

STUDENT NEWS



Student Achievement Award of the IE&EE Division

Robert Lowrey is a graduate student in the Chemical Engineering Department at the University of Florida where he is studying industrial electrolysis and electrochemical engineering under the guidance of Dr. Timothy Anderson. He received a BS in chemical engineering from Northwestern University in 1994. From 1992 to 1994, he worked at Argonne National Laboratory as a co-op engineering intern, studying advanced battery technology. From 1994 to 1995 he worked at Basic Industries Research Laboratories, in Evanston, IL, evaluating polymer electrolytes for lithium batteries. In 1996 he studied the thermodynamics of materials for photovoltaic applications. In 1997 he began his thesis research at DuPont Experimental Station in Wilmington, DE under the guidance of Dr. Marc Doyle. His research is focused on developing PEM reactor technology for fluorine production by bulk electrolysis of anhydrous fluoride.

Awarded Memberships Available

The Society's **Corrosion, Dielectric Science and Technology, Electronics, High Temperature Materials, Industrial Electrolysis and Electrochemical Engineering, and Physical Electrochemistry 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). Post-doctoral students are not eligible. Awarded memberships are renewable for up to four years; applicants must

The H. H. Dow Memorial Student Award of the IE&EE Division



Suresh Sriramulu graduated with a bachelor's degree in Chemical Engineering from the Indian Institute of Technology in Madras, India, in 1992. Subsequently, he was employed as a research associate, at IIT-Madras, to design gas-solid separation systems for a coal-based power plant. He then moved to the University of Wyoming, where he earned an MS in Chemical Engineering in 1995 under the guid-

ance of Professor P. K. Agarwal on modeling bed coal combustion.

Mr. Sriramulu is currently pursuing a PhD in Chemical Engineering at the University of Washington, Seattle under the supervision of Professor Eric M. Stuve. His thesis research is aimed at understanding the mechanism and kinetics of methanol electrocatalysis on platinum based electrodes. Employing a combination of kinetic modeling and experimental measurements, Mr. Sriramulu has shown that the majority of the desired product, carbon dioxide, from methanol electrocatalysis is produced without involvement of the poisoning intermediate, carbon monoxide.

Mr. Sriramulu was also awarded an ECS-DOE summer research fellowship in 1998 and a scholarship grant from the American Methanol Foundation for the current academic year.

reapply each year. Awarded memberships begin on January 1 of the calendar year following receipt of the application. Memberships include subscriptions to both the *Journal of The Electrochemical Society*, *Electrochemical and Solid-State Letters Online*, and *Interface*.

To apply for an Awarded Student Membership, use the application form on page 51. Deadline for submission is October 15, 1999.

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. To apply for a travel grant, use the application form on page 51.

Applications for the 195th Society Meeting in Seattle, May 2-7, 1999, must be received no later than one month prior to the start of the Meeting. The following Divisions are currently offering grants:



Dielectric Science and Technology

The Dielectric Science and Technology Division is offering travel grants of up to \$600 each to students presenting papers at the Society's 195th Meeting in Seattle, May 2-7, 1999. Eligible students must be scheduled to present a paper in a symposium sponsored or cosponsored by the Electronics Division.

Applicants must submit the Student Travel Grant Application on the facing page, a copy of their Meeting Abstract, and a letter of recommendation from their faculty advisor.



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.

Interested students should apply using the Student Travel Grant Application form on the facing page. A recommendation letter from the student's graduate research advisor and a copy of the student's Meeting Abstract are also required. Optional supporting documents such as article reprints, transcripts, or reports are also invited.



Electronics

The Electronics Division is offering travel grants of up to \$600 each to students presenting papers at the Society's 195th Meeting in Seattle, May 2-7, 1999. Eligible students must be scheduled to present a paper in a symposium sponsored or cosponsored by the Electronics Division.

Applicants must submit the Student Travel Grant Application on the facing page, a copy of their Meeting Abstract, and a letter of recommendation from their faculty advisor.



Energy Technology

The Energy Technology Division will be offering travel grants up to \$300 to students attending ECS Meetings. To be eligible for travel support, students must be presenting a paper in a symposium sponsored or cosponsored by the Energy Technology Division.

To apply for the travel support, please complete the Student Travel Grant Application on the facing page, and return it with a letter from a faculty advisor and a copy of the Meeting Abstract. Other supporting documents are also invited.



High Temperature Materials

Travel grants of up to \$500 are offered 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. To apply for an award, complete the Student Travel Grant Application on the facing page, and include a copy of the Meeting abstract, 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 \$1,000 to be distributed among the awardees.

To apply for travel support, please complete the Student Travel Grant Application on the facing page, return it with a letter of recommendation from a faculty advisor, and a copy of the Meeting Abstract. ■

General Society Student Poster Session Winners

From among the 31 posters presented in the General Society Student Poster Session at the Boston Meeting this past November, the following winners were chosen:

- "Concerted Electron Transfer-Catalytic Bond Scission Precautions at Pt Surfaces: An Experimental and Theoretical Study," (Poster #15) by A. Crown, G. Q. Lu, and A. Wiekowski (University of Illinois).
- "Hectorite-Based Composite Electrolytes for Lithium-Ion Batteries," (Poster #13) by M. W. Riley, P. S. Fedkiw, and S. A. Kahn (North Carolina State University).

Honorable Mentions included:

- "Inhibitory Anion Effects on Aluminum Pitting," (Poster #16) by J. C. Polkinghorne, J. Waldener, and A. Wiekowski (University of Illinois).
- "Carbon Negative Electrode for Li-ion Batteries: Effect of Carbon Origin and Additivity," (Poster #14) by G. Nadeau, K. Zaghib, and G. Brissard (Universite de Sherbrooke).



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Memberships begin on January 1 of the calendar year following receipt of the application and include subscriptions to the *Journal, Electrochemical and Solid-State Letters Online*, and *Interface*. The application deadline is October 15, 1999.

AWARDED MEMBERSHIP APPLICATION

Name: _____

Home Address: _____

Date of Birth: _____

Phone #: _____

School, Division, and Department: _____

School Address: _____

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

Major Subject: _____

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: _____

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

☐ **Corrosion**—Send to: Dr. G.S. Frankel, Dept. of Materials Science & Engineering, 477 Watts Hall, The Ohio State University, Columbus, OH 43210

☐ **Dielectric Science and Technology**—Send to: D. Misra, Dept. of Elec. and Computer Engr., NJIT, Newark, NJ 07102.

☐ **Electronics**—Send to: Dr. Arnold Reisman, NC State Univ., Department of ECE, Box 7911, Raleigh, NC 27695

☐ **High Temperature Materials**—Send to: Dr. Mark D. Allen-dorf, Sandia National Labs, MS 9052, P. O. Box 969, Livermore, CA 94551-0969

☐ **Industrial Electrolysis & Electrochemical Engineering**—Send to: Dr. James M. Fenton, Dept. of Chemical Engr., U-222, Rm. 208, Univ. of Connecticut, Storrs, CT 06269-3139

☐ **Physical Electrochemistry**—Send to: Dr. Johna Leddy, Department of Chemistry, University of Iowa, Iowa City, IA 52242

The Society's Dielectric Science and Technology, Electrodeposition, Electronics, Energy Technology, High Temperature Materials, 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

1. Meeting Site: _____

2. Name: _____

3. School Address: _____

3. Major Subject: _____

4. Undergraduate grade point average: _____

Out of possible: _____

Graduate grade point average: _____

Out of possible: _____

5. Division Symposium Title: _____

6. Title of Paper to be Presented at Meeting: _____

7. Are you a Student Member of the Society? _____
(If not, please additionally submit the Awarded Student Membership application at left.)

8. Estimate meeting expenditures: \$ _____

9. Signature: _____

Date: _____

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

☐ **Dielectric Science and Technology**—Send to: D. Misra, Dept. of Elec. and Computer Engr., NJIT, Newark, NJ 07102.

☐ **Electrodeposition**—Send to: D. Schwartz, Dept. of Chem. Engr., Box 351750, Univ. of Washington, Seattle, WA 98195-0005

☐ **Electronics**—Send to: Dr. Arnold Reisman, NC State Univ., Department of ECE, Box 7911, Raleigh, NC 27695

☐ **Energy Technology**—Send to: J. Prakash, Dept. of Chemistry & Environmental Engr., Illinois Institute of Technology, 10 West 33rd Street, Chicago, IL 60616

☐ **High Temperature Materials**—Send to: F. Garzon, Los Alamos National Lab, MS 0429, Los Alamos, NM 87545

☐ **Physical Electrochemistry**—Send to: J. Leddy, Dept. of Chemistry, University of Iowa, Iowa City, IA 52242

Application and faculty letter must be received no later than one month prior the Meeting for which a travel grant is sought.