

STUDENT NEWS



Inas AlNashef IE&EE Division Student Achievement Award Winner



INAS M. ALNASHEF was born in Nablus, Palestine in 1961. He received his BSc degree in chemical engineering from the University of Jordan at Amman, Jordan. He worked in the oil fields for one year and then joined Kuwait University as a research assistant. He worked as a teaching assistant in the College of Engineering at the United Arab Emirates University from 1994 to

2000. In the fall of 2000, he joined the department of chemical engineering at the University of South Carolina at Columbia, South Carolina, as a PhD student. He is currently studying the electrochemistry of the superoxide ions in room-temperature ionic liquids under the supervision of Dr. John W. Weidner and Michael A. Matthews. Room-temperature ionic liquids (RTILs) are emerging as novel replacements for volatile organic solvents that are high on the list of chemicals that are potentially damaging to the environment. RTILs are nonvolatile, and nonflammable compared to other solvents. Superoxide ions can be electrochemically generated in RTILs and used to destroy polyhalogenated aromatic hydrocarbons, which represent a major environmental problem. The electrochemically generated superoxide ion is a mild oxidizing agent that can activate carbon dioxide to give a carboxylating reagent. $O_2^{\bullet-}$ may be used to synthesize carboxylic acids and ketones from the corresponding primary and secondary alcohol, respectively. A novel electrochemical membrane electrochemical reactor was built that utilizes Nafion membranes as a separator between the cathode and anode compartments. This reactor reduced the energy needed for synthesis by three- to fourfold. ■



Veeraghavan Basker IE&EE Division H. H. Dow Memorial Student Achievement Award Winner



VEERARAGHAVAN BASKER obtained a bachelor's degree in chemical and electrochemical engineering from Central Electrochemical Research Institute (Madurai Kamaraj University), in India in 1999. Currently, he is a PhD student in the department of chemical engineering at the University of South Carolina working under the guidance of Dr. Branko Popov and planned

to graduate in December 2003. After graduation, Basker plans to join Dr. Sanjeev Mukerjee's group in the department of chemistry at Northeastern University as a post-doctoral research associate. Basker's doctoral work is focused on the electrodeposition of alloys and composites with superior corrosion and electrocatalytic properties. He was recently awarded the American Electroplaters and Surface Finishers (AESF) graduate scholarship award for the year 2003 for his work on the electroless deposition of alloys for use in lithium-ion batteries as well as in corrosion protection of steel. His research interests include electrochemical synthesis of materials that are applicable in advanced power sources and in corrosion protection of metal substrates. ■

Call for Nominations

For details on each award, including list of requirements for award nominees, and in some cases, a downloadable nomination form, please go to the ECS website (www.electrochem.org) and click on the "Awards" link in the upper right-hand corner. This will take you to a general page that will then lead to the individual awards. The awards are grouped in one of three categories: Society Awards, ECS Division Awards, and ECS Section Awards. Click on one of these sub-links to find the individual award. Please see each award call for information about where nomination materials should be sent; or you may contact the ECS headquarters office by using the contact information on the awards web page.



The H. H. Dow Memorial Student Award of the Industrial Electrolysis 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 a \$1,000 for education expenses. The next award will be presented at the ECS spring meeting in Quebec City Canada, May 15-20, 2005.

Nominations and supporting documents should be sent to Peter C. Foller, PPG Industries, Inc., 1461 Lyons Chase Circle, Murrysville, PA 15668-2627, USA; tel. 724.325.5181, fax 724.325.5105, e-mail foller@ppg.com; materials are due **September 15, 2004**.



The Student Achievement Awards of the Industrial Electrolysis and Electrochemical Engineering Division were established 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 a \$1,000. The next award will be presented at the ECS spring meeting in Quebec City Canada, May 15-20, 2005.

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Student News Wanted

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

Send all correspondence to:

Interface

65 South Main Street
Pennington, NJ 08534-2839, USA
Tel: 609.737.1902
Fax: 609.737.2743
E-mail: interface@electrochem.org

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 below or refer to the ECS website at: www.electrochem.org/student/student.htm.

The Electrochemical Society Awarded Membership Application

The Divisions 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 reapply each year. Memberships include subscriptions to the *Journal* online, *Letters* online, and *Interface*.

Name: _____

Home Address: _____

Date of Birth: _____

Phone #: _____ Fax #: _____ 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: _____ Date: _____

Faculty member attesting to eligibility of student:

Name: _____ Department: _____

Signature: _____ Date: _____

Divisions (please choose one):

- | | | |
|--|--|--|
| <input type="checkbox"/> Battery | <input type="checkbox"/> Energy Technology | <input type="checkbox"/> Luminescence & Display Materials |
| <input type="checkbox"/> Corrosion | <input type="checkbox"/> Fullerenes, Nanotubes, and Carbon Nanostructures | <input type="checkbox"/> Organic & Biological Electrochemistry |
| <input type="checkbox"/> Dielectric Science & Technology | <input type="checkbox"/> High Temperature Materials | <input type="checkbox"/> Physical Electrochemistry |
| <input type="checkbox"/> Electrodeposition | <input type="checkbox"/> Industrial Electrolysis & Electrochemical Engineering | <input type="checkbox"/> Sensor |
| <input type="checkbox"/> Electronics | | |

Send to: The Electrochemical Society, 65 South Main Street, Pennington, NJ 08534-2839, USA • Tel: 609.737.1902 • Fax: 609.737.2743

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. For additional information and an online application form refer to the ECS website at: www.electrochem.org/student/travelgrants.htm. 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/206/cfp.pdf. To apply for a travel grant, use the application form below.

Application Requirements—All applications for the 206th meeting in

Honolulu, Hawaii, October 3-8, 2004, must be received no later than May 21, 2004. To apply for travel support, please complete the Student Travel Grant form below, return it with a letter of recommendation from a faculty advisor, and a copy of the meeting abstract. Travel grants range from \$250-\$750 depending on the student's estimated expenses and the funds available from the Divisions. ■

The Electrochemical Society Travel Grant Application

The Society's Corrosion, Dielectric Science and Technology (DS&T), Electrodeposition, Electronics, Energy Technology, High Temperature Materials (HTM), Organic and Biological Electrochemistry (O&BE), Physical Electrochemistry, and Sensor Divisions offer travel grants to students presenting papers at the Society's next meeting, in Honolulu, Hawaii, October 3-8, 2004. To apply, complete this application and send it along with a copy of your transcript and 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. For additional information and an online application form refer to the ECS website at www.electrochem.org/student/travelgrants.htm. *(Preference for travel allocation grants will be given to ECS Student Members.)*

Meeting Site: _____

Name: _____

School Address: _____

E-mail: _____ Phone #: _____

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

Major Subject: _____ Grade point average _____ out of possible _____

(Please provide letter of recommendation from your faculty advisor and a copy of your transcript)

Symposium Title: _____

Title of paper to be presented at meeting: _____

Are you an ECS Student Member of the Society? ☐ yes ☐ no

(If not, please additionally submit the Awarded Student Membership application.)

Estimate meeting expenditures: \$ _____

Signature: _____ Date: _____

Check Division under which award is being applied for: *(Applications made to multiple Divisions will be rejected)*

☐ **Corrosion**—Send to: R. Scott Lillard, MST-6, MS G755, Los Alamos National Laboratory, Los Alamos, NM 87545, USA. E-mail: lillard@lanl.gov.

☐ **DS&T**—Send to: H. Rathore, Internal Mail Stop AE1, B1640, 2070 Rte. 52, Hopewell Jct., NY, 12533, USA. E-mail: rathore@us.ibm.com.

☐ **Electrodeposition**—Send to: C. Bonhote, Advanced Head of Development and Nanostructures, Hitachi Global Storage Technologies, San Jose Research Center, 650 Harry Rd., C1-430, San Jose, CA 95120-6001 USA. E-mail: Christian.Bonhote@hgst.com.

☐ **Electronics**—Send to: F. Ren, Univ. of Florida, Dept. of Chem. Engr., Gainesville, FL 32611, USA. E-mail: ren@che.ufl.edu.

☐ **Energy Technology**—Send to: S. Calabrese Barton, Dept. of Chem. Engr., Columbia University, 500 W. 120th Street, Room 812, New York, NY 10027-6623, USA. E-mail: scb2001@columbia.edu.

☐ **HTM**—Send to: E. Traversa, Univ. di Roma "Tor Vergata," Via della Ricerca Scientifica, I-00133 Roma, Italy. E-mail: traversa@uniroma2.it.

☐ **O&BE**—Send to: D. Peters, Indiana University, Dept. of Chemistry, Bloomington, IN 47405, USA. E-mail: peters@indiana.edu.

☐ **Physical Electrochemistry**—Send to: P. Vanysek, Northern Illinois University, Dept. of Chemistry and Biochemistry, DeKalb, IL 60115, USA. E-mail: pvanysek@niu.edu.

☐ **Sensor**—Send to: P. Hesketh, Georgia Tech., Dept. of Mechanical Engineering, 225 North Ave NW, Atlanta, GA 30332-0405, USA. E-mail: peter.hesketh@me.gatech.edu.

Applications for Travel Grants for the Honolulu, Hawaii meeting must be received no later than May 21, 2004.