat can be contacted via e-mail at: venkatra@engr.sc.edu.

# Wensheng He IE&EE Division

### The H. H. Dow Memorial Student Award Winner



In 1991, Wensheng He received a BEng in chemical engineering from Tsinghua University in Beijing, China. In 1994, he received an MEng in organic chemical engineering from the Research Institute of Petroleum Processing in Beijing, China. From 1994-1997, he was employed as a research faculty member at the Catalysts and Catalysis Laboratory, Zhengzhou

Institute of Technology, Zhengzhou, China. His primary research activities include kinetics of CO catalytic combustion over Pt/alumina, and deactivation of Pt/alumina by sintering.

Currently Wensheng is pursuing his PhD in chemical engineering at the University of Kansas under the guidance of Dr. Trung Van Nguyen. His research is focused on studying the effect of liquid water flooding on the performance of PEM fuel cells—an experimental method to monitor electrode flooding level in real-time is established and a two-phase flow model is developed to analyze the results.

Wensheng was the recipient of the Hoglund fellowship in the spring of 2001.

## Awarded Student Memberships Available

The ECS Divisions and Group are offering Awarded Student Memberships to qualified full-time students for the year 2002. 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 page 56.

#### **Student Travel Grants**

Several of the Society's Divisions offer travel assistance to students presenting papers at Society meetings. These travel grants are intended to aid students in attending the meeting. To be eligible for a grant, applicants must be scheduled to present a paper in a symposium or session sponsored or cosponsored by the Division to which the application is made. For a complete list of symposia and how to submit a paper, please visit www.electrochem.org/meetings/201/cfp.pdf. To apply for a travel grant, use the application form on page 56.

Application Requirements—All applications for the 201st meeting in Philadelphia, PA, May 12-17, 2002 must be received no later than April 1, 2002. To apply for travel support, please complete the Student Travel Grant form on page 56, return it with a letter of recom-

mendation from a faculty advisor, and a copy of the meeting abstract. See individual listings for any additional requirements.

The following Divisions are currently offering grants:

Electrodeposition—In commemoration of Abner Brenner's pioneering contributions to the field of electrodeposition, the Division offers up to three \$750 travel grants per year to graduate students who present papers in symposia sponsored or cosponsored by the Division. In addition, the Division also offers up to two \$450 travel grants per year to students making a presentation of interest to the Division in the General Society Student Poster Session.

In addition to the basic Travel Grant application requirements, a recommen-

(continued on page 57)

# The Electrochemical Society (EC) Awarded Membership & Travel Grant Forms

The Divisions and Groups of the Society are offering Awarded Student Memberships to qualified full-time students. Eligible students must be in their final two years as undergraduates or be enrolled in a graduate program in science, engineering, or education (with a science or engineering degree). Awarded memberships are renewable for up to four years; applicants must reap-

Memberships include subscriptions to the Journal Online, Letters Online, and Interface.

## AWARDED MEMBERSHIP APPLICATION Home Address:\_\_\_\_ Date of Birth: E-mail: \_\_\_ School, Division, and Department: School 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 won this award before? - circle one: Yes No If yes, how many times? Signature of Student: \_\_\_\_\_ Faculty member attesting to eligibility of student: Name: Department: Signature: \_\_\_\_\_ Division/Group Interests: (please choose one) □ Battery □ Corrosion ☐ Dielectric Science & Technology ☐ Electrodeposition **□** Electronics ☐ Energy Technology **□** Fullerenes ☐ High Temperature Materials ☐ Industrial Electrolysis & Electrochemical Engineering ☐ Luminescence & Display Materials ☐ Organic & Biological Electrochemistry ☐ Physical Electrochemistry □ Sensor The Electrochemical Society 65 South Main Street

Pennington, NJ 08534-2839 USA Tel: 609.737.1902 • Fax: 609.737.2743 The Society's Dielectric Science and Technology (DS&T), Electrodeposition, Electronics, Energy Technology, High Temperature Materials (HTM), and Physical Electrochemistry Divisions offer travel grants to students presenting papers at Society Meetings. For the individual rules of each Division's grant program, please see the Student Travel Grant announcements on the preceding pages of this issue of Interface. To apply, complete this application and send it along with a letter from an involved faculty member attesting both to the quality of the student's work and financial needs, and a copy of the student's Meeting Abstract. (Preference for travel allocation grants will be given to ECS Student Members.)

STUDENT TRAVEL GRANT APPLICATION  Meeting Site:
Name:School Address:
E-mail:
Undergraduate Year (U) or Graduate Year (G) - circle one: U3 U4 G1 G2 G3 G4 G5  Major Subject:
Grade point average out of possible
Symposium Title:
Title of Paper to be Presented at Meeting:
Are you a Student Member of the Society?
Signature:
Date:
Check Division under which award is being applied for: (Applications made to multiple Divisions will be rejected)
□ <b>DS&amp;T</b> — <i>Send to:</i> D. Misra, Dept. of Elec. and Computer Engr., NJIT, Newark, NJ 07102. E-mail: dmisra@megahertz.njit.edu.
□ <b>Electrodeposition</b> — <i>Send to:</i> K. Kondo, Dept. of Applied Chem., Univ. of Okayama, 3-1-1 Tshima-Naka, Okayama 700 Japan. E-mail: kkondo@cc.okayama-u.ac.jp.
□ Electronics—Send to: A. Reisman, NC State Univ., Department of ECE, Box 7911, Raleigh, NC 27695. E-mail: reisman@eos.ncsu.edu.
□ Energy Technology—Send to: J. Prakash, Dept. of Chemistry & Environmental Engr., Illinois Institute of Technology, 10 West 33rd Street, Chicago, IL 60616. E-mail: prakash@charlie.cns.iit.edu.
□ <b>HTM</b> — <i>Send to:</i> E. Wachsman, Univ. of Florida, PO Box 116400, Gainseville, FL 32611-6400. E-mail: ewach@mse.ufl.edu.
□ <b>Physical Electrochemistry</b> — <i>Send to:</i> G. Brisard, Dept. de Chimie, Univ. de Sherbrooke, 2500 Boul Universite, Sherbrooke QC, Canada J1K 2R1. E-mail: gbrisard@courrier.usherb.ca.

Application and faculty letter must be received no later than

one month prior the Meeting for which a travel grant is sought.

#### **Student News**

(continued from page 55)

dation letter from the student's graduate research advisor is also required. Optional supporting documents such as article reprints, transcripts, or reports are also invited.

Electronics—The Division is offering travel grants of up to \$600 each to students presenting papers in a symposium sponsored or cosponsored by the Electronics Division at the ECS meeting in Philadelphia, PA, in May 2002.

Energy Technology—The Division will be offering travel grants up to \$600 to students presenting a paper in a symposium sponsored or cosponsored by the Energy Technology Division and attending the ECS meeting in Philadelphia, PA, in May 2002.

In addition to the basic Travel Grant application requirements, other supporting documents are also invited.

High Temperature Materials— The Division will be offering travel grants up to \$600 to student members of the Division who are presenting papers at ECS meetings. These grants will be made on a first-come, first-served basis, with up to three awards made per meeting.

In addition to the basic Travel Grant application requirements, include a letter from a faculty advisor attesting to the student's financial needs.

Physical Electrochemistry—The Division will support the travel of students to each ECS meeting. Eligible students must be a graduate student or upper level undergraduate and must be scheduled to present a talk at a symposium sponsored by the Physical Electrochemistry Division. The maximum amount given for travel support will be up to \$2,000 to be distributed among the awardees.

## **SHORT COURSES**

The Society will sponsor six short courses in conjunction with the 201st Meeting in Philadelphia. These courses will be held on Sunday, May 12, 2002, from 9:00 AM to 5:00 PM. The registration fee is \$300 for ECS Members and \$375 for nonmembers. The registration fee for the course covers the course, luncheon, coffee breaks, and text materials; it is not applicable to any other activities of the Society Meeting. Students are offered a 50% discount. The deadline for registration for a course is **April 12, 2002**. If you plan to register for the meeting AND a Short Course, please use the Advance Registration Form, which appears after page 60. If you plan to register only for a Short Course, you may use the form on Program Section page 9. Written requests for refunds will be honored only if received at Society Headquarters before **April 29, 2002**. All courses are subject to cancellation pending an appropriate number of advance registrants.

#### Course # 1

## Plasma Processing of Low k Dielectric Films

Instructor: Dennis W. Hess, Georgia Institute of Technology

Course # 2

## **Fundamentals and Applications of Electrochemical Capacitors**

Instructors: Brian E. Conway, The University of Ottawa; John R. Miller, JME, Inc.

Course # 3

## **Luminescence and Luminescent Materials**

Instructors: A. Meijerink, Utrecht University; C. Ronda, Philips Research Laboratories; A. Srivastava, GE Research

Course # 4

## **Rechargeable Lithium Batteries**

Instructors: Thomas Reddy, Yardney Technical Products; K. M. Abraham, E-KEM Sciences

Course # 5

#### **Impedance Spectroscopy: Theory and Applications**

Instructor: M. E. Orazem, University of Florida

Course # 6

#### **Battery Design and Simulation**

Instructor: Robert Spotnitz, Battery Design Co.