

University of Maryland Chapter Visits Congress to Advocate for Stable Science R&D Funding

The ECS University of Maryland Student Chapter participated in the Science, Engineering, & Technology Congressional Visits Day (SET-CVD), which took place March 12-13, in Washington, DC. Ten student chapter members initiated meetings with Congress and staff members.

This visit by University of Maryland students to Capitol Hill continues a long tradition of ECS participation in the annual Congressional Visit Days. Senate and House leaders and staff like to hear about the needs and accomplishments of scientists, but even more so, they like to hear success stories from students. The ECS Maryland Student Chapter members carried a strong message to Washington: the ECS mission may be more relevant today than ever before. Much of the research domain of ECS centers on energy and sustainability, with the activities of the Society and its members focusing on the need for improved power sources, core materials, clean water technologies, and information technology. Many of the Society's research initiatives, including the ECS Electrochemical Energy Summit, the ECS Clean Water Technologies Symposium, and the upcoming Energy Water-Nexus Symposium (at the 224th ECS Meeting in San Francisco, October 2013), regularly bring scientists and policy makers together in a public forum to help further solutions to these worldwide challenges.

In preparation for their visit to SET-CVD, the students set up meetings with some of the most influential members of Congress on the Commerce, Science, & Transportation, the Energy & Natural Resources, and the relevant Appropriations committees to ensure that the ECS message was heard by members that can directly act on it. Chapter members had the opportunity to meet with legislators and staff from Maryland, as well as their home states, among them Senators Mark Udall (D-CO), Tom Harkin (D-IA), Chuck Grassley (R-IA), Elizabeth Warren (D-MA), Ben Cardin (D-MD), Barbara Mikulski (D-MD), and Pat Toomey (R-PA).

In addition to promoting the ECS mission, Student Chapter members discussed the benefits of the innovation ecosystem created through a combination of federal and private scientific research programs and the importance of stable and predictable federal funding, a timely issue after the Sequester that just went into effect and the looming spending cuts it entails. Additionally, the Chapter's faculty advisor, Eric Wachsman, stressed the importance of science and energy policy, and the potential impact of the UMD Chapter on keeping legislators informed of the benefits of electrochemical energy



ECS UMD Student Chapter members before meeting with Sen. BEN CARDIN (D-MD).



ECS UMD Student Chapter Members GREG HITZ (left), ALEX KOZEN (second from left), and ASHLEY LIDIE (far right) met with SEN. ELIZABETH WARREN (MA) (second from right) to discuss stability of science R&D funding.

technologies. Dr. Wachsman recently published an article entitled, "Role of Solid Oxide Fuel Cells in a Balanced Energy Strategy" in *Energy & Environmental Science*, and gave a number of energy policy oriented talks in DC region.

Roque Calvo, Executive Director of ECS; Betsy Houston of Federation of Materials Sciences; Dean Darryl Pines of UMD's Clark School of Engineering, and; Bob Boege, organizer of SET-CVD, were instrumental in guiding the students, however, the enthusiasm and commitment of the students to science prevailed. For all but one student, it was the first time that they had taken part in a congressional

visit, but all left with a newfound appreciation of the accessibility and willingness of the legislators and their staff to meet with constituents and to hear their concerns. Though brief, the meetings were a great opportunity to make contacts with legislators and their staff, and the UMD chapter members were able to offer assistance and information to congressional staff as well as grow their own network in the policy world.

Colin Gore, President of the UMD chapter, put it nicely when he said, "I know that though we don't yet have the clout to make any big changes in the minds of the staffers we talked to, we as a group left with a changed perspective

that will inform our positions and actions throughout the rest of our long careers in science and engineering. I'm glad that we were able to have this experience early on in our careers so that we have many decades to improve our relationship with our congressmen and women. I look forward to spreading this message to my peers at UMD, in ECS, and in the other professional spheres I go on to inhabit in the future.

For more information on participating on Science, Engineering, Technology Congressional Visits Day, visit setcvd.org. ■

Highlights from CSTIC 2013

ECSC and SEMI are pleased to announce that the annual China Semiconductor Technology International Conference (CSTIC 2013) successfully concluded on March 18, 2013 in Shanghai, China with over 260 speakers and more than 700 attendees from around the world. The successful conclusion of CSTIC 2013 marked another milestone of this annual international conference. With a focus on semiconductor technology and manufacturing, CSTIC promoted technical exchanges on the latest developments in semiconductor technology and manufacturing and facilitated investment and collaboration in the semiconductor industry in Asia, particularly China.

CSTIC 2013 covered all aspects of semiconductor technology and manufacturing, including circuit design, devices, lithography, integration, materials, processes, and manufacturing, as well as emerging semiconductor technologies and silicon material applications. Hot topics, such as 3D integration, LEDs, and MEMs, were also included in the conference. Ivar Giaever (Nobel Laureate and Professor of Rensselaer Polytechnic Institute), Ghavam Shahidi (IBM Fellow and Director of Silicon Technology at IBM Thomas J. Watson Research Center), and Peng Bai (Vice President, Technology and Manufacturing Group at Intel) delivered the keynote speeches at the conference plenary session. Over 130 other leading experts in semiconductor technology presented invited talks in the eleven parallel symposia.

Qinghuang Lin (IBM Thomas J. Watson Research Center), CSTIC 2013 Conference Chair, said "With the support of SEMI, ECS, and the dedicated volunteer service of more than 120 committee members, CSTIC has become an increasingly important and influential international conference on leading edge semiconductor technology and manufacturing." Among the 308 accepted papers, about half of them were from the U.S., Europe, Japan, and Korea, while the other half were from China.

CSTIC 2013 was organized jointly by ECS and SEMI. More than 150 CSTIC 2013 papers were published in *ECS Transactions* in



ECS Executive Director **ROQUE CALVO** (right) presented **TAO DENG** (left) with the Best Student Award at CSTIC 2013.

the ECS Digital Library after peer review by the conference committee members. Allen Lu (President of SEMI China) and D. Noel Buckley (Former President of ECS) gave opening speeches at the plenary session. ECS Executive Director Roque Calvo attended the conference.

CSTIC 2013 was co-organized by China's High-Tech Expert Committee (CHTEC) and co-sponsored by IEEE-EDS, MRS, CEMIA, and CSE. It was supported by Shanghai Pudong Association for Science & Technology, Shanghai Pudong New Area Science & Technology Development Fund. About 20

industry companies provided financial support for this industrial semiconductor technology conference.

The Best Student Award winner was Tao Deng, Tsinghua University, China and the Best Young Engineer Award winner was Yingying Bai of Shanghai Huali Microelectronics, China; the awards were presented at CSTIC 2013.

CSTIC 2014 is scheduled to be held March 16-17, 2014 in Shanghai, China. More information about CSTIC is available at www.semiconchina.org/cstic. ■

ECS Employee Retires after 34 Years of Service

ELLEN TIANO retired at the end of December after over 34 years of service to the Society. She had many important roles with ECS and became the longest serving employee in the Society's 111 year history.

Her career with ECS began on February 21, 1978 when she was hired as a part-time Accounting Clerk. In 1980, Ellen was promoted to the full-time position of Computer Operator, and held that position until the end of 1991. At that time, she was promoted again to Information Systems Manager and worked in that position until the end of 1994 when her responsibilities shifted

to a broader management role as Membership and Administration Manager. Ellen held this position until the end of 1999 when her title changed to Director of Membership and Administration. In 2004, Ellen resigned from full-time service and moved to Florida where she worked remotely on a part-time basis as Constituent Services Associate, through 2012.

ECS Executive Director Roque Calvo worked with Ellen Tiano for 30 years and had this to say about her retirement, "I've worked with Ellen for many years and in many different capacities, and she has always been a committed member of the staff

and a major contributor to the growth and development of ECS. She had a mastery of our software management systems that we may never find again, but more importantly she has been a friend whose quiet support has been invaluable to me during my years as Executive Director. Ellen provided ECS with many years of loyal service and made numerous important contributions. She will be missed by the ECS staff and many members. On behalf of the Society's Board of Directors I would like to thank her for all that she has done for ECS and offer her our best wishes in the future."



Tetsuya Osaka
President

Results of the 2013 Election of Officers and Slate of Officers for 2014

The ECS Tellers of Election have announced the results of the 2013 election of Society officers, with the following persons elected: President — Tetsuya Osaka, Waseda University; and Vice-President — Krishnan Rajeshwar, University of Texas at Arlington. The terms of Paul Kohl (Vice-President), Daniel Scherson (Vice-President), Hariklia Deligianni (Secretary), and Christina Bock (Treasurer) were unaffected by this election.

At the Board of Directors meeting in Toronto, ON, Canada on May 16, 2013, members of the Board voted to approve the slate of candidates recommended by the ECS Nominating Committee. The slate of candidates for the next election of ECS officers, to be held in January-March 2014, include: for President — Paul Kohl; for Vice-President (one to be elected) — Johna Leddy and Peter Fedkiw; and for Treasurer (one to be elected) — Enrico Traversa and E. J. Taylor. Full biographies and candidate statements will appear in the winter 2013 issue of *Interface*.



Krishnan Rajeshwar
Vice-President

See the Society's
ECS ANNUAL REPORT

starting on page 91 in this issue.

2012



New Division Officers

New officers for the 2013-2015 term have been elected for the following Divisions.



Electronics and Photonics Division

Chair

Andrew Hoff, University of South Florida

Vice-Chair

Mark Overberg, Sandia National Laboratories

2nd Vice-Chair

Edward Stokes, University of North Carolina

Secretary

Junichi Murota, Tohoku University

Treasurer

Fan Ren, University of Florida

Members-at-Large

Albert Baca, Sandia National Laboratories
 Helmut Baumgart, Old Dominion University
 D. Noel Buckley, University of Limerick
 George Celler, Rutgers University
 Cor Claeyss, IMEC
 Stefan De Gendt, IMEC
 M. Jamal Deen, McMaster University
 Manfred Engelhardt, Infineon Technologies AG
 Takeshi Hattori, Hattori Consulting International
 Hiroshi Iwai, Tokyo Institute of Technology
 Zia Karim, Aixtron Corporation
 Yue Kuo, Texas A&M University
 Qiliang Li, George Mason University
 Durgamadhab Misra, New Jersey Institute of Technology
 Suzuki Motofumi, Kyoto University
 Colm O'Dwyer, University Of Limerick
 Fred Roozeboom, Eindhoven University of Technology
 Jerzy Ruzyllo, Pennsylvania State University
 Krishna Shenai, Argonne National Laboratory
 Tadatomu Suga, University of Tokyo
 Ravi Todt, IBM Corp
 Yu-Lim Wang, National Tsing-Hua University



Energy Technology Division

The Energy Technology Division will hold its election in June, 2013. The results will be published in the fall issue of *Interface*.



Organic & Biological Electrochemistry Division

Chair

James Burgess, Case Western Reserve University

Vice-Chair

Mekki Bayachou, Cleveland State University

Secretary/Treasurer

Graham Cheek, US Naval Academy

Members-at-Large

David Cliffel, Vanderbilt University
 Danjun Fang, Nanjing Medical University
 Toshio Fuchigami, Tokyo Institute of Technology
 Chang Ji, Texas State University-San Marcos
 Donal Leech, National University of Ireland Galway
 Flavio Maran, University of Padova
 Michael Mirkin, CUNY, Queens College
 Kevin Moeller, Washington University (St. Louis)
 Ikuzo Nishiguchi, Nagaoka University of Technology
 James F. Rusling, University of Connecticut
 Richard West, Case Western Reserve University



Physical & Analytical Electrochemistry Division

Chair

Robert Mantz, Army Research Office

Vice-Chair

Pawel Kulesza, University of Warsaw

Secretary

Andrew Hillier, Iowa State University

Treasurer

Alanah Fitch, Loyola University

Members-at-Large

Plamen Atanassov, University of New Mexico
 Robert Calhoun, U.S. Naval Academy
 Wesley Henderson, North Carolina State University
 Gregory Jerkiewicz, Queen's University
 Nicolas Mano, CRPP, Centre de Recherche Paul Pascal
 Alice Suroviec, Berry College
 Petr Vanýsek, Northern Illinois University

2013-2014 ECS Committees

Executive Committee of the Board of Directors

Tetsuya Osaka, Chair	Spring 2014
Paul Kohl	Senior Vice-President, Spring 2014
Daniel Scherson	Second Vice-President, Spring 2015
Krishnan Rajeshwar	Third Vice-President, Spring 2016
Hariklia Deligianni	Secretary, Spring 2016
Christina Bock	Treasurer, Spring 2014

Board of Directors, Presidential Appointment

Stuart Swirson	Spring 2014
----------------	-------------

Audit Committee

Peter Fedkiw, Chair	Spring 2014
Petr Vanysek	Spring 2014
Paul Natishan	Spring 2015
William Eggers	Spring 2016
Stuart Swirson	Nonprofit Financial Professional, Spring 2014

Education Committee

Mark Orazem, Chair	Spring 2017
Vimal Chaitanya Desai	Spring 2014
Jeff Long	Spring 2014
Randy Leising	Spring 2015
Chris Applebitt	Spring 2015
Kalpathy Sundaram	Spring 2016
Jeffrey Kelber	Spring 2016
Douglas Hansen	Spring 2017
A. Robert Hillman	Spring 2017
Krishnan Rajeshwar	Third Vice-President, Spring 2014
Kevin Rhodes	Chair, Individual Membership Committee, Spring 2016

Ethical Standards Committee

Fernando Garzon, Chair	Immediate Past President, Spring 2014
Jan Talbot	Spring 2014
Johna Leddy	Spring 2015
William Brown	Spring 2016
Hariklia Deligianni	Secretary, Spring 2014

Finance Committee

Christina Bock, Chair	Treasurer, Spring 2014
Nancy Missert	Spring 2014
Elizabeth Opila	Spring 2014
Pete Peterson	Spring 2015
Plamen Atanassov	Spring 2015
Paul Kohl	Senior Vice-President, Spring 2014
Hariklia Deligianni	Secretary, Spring 2016

Honors and Awards Committee

Peter Pintau, Chair	Spring 2015
Ralph White	Spring 2014
D. Noel Buckley	Spring 2014
Francis D'Souza	Spring 2014
Kalpathy Sundaram	Spring 2015
Paul Natishan	Spring 2015
Joseph Stetter	Spring 2015
Jean St. Pierre	Spring 2016
Durga Misra	Spring 2016
Masayoshi Watanabe	Spring 2016
Enrico Traversa	Spring 2017
David Lockwood	Spring 2017
Vijay Ramani	Spring 2017
Tetsuya Osaka	President, Spring 2014

Individual Membership Committee

Kevin Rhodes, Chair	Spring 2016
Sri Narayan	Spring 2014
Robert Savinell	Spring 2014
David (Picheng) Huang	Spring 2015
Parag Banerjee	Spring 2015
Elizabeth Podlaha-Murphy	Spring 2016
Wataru Sugimoto	Spring 2016
Hariklia Deligianni	Secretary, Spring 2016

Nominating Committee

Fernando Garzon, Chair	Immediate Past President, Spring 2014
D. Noel Buckley	Spring 2014
Subash Singhal	Spring 2014
Dennis Hess	Spring 2014
Krishnan Rajeshwar	Third Vice-President, Spring 2014

Sponsorship Committee

E. Jennings Taylor, Chair	Spring 2016
Rob Sides	Spring 2014
Michael Kubicko	Spring 2014
Ana Londergan	Spring 2014
William Eggers	Spring 2015
William Brown	Spring 2015
Paul Trulove	Spring 2015
Bruno Scrosati	Spring 2016
Yukinari Kotani	Spring 2016
Soo-Gil Park	Spring 2016
Tetsuya Osaka	President, Spring 2014
Christina Bock	Treasurer, Spring 2014
Roque J. Calvo	ex officio-nonvoting, Term as Executive Director

Technical Affairs Committee

Paul Kohl, Chair	Senior Vice President, Spring 2014
Tetsuya Osaka	President, Spring 2014
Fernando Garzon	Immediate Past President, Spring 2014
Esther Takeuchi	2 nd Immediate Past President, Spring 2014
Krishnan Rajeshwar	Chair, Symposium Subcommittee, Spring 2014
Daniel Scherson	Chair, Publications Subcommittee, Spring 2014
Eric Wachsman	Chair, New Technology Subcommittee, Spring 2016

Tellers of Election

Robert Comizzoli, Chair	Spring 2014
Ronald Enstrom	Spring 2014
William Ayers	Spring 2014
Craig Arnold	Alternate, Spring 2014
James Amick	Alternate, Spring 2014
Norman Goldsmith	Alternate, Spring 2014

Ways and Means Committee

Hariklia Deligianni, Chair	Secretary, Spring 2016
Robert Glass	Spring 2014
Petr Vanysek	Spring 2014
Peter Fedkiw	Spring 2015
Adam Weber	Spring 2015
Paul Kohl	Senior Vice-President, Spring 2014
Daniel Scherson	Second Vice-President, Spring 2014

Development Subcommittee of the Sponsorship Committee

William Brown, Chair	Spring 2014
Bruno Scrosati	Spring 2014
E. Jennings Taylor	Chair, Sponsorship Committee, Spring 2014
Tetsuya Osaka	President, Spring 2014
Roque Calvo	Executive Director, Term as ED
Dan Fatton	Director of Development, Term as DD

New Technology Subcommittee of the Technical Affairs Committee

Eric Wachsman, Chair	High Temperature Materials Division, Spring 2016
Hariklia Deligianni	Electrodeposition Division, Spring 2014
Uwe Happek	Luminescence and Display Materials Division, Spring 2014
Rick Wise	Electronics and Photonics Division, Spring 2014
Xiao-Dong Zhou	High Temperature Materials Division, Spring 2014
Ana Londergan	Dielectric Science and Technology Division, Spring 2015
Trung-Van Nguyen	Industrial Electrochemistry and Electrochemical Engineering Division, Spring 2015
Michael Carter	Sensor Division, Spring 2015
Shelley Minter	Physical and Analytical Electrochemistry Division, Spring 2015
Arumugam Manthiram	Battery Division, Spring 2016
Patrik Schmuki	Corrosion Division, Spring 2016
Isao Taniguchi	Organic and Biological Electrochemistry Division, Spring 2016
Phaedon Avouris	Fullerenes, Nanotubes, and Carbon Nanostructures Division, Spring 2016

Publications Subcommittee

Daniel Scherson, Chair	Second Vice-President, Spring 2014
Mary E. Yess	Publisher, Term as Pub
Robert Savinell	EST Board Chair, 5/17/2017
Dennis W. Hess	SSST Board Chair, 12/31/2016
Krishnan Rajeshwar	Interface Editor, 12/31/2013
Jeffrey Fergus	ECS Transactions Editor, 12/31/2014
Subhash Singhal	Spring 2014
Johna Leddy	Spring 2014
Hubert Gasteliger	Spring 2015
James Fenton	Spring 2015
Hariklia Deligianni	Secretary, Spring 2016

Symposium Subcommittee

Krishnan Rajeshwar, Chair	Third Vice-President, Spring 2014
Bor Yann Liaw	Chair, Battery Division, Fall 2014
Shinji Fujimoto	Chair, Corrosion Division, Fall 2014
Dana Leonte	Chair, Dielectric Science and Technology Division, Spring 2014
Giovanni Zangari	Chair, Electrodeposition Division, Fall 2013
Andrew Hoff	Chair, Electronics and Photonics Division, Spring 2015
Adam Weber	Chair, Energy Technology Division, Spring 2015
Bruce Weisman	Chair, Fullerenes, Nanotubes, and Carbon Nanostructures Division, Spring 2014
Jeffrey Fergus	Chair, High Temperature Materials Division, Fall 2013
Gerardine Botte	Chair, Industrial Electrochemistry and Electrochemical Engineering Division, Spring 2014
John Collins	Chair, Luminescence and Display Materials Division, Fall 2013
James Burgess	Chair, Organic and Biological Electrochemistry Division, Spring 2015
Rob Mantz	Chair, Physical and Analytical Electrochemistry Division, Spring 2015
Michael Carter	Chair, Sensor Division, Fall 2014
Eric Wachsman	Chair, New Technology Subcommittee, Spring 2016

Society Historian

Zoltan Nagy	Spring 2016
-------------	-------------

Representatives to Other Societies

American Association for the Advancement of Science	Term as Executive Director
Roque J. Calvo	Term as Executive Director
Chemical Heritage Foundation	
Kathryn R. Bullock	Heritage Councilor, Spring 2014
Federation of Materials Societies	
Petr Vanysek	Trustee, Spring 2014
Roque J. Calvo	Advisory Board, Term as Executive Director

National Inventors Hall of Fame

Peter Pintau	Chair, Honors & Awards Committee, Spring 2015
--------------	---

ECS Division Contacts



Battery

Bor Yann Liaw, Chair
University of Hawaii at Manoa
 bliaw@hawaii.edu • 808.956.2339 (U.S.)

Robert Kostecki, Vice-Chair
 Christopher Johnson, Secretary

Marca Doeff, Treasurer



Corrosion

Shinji Fujimoto, Chair
Osaka University
 fujimoto@mat.eng.osaka-u.ac.jp • 81.6.6879.7469 (Japan)

Rudolph Buchheit, Vice-Chair
 Barbara A. Shaw, Secretary/Treasurer



Dielectric Science and Technology

Oana Leonte, Chair
Berkeley Polymer Technology
 odleonte@comcast.net • 510.537.9413 (U.S.)

Dolf Landheer, Vice-Chair
 Peter Mascher, Secretary

Yaw Obeng, Treasurer



Electrodeposition

Giovanni Zangari, Chair
University of Virginia
 gz3e@virginia.edu • 434.243.5474 (U.S.)

Elizabeth Podlaha-Murphy, Vice-Chair
 Stanko Brankovic, Secretary

Philippe Vereecken, Treasurer



Electronics and Photonics

Andrew Hoff, Chair
University of South Florida
 hoff@usf.edu • 813.974.4958 (U.S.)

Mark Overberg, Vice-Chair
 Edward Stokes, 2nd Vice-Chair

Junichi Murota, Secretary
 Fan Ren, Treasurer



Energy Technology

Jean St-Pierre, Chair
University of Hawaii at Manoa
 jsp7@hawaii.edu • 808.956.3909 (U.S.)

Jeremy Meyers, Vice-Chair
 Adam Weber, Secretary

Scott Calabrese Barton, Treasurer



Fullerenes, Nanotubes, and Carbon Nanostructures

Bruce Weisman, Chair
Rice University
 weisman@rice.edu • 713.348.3709 (U.S.)

Luis Echegoyen, Vice-Chair
 Slava V. Rotkin, Secretary

Dirk Guldi, Treasurer



High Temperature Materials

Jeffrey Fergus, Chair
Auburn University
 jwfergus@eng.auburn.edu • 334.844.3405 (U.S.)

Timothy Armstrong, Sr. Vice-Chair
 Xiao-Dong Zhou, Jr. Vice-Chair

Gregory Jackson, Secretary/Treasurer



Industrial Electrochemistry and Electrochemical Engineering

Gerardine Botte, Chair
Ohio University
 botte@ohio.edu • 740.593.9670 (U.S.)

Venkat Subramanian, Vice-Chair
 E. Jennings Taylor, Secretary/Treasurer



Luminescence and Display Materials

John Collins, Chair
Wheaton College
 jcollins@wheatonma.edu • 508.286.3976 (U.S.)

Baldassare Di Bartolo, Vice-Chair
 Anant A. Setlur, Secretary

Madis Raukas, Treasurer



Organic and Biological Electrochemistry

James Burgess, Chair
Case Western Reserve University
 jdb22@po.cwru.edu • 216.368.4490 (U.S.)

Mekki Bayachou, Vice-Chair
 Graham Cheek, Secretary/Treasurer



Physical and Analytical Electrochemistry

Robert Mantz, Chair
Army Research Office
 robert.a.mantz@us.army.mil • 919.549.4309 (U.S.)

Pawel Kulesza, Vice-Chair
 Andrew Hillier, Secretary

Alanah Fitch, Treasurer



Sensor

Michael Carter
KWJ Engineering
 mcarter58@earthlink.net • 510.405.5911 (U.S.)

Bryan Chin, Vice-Chair
 Nianqiang (Nick) Wu, Secretary

Ajit Khosla, Treasurer

ECS Co-sponsored Conferences for 2013

In addition to the regular ECS biannual meetings, ECS, its Divisions, and Sections co-sponsor meetings and symposia of interest to the technical audience ECS serves. The following is a list of the co-sponsored meetings for 2013. Please visit the ECS website for a list of all co-sponsored meetings.

- **13th International Symposium on Solid Oxide Fuel Cells (SOFC-XIII)**, October 6-11, 2013 — Okinawa, Japan
- **28th Symposium on Microelectronics Technology and Devices (SBMicro 2013)**, September 16-19, 2013 — Curitiba, Brazil (Sponsored by ECS Electronics & Photonics Division)
- **New Processes and Materials Based on Electrochemical Concepts at the Microscopic Level (MicroEchem 2013)**, September 16-19, 2013 — Querétaro, Mexico
- **64th Annual Meeting of the International Society of Electrochemistry**, September 8-13, 2013 — Santiago de Querétaro, Mexico
- **EuroCVD 19**, September 1-6, 2013 — Varna, Bulgaria
- **Electrochem 2013**, September 1-3, 2013 — Southampton, UK
- **4th International Conference on Semiconductor Technology for Ultra Large Scale Integrated Circuits**, July 7-12, 2013 — Villard-de-Lans, France (Sponsored by ECS Electronics & Photonics Division)
- **4th International Conference from Nanoparticles and Nanomaterials to Nanodevices and Nanosystems (IC4N)**, June 16-20, 2013 — Corfu, Greece

To learn more about what an ECS co-sponsorship could do for your conference, including information on publishing proceeding volumes for co-sponsored meetings, or to request an ECS co-sponsorship of your technical event, please contact ecs@electrochem.org.



224th ECS MEETING

San Francisco, CA

October 27–November 1, 2013
Hilton San Francisco



Mark your calendars NOW for the 224th ECS Meeting in San Francisco!

What you need to know ...

- The deadline for early-bird meeting registration is September 27, 2013.
- Reserve your stay at the Hilton San Francisco, the meeting headquarters hotel—Discount rates, starting at only \$179 are offered until September 27, 2013 *or until the block sells out*, whichever comes first.

ECS looks forward to MEETING you in San Francisco in October!

More meeting details: www.electrochem.org or e-mail meetings@electrochem.org

In the **NEXT** issue of **INTERFACE**

- The work of the members of the ECS **Fullerenes, Nanotubes, and Carbon Nanostructures Division** will be featured in the fall 2013 issue of *Interface*. Guest edited by **R. Bruce Weisman**, the issue on **New Frontiers in Nanocarbons** will feature a number of very interesting articles, including “The Revival of Fullerenes?” by **Nazario Martin**; “Carbon Onions and Their Electrochemical Applications,” by **John K. McDonough** and **Yury Gogotsi** of Drexel University; and “Discovering Properties of Nanocarbon Materials as a Pivot for Device Applications,” by **Slava V. Rotkin** and **Tetyana Ignatova**.
- The **224th ECS Meeting in San Francisco** is offering a full complement of technical presentations, networking events, special keynote talks, and other events. A highlight of the fall 2013 meeting will be the **Electrochemical Energy Summit (E2S)** featuring the **Water-Energy Nexus Symposium**. Also of interest is a special symposium in honor of **Adam Heller** on the occasion of his 80th birthday.
- **TECH HIGHLIGHTS** continues to provide readers with free access to some of the most interesting papers published in the ECS journals, including articles from the Society’s newest journals: *ECS Journal of Solid State Science and Technology*, *ECS Electrochemistry Letters*, and *ECS Solid State Letters*.
- Don’t miss the next edition of **WEBSITES OF NOTE** which will focus on all the ECS websites: the new ECS Digital Library, the ECS home site, and Redcat.



websites of note

by Zoltan Nagy

Nanoelectrochemistry: Metal Nanoparticles, Nanoelectrodes, and Nanopores

A recent detailed review of nanoelectrochemistry: electrochemistry of metal nanoparticles; voltammetry of solutions of isolatable nanoparticles; electrochemistry of films of nanoparticles; electrochemistry at nanoscopic electrodes; and electrochemistry at single nanopores.

- R. W. Murray (UNC at Chapel Hill)
- [http://mccarley.chemistry.lsu.edu/Chemistry7750/F2009/Nanoelectrochemistry%20-%20Metal%20Nanoparticles%20Nanoelectrodes%20and%20Nanopores%20\(Royce%20W%20Murray\).pdf](http://mccarley.chemistry.lsu.edu/Chemistry7750/F2009/Nanoelectrochemistry%20-%20Metal%20Nanoparticles%20Nanoelectrodes%20and%20Nanopores%20(Royce%20W%20Murray).pdf)

Electron Transfer in Functionalized Fullerenes

A considerable amount of work concerning systems in which C₆₀ is an electron acceptor has been published. The fundamental principles behind fullerene donor-acceptor systems are revisited and the experimental methods available for the study of these systems is presented. Potential applications of photoinduced electron transfer systems. Intermolecular charge transfer complexes involving fullerenes.

- P. J. Bracher and D. I. Schuster (New York U.)
- <http://www.paulbracher.com/laboratory/pubs/pub0001.pdf>

Electrochemistry of Carbon Nanotube Composite Electrodes

A new type of composite electrode based on the combination of carbon nanotubes and sol-gel technology is reported. This approach combines the advantages of sol-gel based ceramic materials with the favorable electrochemistry of carbon nanotubes. The characteristics of the designed electrodes are controlled by altering the nature (in terms of methyl, ethyl or propyl-derived silane precursor) or the amount of the sol used. The composite electrodes exhibit well-defined electrochemical properties with superior characteristics compare to other carbon based composite electrodes.

- L. G. Bachas (U. of Kentucky)
- http://acs.omnibooksonline.com/data/papers/2001_18.5.pdf

About the Author

ZOLTAN NAGY is a semi-retired electrochemist. After 15 years in a variety of electrochemical industrial research, he spent 30 years at Argonne National Laboratory carrying out research on electrode kinetics and surface electrochemistry. Presently he is at the Chemistry Department of the University of North Carolina at Chapel Hill. He welcomes suggestions for entries; send them to nagy@email.unc.edu.

Have you moved or are you planning to move?

Please take a moment to fill out this form with your updated contact information and return it to ECS.

(The Electrochemical Society, 65 South Main Street, Building D, Pennington, NJ, 08534-2839, USA)

(Please print clearly)

Name _____ Membership No. _____

Old address

Organization _____

Address _____

City _____

State/Province _____

Postal Code _____

Country _____

E-Mail _____

New address

Organization _____

Address _____

City _____

State/Province _____

Postal Code _____

Country _____

E-Mail _____

Phone _____

Fax _____