

## STUDENT NEWS

### F. M. Becket Memorial Award Winner Announced



The Society is pleased to announce this year's F. M. Becket Memorial Award winner, **Gyeong S. Hwang**. Mr. Hwang received his BS (1991) and his MS (1993), in Chemical Engineering from Seoul National University in Korea under the direction of Professor Sang Heup Moon. While fulfilling his compulsory military service, he worked on the development of molten carbonate fuel cells and inorganic membranes as a part-time research engineer at the Korea Institute of Science and Technology under the supervision of Dr. Seong-Ahn Hong and Dr. Suk-Woo Nam. In 1994, he entered the PhD program of Chemical Engineering at the California Institute of Technology. While performing his thesis research with

Professor Konstantinos P. Giapis on the dynamics of gas-surface interactions and the physics of charging damage during plasma processing of semiconductors, he earned an MS in Applied Physics (1998).

Mr. Hwang has published over 35 technical papers and has received several awards including: the Constantin G. Economou Memorial Prize (Caltech, 1996); student travel awards (PSTD, AVS, 1996); the Graduate Research Award (AVS, 1997); the Colin Garfield Fink Fellowship (ECS, 1998); the Graduate Student Award (Finalist, MRS, 1998); Travel Grant (ECS, Electronics Division, 1998); the Powell Foundation Fellowship (Caltech, 1994); and the Applied Materials Chemistry and Chemical Engineering Fellowship (Caltech, 1997).

### Verhoff Receives the 1999 Morris Cohen Graduate Student Award



The Battery Division is pleased to announce the 1999 Morris Cohen Graduate Student Award winner, **Marta Verhoff**. Verhoff received her MS in 1994, and her PhD in 1997, in chemical engineering from the University of Illinois at Urbana-Champaign. Working under the direction of Richard Alkire, she studied the pitting corrosion of pure transport and reaction. Dr. Verhoff earned her BS in chemical engineering from the University of Notre Dame where she was a four-year member of the Band of the Fighting Irish. She was awarded a NSF fellowship for graduate study and a Dome award in her senior year.

Currently Dr. Verhoff is working as a post doctoral appointee at the Microelectronics Development Laboratory at Sandia National Laboratories in Albuquerque, NM. Her current work focuses on the chemical mechanical planarization (CMP) process for the production of integrated circuits. Her work at Sandia includes a statistical analysis of post-polish surfaces and the correlation of the results which polish mechanism.

### Rousse Wins the 1999 Student Research Award



The Battery Division is pleased to announce **Gwenaëlle E. Rousse** as the recipient of the 1999 Student Research Award. Rousse is a PhD candidate in the Université Paris-Sud Orsay, France. She obtained her engineering degree in 1996 from the Ecole Supérieure de Physique et Chimie in Paris and her MS in Materials Science and Engineering in 1997 from Paris VI University.

Rousse's work focuses on the physico-chemical and crystallographic properties of  $\text{LiMn}_2\text{O}_4$ . From neutron diffraction analysis, she determined the crystal structure of the low-temperature form of  $\text{LiMn}_2\text{O}_4$ . This form is orthorhombic with a partial  $\text{Mn}^{3+}/\text{Mn}^{4+}$  charge ordering. She is also concentrating

on the resolution of the magnetic structure of  $\text{LiMn}_2\text{O}_4$ .

Rousse holds an industrial scholarship sponsored by Union Minière and was recently awarded the Graduate Student Gold Medal at the 1998 MRS Fall Meeting in Boston. She plans to finish her PhD by mid-2000.

Currently, Rousse is working at the Laboratoire de Chimie des Solides under the supervision of Dr. C. R. Masquelier, in the field of cathode materials for rechargeable Li-batteries.

### Call for Nominations



#### Morris Cohen Graduate Student Award

Nominations are now being accepted for the 2000 Morris Cohen Graduate Student Award of the Corrosion Division. Named in honor of the late Dr. Morris Cohen, a renowned expert in the field of electrochemistry and corrosion science, this award was established in 1992 to recognize and reward outstanding graduate research in the field of corrosion science and/or engineering. Such early recognition of highly qualified corrosion scientists/engineers is intended to encourage especially promising researchers to remain active in the field after their graduate research is completed.

This award, for outstanding Master's or PhD work, is open to graduate students who have successfully completed all the requirements for their degrees. Candidates remain eligible for two years, and those eligible for the 2000 award must have completed all requirements for their degree between January 1, 1997 and December 31, 2000. The successful candidate is expected to present a lecture on their research work at a Corrosion Division symposium held at the Fall 2000 Meeting of the Society. The award consists of a certificate plus \$1,000. Assistance for unreimbursed travel expenses, up to an additional \$1,000, can also be provided for travel expenses incurred in attending the Society Meeting at which the award is presented.

Further information about this award may be obtained directly from the chairman of the award committee: Dr. Sannakaisa Virtanen, Department of Materials and Institute of Materials Chemistry and Corrosion, Swiss Federal Institute of Technology, ETH-Hoenggerberg 8093 Zurich, Switzerland, e-mail: virtanen@ibwk.baum.ethz.ch.

Nominations for the 2000 award must be received by the award committee chairman no later than December 15, 2000.

### Awarded Student 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). Postdoctoral students are not eligible. Awarded memberships are renewable for up to four years; applicants must 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 48. 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 48.

Applications for the 1999 Joint International Meeting in Honolulu, Hawaii, October 17-22, 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 1999 Joint International Meeting in Honolulu, Hawaii, October 17-22, 1999. Eligible students must be scheduled to present a paper in a symposium sponsored or cosponsored by the DS&T Division.

Applicants must submit the Student Travel Grant Application on page 48, 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 page 48. 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 1999 Joint International Meeting in

Honolulu, Hawaii, October 17-22, 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 page 48, 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 \$600 to students attending the 1999 Joint International Meeting in Honolulu, Hawaii, October 17-22, 1999. 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 page 48, and return it with a letter from a faculty advisor and a copy of the Meeting Abstract. Other supporting documents are also invited.

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## ECS SUMMER FELLOWSHIP WINNERS

*Each year The Electrochemical Society gives Summer Research Fellowships to assist students in continuing their graduate work during the Summer months in a field of interest to the Society. This year's Summer Fellowship recipients are:*



The recipient of the Society's Edward G. Weston Summer Research fellowship, **Allen C. Templeton**, attended Texas A&M Univer-

sity, at Commerce, where he earned a BS in chemistry with high honors in 1994. After a two-year stint in the Materials Science Laboratory at Texas Instruments, Inc. (Dallas, TX), he turned his attention toward pursuing a PhD in chemistry at the University of North Carolina at Chapel Hill. He is currently beginning his fourth year of graduate study in electrochemistry under the direction of Professor Royce W. Murray. His specific thesis research work involves the analytical and electrochemical evaluation of novel gold nanocluster materials. Mr. Templeton has been the past recipient of the Charles N. Reilley Award, the Dobbins Fellowship, the Lord Corporation Fellowship, and has been named the recipient of an ACS Division of Analytical Chemistry Graduate Research Fellowship (sponsored by Perkin-Elmer) for 1999-2000.



The recipient of the Society's Colin Garfield Fink Summer Research fellowship, **Wendy Baker**, graduated with honors from Agnes

Scott College in 1993 with a BA in chemistry. After graduation, she held a summer research position at the Institute of Paper Science and Technology in Atlanta, GA, where she discovered her interest in research. She worked in a clinical laboratory in Louisville, KY, for two years before going to Texas A&M University in 1995. She is currently pursuing a PhD in chemistry under the guidance of Dr. Richard M. Crooks. The topic of her dissertation is "The Electrochemical Behavior of Arrays of Nanometer-Scale Electrodes."



The recipient of the Society's Joseph W. Richards Summer Research fellowship, **Ajith Wijayawardhana**, received his BS in

chemistry from Denison University, and his MS in chemistry from the University of Utah. He is currently a third year graduate student in the sensors group of the Department of Chemistry, University of Cincinnati, working under the direction of Professors William R. Heinaman and H. Brian Halsall. His research interests include the development of an electrochemical immunosensor based on MECS technology and the use of scanning electrochemical microscopy for patterning and imaging biochemical surfaces. Among his recent awards are the Henry Eyring Research Fellowship (Utah) and the William V. Caruso Award and the Laws Fellowship (Cincinnati).

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### ECS Summer Fellowships

The Electrochemical Society is currently soliciting applications for the 2000 Society Summer Fellowships, which are given each year to assist a student in continuing his or her graduate work during the summer months in a field of interest to the Society. Each year the Society gives up to three such fellowships, worth \$4,000 each.

In order to be eligible for a Summer Fellowship, the individual must be a graduate student pursuing work between the degree of BS and PhD, in a college or university, and who will continue his or her studies after the summer period. A previous holder of a Summer Fellowship is eligible for reappointment.

Qualified graduate students are invited to apply for these fellowships.

Applicants must complete an application form and supply the following information: (1) a brief statement of educational objectives; (2) a brief statement of the thesis research problem, including objectives, work already accomplished, and work planned for the summer of 2000; (3) a transcript of undergraduate and graduate academic work; and (4) two letters of recommendation, one of which should be from the applicant's research advisor.

As it is the spirit of these awards that they be the sole sponsor of the summer graduate work, successful recipients of a fellowship must agree not to hold other appointments or other fellowships during the summer of 2000.

Application forms are available from the chairman of the fellowship award subcommittee, to whom completed applications and letters of recommendation should be sent: R. McCarley, Louisiana State University, Department of Chemistry, Laboratory of

Chemistry, Baton Rouge, LA 70803, tel: 504.388.3239, fax: 504.388.3458, e-mail: tunnel@unix1.sncc.lsu.edu.

The deadline for receipt of completed applications is January 1, 2000. Award winners will be announced on April 1, 2000.

In addition, SUBJECT TO APPROVAL, there will be five additional summer fellowships in 2000, each consisting of \$3,000, supported by the U.S. Department of Energy.

The purpose of these fellowships is to assist students in continuing graduate work during the summer months in such fields as energy-related aspects of electrochemical science and engineering as well as solid-state science and engineering, and shall involve the areas of batteries, fuel cells, photoelectrochemistry, photovoltaics, and electrochemical processes of materials aimed at reducing energy consumption.

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Qualifications, submission of information, and deadlines for these fellowships are the same as outlined above.



### **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 page 48, include a copy of the Meeting abstract, and 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 page 48, return it with a letter of recommendation from a faculty advisor, and a copy of the Meeting Abstract. ■

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