

2008 Oronzio de Nora Industrial Electrochemistry Fellowship Recipient



VIJAYASEKARAN BOOVARAGAVAN is the 2008 recipient of the Oronzio de Nora Industrial Electrochemistry Fellowship of ECS. This year's fellowship is the second time he has received this prestigious international award. (See his report on page 54 of the winter 2007 issue of *Interface*; his 2008 report will be published in an upcoming issue.)

Dr. Boovaragavan (Vijay) received his Master of Engineering degree in chemical engineering from Annamalai University, India in 2002 and his PhD in chemical engineering from the Central Electrochemical Research Institute (CECRI), India in 2005. He is involved in studying electrochemical processes, namely electro-organic synthesis, electrochemical power sources and electroplating using mathematical models, novel simulation schemes, and dynamic optimization procedures. He did his doctoral research under the supervision of Dr. Ahmed Basha, scientist and Dean of CECRI. It included the evaluation of an exact optimal control strategy for electrochemical reactors, successful development of a simple mathematical model for lead-acid batteries, and the formulation of a novel simulation scheme for elucidating tertiary current distribution in electrochemical cells for different geometries. He was a Junior and Senior Research Fellow at the Council for Scientific and Industrial Research (CSIR), India, which supported his entire doctoral research. He received the Young Scientist Award at CECRI twice in a row, for the years 2003 and 2004, for his outstanding research output. His work on dynamic optimization of electrochemical reactors recognized him internationally through the 2006 Oronzio de Nora foundation's young author award of the International Society of Electrochemistry.

In the spring of 2006, Vijay joined the research group of Venkat Subramanian in the Department of Chemical Engineering at Tennessee Technological University (TTU) in Cookeville, Tennessee as a postdoctoral associate. At TTU, he has coauthored six research articles focusing mainly on the development of a novel reformulated model for lithium-ion batteries that can predict the battery behavior in milliseconds. At TTU, he has helped three graduate students in their thesis and research, and has taught a course entitled Chemical Engineering Operations for undergraduates. He is currently working on modeling corrosion in electrodes, cycling/capacity-fade analysis of lithium-ion batteries using a reformulated real-time model, and overcoming the numerical and computational difficulties associated with different electrochemical models like impedance and fuel cell models. The successful development and implementation of an efficient reformulated model and computational scheme will help pave the way for using electrochemical power sources in niche applications such as hybrid vehicles, satellites, online control, and monitoring. He has 15 peer-reviewed journal publications, two book chapters, and 16 scientific presentations to his credit.

The Oronzio de Nora Industrial Electrochemistry Fellowship was established in 2003 to assist a postdoctoral scientist or engineer in the research of the field of industrial electrochemistry. The award, funded by the Oronzio de Nora Foundation, is in the amount of \$25,000 for one year, twice renewable based on successful research progress as judged by the award's committee.

2007 Young Author Award Winners

The Society is pleased to announce the recipients of the 2007 Norman Hackerman Young Author Awards. The awards are given annually for the two best papers published in the *Journal of The Electrochemical Society* (JES) by authors under 31 years of age. The awards were established in 1928 and renamed for Dr. Norman Hackerman, former Editor of JES. (**Ed. Note:** See the ECS Classics piece on Dr. Hackerman in the summer 2008 issue of *Interface*, p. 23.) The selection subcommittees were chaired by Randy Leising, Greatbatch, Inc., for the Electrochemical Science and Technology (ES&T) Subcommittee; and Mike Kelly, Sandia National Laboratory, for the Solid-State Science and Technology Subcommittee (SSS&T).



STEFFEN ECCARIUS was awarded the Young Author Award in the ES&T category for his paper, "On the Reliability of Measurements Including a Reference Electrode in DMFCs" (JES, Vol. 154, No. 8, p. B852).

Steffen Eccarius received his doctorate from the Universität Karlsruhe (TH), Germany in 2003. He majored in electrical engineering and information technology, and his thesis was entitled, "Electric Characterization of Coatings of Thermally Stressed Turbine Blades. He was the winner of the Jean-Raebel-Stiftung grant. From October 2001 to March 2002, he was an intern at Bosch Automotive Systems Corp. in Tokyo, Japan.

From February 2004 to December 2007, Dr. Eccarius was a research assistant at the Fraunhofer Institute for Solar Energy Systems ISE in Freiburg, Germany. He was a research associate at the University of South Carolina in Columbia, USA (January-April 2006), and focused on experimental validation of a crossover model in DMFC applications. Since May 2008 he has been an associate at McKinsey & Company.



A. T. J. ("TON") VAN NIFTRIK was awarded the Young Author Award in the SSS&T category, for the paper, "A Diffusion and Reaction Related Model of the Epitaxial Lift-Off Process" (JES, Vol. 154, No. 11, p. D629). van Niftrik received a combined BS and MSc in chemistry from Radboud Universiteit, in Nijmegen, The Netherlands in 2001. He also received a combined BS and MSc in natural science (physico-chemical cluster) from the same university that year. His

master's research paper was entitled, "Polymorphic Phase Behavior of the Océ Transport Molecule," and was completed in the solid state chemistry research group of the Radboud Universiteit (Nijmegen) and at Océ Technologies B.V. in Venlo. His supervisors were E. Vlieg, H. Meeke, and E. Smit.

From 2002 to 2003, he was a product engineer/project leader for Philips Lighting B.V. in Roosendaal. From 2003 to 2007 he did his PhD research in the applied materials science research group at the Institute for Molecules and Materials at Radboud Universiteit (Nijmegen). His thesis was entitled, "The Epitaxial Lift-off Method: III-V Materials and HF Etch Process Studies." His supervisors were P. K. Larsen and J. J. Schermer.

Since 2007, Dr. van Niftrik has been working in applications business support engineer imaging for ASML Netherlands B.V. in Veldhoven, The Netherlands.

ECS Society Awards



The **VITTORIO DE NORA AWARD** was established in 1971 for contributions to the field of electrochemical engineering and technology; and consists of a gold medal, wall plaque, and prize of \$7,500. The next award will be presented at the ECS spring meeting in Vancouver, Canada, April 25-30, 2010.

Nominations and supporting documents should be sent to James Fenton, University of Central Florida, 1679 Clearlake Rd., Florida Solar Energy Center, Cocoa, FL 32922-5703, USA; tel: 321.638.1002; e-mail: jfenton@fsec.ucf.edu. **Materials are due by May 1, 2009.**



The **HENRY B. LINFORD AWARD FOR DISTINGUISHED TEACHING** was established in 1981 for excellence in teaching in subject areas of interest to the Society; and consists of a silver medal, wall plaque, and prize of \$2,500. The next award will be presented at the ECS spring meeting in Vancouver, Canada, April 25-30, 2010.

Nominations and supporting documents should be sent to Peter Hesketh, Georgia Technical University, School of Mechanical Engineering, 801 Ferst Drive, Atlanta, Georgia 30332-0405, USA; tel: 404.385.1358; e-mail: peter.hesketh@me.gatech.edu. **Materials are due by May 1, 2009.**



The award of **FELLOW OF THE ELECTROCHEMICAL SOCIETY** was established in 1989 for individual contribution and leadership in the achievement of science and technology in the area of electrochemistry and solid-state sciences and current active participation of the affairs of ECS, and consists of a scroll, lapel pin, and announcement in a Society publication. The next Fellows will be presented at the ECS fall meeting in Vienna, Austria October 4-9, 2009.

Nominations and supporting documents should be sent to Andrez Wieckowski, University of Illinois-Chem/RAL 58B Box 56-5, 600 S Mathews Ave., Urbana, IL 61801-3602, USA; e-mail: andrzej@scs.uiuc.edu. **Materials are due by January 15, 2009.**



The **ORONZIO DE NORA INDUSTRIAL ELECTROCHEMISTRY FELLOWSHIP OF THE ELECTROCHEMICAL SOCIETY** was established in 2003 to assist a postdoctoral scientist or engineer in the research of the field of industrial electrochemistry, and consists of a \$25,000 scholarship for one year, twice renewable based on successful research progress as judged by the award's committee. The next award will be announced April 1, 2009.

Nominations and supporting documents should be sent to Albert L. Barnes, Eltech Systems Corp., 625 East Street, Fairport Harbor, OH 44077-5668, USA; e-mail: al.barnes@denora.com. **Materials are due by January 1, 2009.**

call for nominations

For details on each award, including a 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. This will take you to a general page that will then lead to the individual awards. The awards are grouped in one of four categories: Society Awards, ECS Division Awards, Student Awards, and ECS Section Awards. Click on one of these sub-links to find the individual award. Please see each 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. For student awards, please see the Student News Section in this issue.

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

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the society for solid-state and electrochemical science and technology

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AWARDS

ECS Division Awards



The **RESEARCH AWARD OF THE BATTERY DIVISION** was established in 1958 to recognize outstanding

contributions to the science and technology of primary and secondary cells and batteries and fuel cells. The award consists of a scroll, a prize of \$1,000, and membership in the Battery Division for as long as the winner is a Society member. The next award will be presented at the ECS fall meeting in Vienna, Austria, October 4-9, 2009.

Nominations and supporting documents should be sent to Stanley Whittingham, SUNY at Binghamton, Dept. of Chemistry and Materials Center, Binghamton, NY 13902, USA; tel. 607.777.4623, e-mail: stanwhit@binghamton.edu. **Materials are due by March 15, 2009.**



The **TECHNOLOGY AWARD OF THE BATTERY DIVISION** was established in 1993 to encourage the development of battery and fuel cell technology.

The award consists of a scroll, prize of \$1,000 and membership in the Battery Division for as long as the winner is a Society member. The next award will be presented at the ECS fall meeting in Vienna, Austria, October 4-9, 2009.

Nominations and supporting documents should be sent to Martin Winter, Graz University of Technology, Institute for Chemistry and Technology, Stremayrgasse 16, A8010 Graz, Austria, e-mail: martin.winter@tugraz. **Materials are due by March 15, 2009.**



The **H. H. UHLIG AWARD OF THE CORROSION DIVISION** was established in 1972 to recognize excellence in

corrosion research and outstanding technical contributions to the field of corrosion science, and consists of a scroll, prize of \$1,500, and travel assistance to the meeting in which the award is presented (if required). The next award will be presented at the ECS fall meeting in Vienna, Austria, October 4-9, 2009.

Nominations and supporting documents should be sent to Gerald Frankel, Ohio State University, 477 Watts Hall 2041 North College Road, Columbus, Ohio 43210-1124, USA; e-mail: frankel10@osu.edu. **Materials are due by December 15, 2009.**



The **SES RESEARCH YOUNG INVESTIGATOR AWARD OF THE FULLERENES NANOTUBES, AND CARBON NANOSTRUCTURES**

DIVISION was established in 2007 to encourage young promising researchers in their early career to remain active in the field of fullerenes nanotubes, and carbon nanostructures. The first award will be presented at the spring meeting in San Francisco, CA, May 24-29, 2009.

Nominations and supporting documents should be sent to, Prashant Kamat, University of Notre Dame, Radiation Laboratory, Notre Dame, IN 46556-0579, USA; tel: 574.631.5411; e-mail: pkamat@nd.edu. **Materials are due by September 1, 2008.**



The **J. B. WAGNER, JR. AWARD OF THE HIGH TEMPERATURE MATERIALS**

DIVISION was established in 1998 to recognize a young member of the Society who has demonstrated exceptional promise for a successful career in science and technology in the field of high temperature materials. The award consists of a scroll, a prize of \$1,000, and travel assistance (if needed) to the meeting where the award presentation will take place. The next award will be presented at the ECS fall meeting in Vienna, Austria, October 4-9, 2009.

Nominations and supporting documents should be sent to Enrico Traversa, University di Roma "Tor Vergata," Via della Ricerca Scientifica, Roma, Italy I-00133; tel: 39.672.594492; e-mail: traversa@uniroma2.it. **Materials are due by January 1, 2009.**



The **MANUEL M. BAIZER AWARD OF THE ORGANIC AND BIOLOGICAL ELECTROCHEMISTRY**

DIVISION was established in 1992 for outstanding scientific achievements in the electrochemistry of organics. The award consists of a scroll, a prize of \$1,000, and travel assistance (if needed) to the meeting where the award presentation will take place. The next award will be presented at the ECS spring meeting in Vancouver, Canada, April 25-30, 2010.

Nominations and supporting documents should be sent to Albert J. Frey, Wesleyan University, Chemistry Department, Lawn Avenue, Middletown, CT 06459, USA; tel: 860.685.2622; e-mail: afry@wesleyan.edu. **Materials are due by January 15, 2009.**