

## ECS 2007 Summer Fellowship Winners

Each year ECS gives up to four Summer Fellowships to assist students in continuing their graduate work during the summer months in a field of interest to the Society. Congratulations to the following 2007 Summer Fellowship recipients. The reports of the 2007 Summer Fellows will appear in the winter issue of *Interface*.



**PRABEER BARPANDA** is the recipient of the ECS Colin Garfield Fink Summer Fellowship. He is a third year graduate student working in the energy storage research group (ESRG) of Rutgers University, headed by Prof. Glenn G. Amatucci. His research interests include the electrochemistry of supercapacitors, micromagnetic simulation, and inorganic materials synthesis. Prabeer received his BS in ceramic engineering

from NIT, Rourkela, India in 2002. After one year's work at the Indian Institute of Science, he won the Shell-Chevening Commonwealth Fellowship (2003) to pursue an MPhil degree at Cambridge University, UK. He has been pursuing his PhD study since the spring of 2005, conducting research on halide modified activated carbons for supercapacitor applications. Among others, he has won an ECS Semizone fellowship (2005) and a Ceradyne international award (2006). To date, Prabeer has authored eleven journal publications.



**ALEX G. GÜELL** is the recipient of the ECS E. G. Weston Summer Fellowship. He obtained his degree in chemistry from the University of Barcelona, specializing mainly in physical chemistry and secondarily in the field of materials science and analytical chemistry. Subsequently, he obtained a second degree, in chemical engineering, from the same university. He simultaneously earned his PhD working in the Bioelectrochemistry & Nanotechnology

Group led by Prof. Fausto Sanz, in the Physical Chemistry Department, at the University of Barcelona. Dr. Güell's first steps in research started at Montanuniversität Leoben, Austria, as an undergraduate student, thanks to a Socrates-Erasmus fellowship, where he studied the behavior of copper substrates in corrosive environments. As a graduate in chemistry, he has been focused on the chemical and electrochemical functionalization of silicon substrates for applications in electronics, molecular sensing, and silicon photovoltaics, in cooperation with the Hahn Meitner Institut in Berlin, Germany. His current research, in collaboration with Prof. Reg M. Penner at the University of California Irvine, is the synthesis of nanowires electrochemically by the use of well defined substrates as templates. To complement this work, his final degree project in chemical engineering is devoted to the design and development of new strategies in nanoparticles synthesis and their applications in biological systems. He has been awarded several fellowships and grants, from different agencies, including the European Community, the Spanish Ministry of Science and Technology, and the Catalan Government Research Council.



**SADAGOPAN KRISHNAN** is the recipient of ECS J. W. Richards Summer Fellowship. He received his BS in chemistry from Manonmanium Sundaranar University, India in 1998 and his MS in chemistry in 2000 from Madurai Kamaraj University, India. He graduated with distinctions in both BS and MS, and received a Gold Medal for ranking first in the Master's program. Immediately after his Master's, he worked as a chemist in Asian Paints (India) Ltd. for few months; he

then accepted a Fellowship from Naval Materials Research Laboratory, Mumbai, India, to work on the synthesis and characterization of non-linear optical and liquid crystalline polymers (2001-2002). Following this, he became a Scientific Officer at Tata Institute of Fundamental Research, Mumbai, one of the premier research institutes in India, and worked on proteomics, protein-structure function relationship studies, and polydiacetylene-protein thin films for sensor applications (2002-2005). In the fall of 2005, he became a PhD candidate under the direction of Prof. James F. Rusling at the Dept. of Chemistry, University of Connecticut, U.S. His current research goals are developing electrochemical and electrochemiluminescent sensors for genotoxicity screening, and thin film voltammetry studies of metabolic enzymes. He may be reached at gopankris@gmail.com.



**MICHAEL ORTHNER** is the recipient of the ECS F. M. Becket Summer Fellowship. He received his BS degree with honors in materials science and engineering from the University of Utah in 2003. His undergraduate research focused on developing CMOS (complementary metal oxide semiconductor) based micro chemical sensors used to detect heavy metals in solution. In January of 2004, he joined Florian Solzbacher's micro-systems research group at the University

of Utah, where he began his graduate work developing a low pressure chemical vapor deposition (LPCVD) system for the epitaxial growth of 3C-SiC on Si. He graduated with his MS in materials science and engineering in 2006. Presently, he is a doctoral candidate in electrical engineering focusing his research on SiC materials development and MEMS (micro-electro-mechanical systems) design. He is continuously optimizing the growth conditions used to grow the SiC films and currently modeling a SiC based micro pressure sensor array used for biological applications.

### 2007 SUMMER FELLOWSHIP COMMITTEE

**Vimal Desai**, *Chair*

New Mexico State University

**Enrico Traversa**

University of Rome "Tor Vergata"

**Kalpathy Sundaram**

University of Central Florida

**Scott Lillard**

Los Alamos National Laboratory

## Award Winners



**Magnus Johnson  
Receives ECS  
Corrosion Division  
Morris Cohen Award**



MAGNUS JOHNSON obtained his MSc degree in chemistry in 2000 from the Royal Institute of Technology (KTH) in Stockholm, Sweden. During these studies he was an exchange student at Iowa State University (U.S., 1998-1999) and he performed his master's thesis work in the field of IR and Raman spectroscopy of water at UC Berkeley (U.S., 1999-2000) with Professor R. Saykally. In 2000, he started his PhD studies in the division of corrosion science at KTH, supervised by Prof. Christofer Leygraf. The main goal of the research project was to obtain a better understanding of the roles of the solid/liquid and liquid/vapor interfaces involved in a corrosion process. A very important part of the studies involved the establishment of the surface sensitive laser spectroscopy technique "vibrational sum frequency spectroscopy (VSFS)" at KTH. During his PhD studies he spent some months as a visiting researcher at the Catalysis Research Center at Hokkaido University (Japan, 2004), in the group of Prof. M. Osawa and Prof. S. Ye. After obtaining his doctoral degree in 2005, Magnus Johnson received a Humboldt postdoctoral fellowship to continue his VSFS studies in the group of Prof. J. Spatz and Dr. S. Roke at the Max Planck Institute for Metals Research in Germany. In 2007 he obtained a position as an assistant professor in the division of surface chemistry at KTH, with his research focused on the fields of linear and nonlinear spectroscopy. The same year he received the Ingvar Carlsson Award. Magnus Johnson is the author or coauthor of approximately 15 scientific papers.



**Feng Jiao  
Receives ECS  
Battery Division  
Student Research Award**



FENG JIAO studied chemistry at Fudan University (China) and obtained his BS in 2001. He then spent a year working on heterogeneous catalysis as a research assistant at Fudan University. After working at University of St. Andrews (UK) as a visiting scientist (October 2003), he started his PhD studies on nanomaterials for energy storage and conversion under Prof. Peter G. Bruce's supervision in 2004 and will graduate this winter. His research activities include not only synthesis and characterization of nanomaterials (e.g. mesoporous materials), but also their potential applications with a focus on uses as electrodes in Li-ion batteries. He has already published seven journal papers in *J. Am. Chem. Soc.*, *Angew. Chem. Int. Ed.*, and *Adv. Mater.* He is also interested in fuel cells, solar cells, and magnetic materials. Recently, he was awarded the 2006 Chinese Government Award for Outstanding Self-financed Student Abroad.

For details on each award—including a list of requirements for award nominees, and in some cases, a downloadable application form—please go to the ECS website ([www.electrochem.org](http://www.electrochem.org)) and click on the "Awards" link. Awards are grouped in the following sub-categories: Society Awards, ECS Division Awards, Student Awards, and ECS Section Awards. Please see the individual award call for information about where nomination materials should be sent; or contact ECS headquarters.



**THE ELECTROCHEMICAL SOCIETY SUMMER FELLOWSHIPS** were established in 1928 to assist students during the summer months in pursuit of work in the field of interest to ECS. Each fellowship is in the amount of \$5,000. The next fellowships will be presented in 2008.

Nominations and supporting documents should be sent to Vimal H. Desai, New Mexico State University, Office of the VP for Research, MSC 3RES - Box 30001, Las Cruces, NM 88033-8001, USA, e-mail: [vimalc@nmsu.edu](mailto:vimalc@nmsu.edu). **Materials are due by January 1, 2008.**



**THE STUDENT RESEARCH AWARD OF THE BATTERY DIVISION** was established in 1962 to recognize promising young engineers and scientists in the field of electrochemical power sources and consists of a scroll, a prize of \$1,000 and membership in the Battery Division as long as a Society member. The next award will be presented at the ECS fall meeting in Honolulu, Hawaii October 12-17, 2008.

Nominations and supporting documents should be sent to Robert Kostecki, Lawrence Berkeley National Laboratory, 1 Cyclotron Rd #62-203, Berkeley, CA 94720-8028, USA; tel. 510.486.6002, e-mail: [r\\_kostecki@lbl.gov](mailto:r_kostecki@lbl.gov). **Materials are due by March 15, 2008.**



**THE MORRIS COHEN GRADUATE STUDENT AWARD OF THE CORROSION DIVISION** was established in 1991 to recognize outstanding graduate research in the field of corrosion science and/or engineering. The award consists of a scroll, a prize of \$1,000 and travel assistance to the meeting where the award will be presented (up to \$1,000). The next award will be presented at the ECS fall meeting in Honolulu, Hawaii, October 12-17, 2008.

Nominations and supporting documents should be sent to Shinji Fujimoto, Osaka University Department MSP, 2-1 Yamada-oka, Suita, Osaka 565-0871 Japan, e-mail: [fujimoto@mat.eng.osaka-u.ac.jp](mailto:fujimoto@mat.eng.osaka-u.ac.jp). **Materials are due by December 15, 2007.**

**THE STUDENT AWARD OF THE CANADIAN SECTION** was established in 1987 for a student pursuing, at a Canadian University, an advanced degree in any area of science or engineering in which electrochemistry is the central consideration, and consists of an amount determined by the Executive Committee of the Canadian Section not to exceed \$1,500. The next award will be presented at an upcoming section meeting.

Nominations and supporting documents should be sent to James J. Noel, University of Western Ontario, RR #1, Grand Bend, ON, N0M 1T0, Canada; tel. 519.661.2111, e-mail: [jjnoel@uwo.ca](mailto:jjnoel@uwo.ca). **Materials are due by February 28, 2008.**

Call for nominations

VISIT [WWW.ELECTROCHEM.ORG](http://WWW.ELECTROCHEM.ORG) AND  
CLICK ON "AWARDS" LINK.

## Student Travel Grants

Several of the Society's Divisions offer travel assistance to students presenting papers at ECS meetings. For details about travel grants for the spring 2008 meeting in Phoenix, AZ, visit the ECS website: [www.electrochem.org/students/travel\\_grants.htm](http://www.electrochem.org/students/travel_grants.htm). Please be sure to e-mail the student travel grant contact as each Division requires different materials for approval. The deadline for submission for the spring 2008 travel grants is December 17, 2007.

## 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: <https://www.electrochem.org/awards/applications/online/awardedmembership.asp>.

### Awarded Membership Application

ECS Divisions are offering Awarded Student Memberships to qualified fulltime students. To be eligible, students must be in their final two years of an undergraduate program or be 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, *Interface* online, and a CD-ROM of the *Journal and Letters*.

#### Personal Information

Name: \_\_\_\_\_ Date of Birth: \_\_\_\_\_  
 Home Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 Email: \_\_\_\_\_

#### Divisions (please select only one):

- Battery
- Corrosion
- Dielectric Science & Technology
- Electrodeposition
- Electronics and Photonics
- Energy Technology
- Fullerenes, Nanotubes, and Carbon Materials
- High Temperature Materials
- Industrial Electrochemistry & Electrochemical Engineering
- Luminescence & Display Materials
- Organic & Biological Electrochemistry
- Physical and Analytical Electrochemistry
- Sensor

#### School Information

School: \_\_\_\_\_  
 (please include Division and Department)  
 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 ever won this award before?    YES \_\_\_\_\_ NO \_\_\_\_\_ If yes, how many times? \_\_\_\_\_

#### Signatures

Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Faculty member attesting to eligibility of full time student:

Faculty Member: \_\_\_\_\_ Dept.: \_\_\_\_\_

E-mail Address: \_\_\_\_\_ Date: \_\_\_\_\_