

Accessing ECS Content and Services Online

by Annie Goedkoop



Although it may appear to be one seamless website, there are significant differences between various parts of ECS online. In terms of accessing restricted content or services, the most significant difference is the authentication procedure or mechanism used for granting access. An authentication mechanism is the way an identity is checked to confirm the source of the request and to guarantee security in online transactions. A single sign-on system will be coming in the future; but in the meantime, as an aid to our members, a brief overview of the various sites and their access control is provided here.

The following online services are accessed by an individual ECS member with the same username and password:

- renew membership in ECS
- verify/update membership information
- access the ECS Member Directory
- purchase publications in the ECS Bookstore
- register for a meeting or event

For any of the above actions, it's important to remember that the username for ECS members is always their e-mail address on record. The default password is the member's last name (all lowercase, no spaces, and no accents or apostrophes); however members are allowed to change their password.

ECS members may access the ECS Career Center for information about positions available or to post resumes. The username for this site is the member's 6-digit member number. The password is the member's last name.

ECS members create their own usernames and passwords during the registration process for online access to the full content of the ECS Digital Library (DL). An ECS member must use his or her DL login to access their ECS Article Pack Report, which provides a record of downloaded articles. The ECS DL is hosted on AIP's Scitation platform, allowing some users to access the content with a Scitation login.

Meeting organizers are assigned usernames and passwords by ECS to access the online Meeting Abstracts Peer X-Press (PXP) site for the ECS or ECS-sponsored meeting at hand. Authors submitting meeting abstracts must create their own logins. Each meeting has its own website and users either must be assigned logins or create new logins for each new meeting. Whether logins to the abstract site are assigned or user-created, the same login information must be used to access the related *ECS Transactions* (ECST) PXP site for the meeting at hand. These two systems, Meeting Abstracts and ECST, share one database for each meeting.

The database for the PXP sites for the *Journal of The Electrochemical Society* (JES) and *Electrochemical and Solid-State Letters* (ESL) is also shared, however, it is not the same as that for Meeting Abstracts or ECST. The default username on the JES and ESL sites is the user's e-mail address on record, but that can be changed by the user. Passwords are created by the users.

Most of the sites above have links to retrieve forgotten or unknown passwords. For more information on logins, please contact ECS by e-mail at ecs@electrochem.org, or visit the following Web page: www.electrochem.org/dl/logins.htm.

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Division News

Division Officer Slates Announced

New officers for a 2010-2012 term have been nominated for the following Divisions. All election results will be reported in the winter 2010 issue of *Interface*.



Battery Division

Chair

Arumugam Manthiram, University of Texas

Vice-Chair

Bor Yann Liaw, University of Hawaii at Manoa

Secretary (one to be elected)

Daniel Doughty, Battery Safety Consulting Inc.

Robert Kostecki, Lawrence Berkeley

National Laboratory

Treasurer (one to be elected)

Marshall Smart, Jet Propulsion Laboratory

Christopher Johnson, Argonne National Laboratory

Members-at-large (four to be elected)

Jiguang (Jason) Zhang, Pacific Northwest Laboratory

Marina Yakovleva, FMC

Wesley Henderson, North Carolina State University

Stefano Passerini, Westfälische Wilhelm

Universität Muenster

Yoshiharu Uchimoto, Kyoto University

Marca Doeff, Lawrence Berkeley National Laboratory

Ying Shirley Meng, University of California,

San Diego

Stephen J Harris, General Motors R&D



Sensor Division

Chair

Zoraida Aguilar, Vegrandis, LLC

Vice-Chair

Michael Carter, Eltron Research & Development, Inc.

Secretary (one to be elected)

Bryan Chinn, Auburn University

Nick Wu, West Virginia University

Treasurer

The person not selected for Secretary will fill the office of Treasurer.

Members-at-Large (Up to twenty-nine to be elected)

Shekhar Bhansali, University of South Florida

Venkat Bhethanabotla, University of South Florida

Ying-Lan Chang, Agilent Laboratories

Sheikh Akbar, Ohio State University

Jay Grate, Pacific Northwest National Laboratory

Robert Hillman, University of Leicester

Tatsumi Ishihara, Kyushu University

Mira Josowicz, Georgia Institute of Technology

Christine Kranz, Georgia Institute of Technology

Vadim Lvovich, Lubrizol Corp.

Mike Sailor, University of California, San Diego

Aleksandr Simonian, Auburn University

Massood Tabib-Azar, Case Western Reserve University

Thomas Thundat, Oak Ridge National Laboratory

Norio Miura, University of Kyushu

Girish Kale, University of Leeds

William Buttner, Illinois Institute of Technology

Larry Nagahara, National Cancer Institute

Jerry Hu, Shanghai University

Christian Mutale, Alcoa Primary Metals

Rangachary Mukundan, Los Alamos National

Laboratory

Gary Hunter, NASA Glenn Research Center

Cindy Bruckner-Lea, Pacific Northwest National

Laboratory

Joe Stetter, SRI International

Peter Hesketh, Georgia Institute of Technology

Tony Ricco, Stanford University

Peter Vanýsek, Northern Illinois University

Nianqiang (Nick) Wu, West Virginia University

Bryan Chin, Auburn University



Corrosion Division

Chair

Doug Hansen, University of Dayton Research Institute

Vice-Chair

Shinji Fujimoto, Osaka University

Secretary/Treasurer

R. Scott Lillard, Los Alamos National Laboratory

Members-at-Large (one to be elected)

Neil McMurray, Swansea University

Kurt Hebert, Iowa State University

Highlights from ECS Sponsored Meetings

XXV Meeting of the Mexican Society of Electrochemistry and the 3rd Meeting of the ECS Mexican Section

The XXV Meeting of the Mexican Society of Electrochemistry (SMEQ) and the 3rd Meeting of the ECS Mexican Section was held in the colonial city of Zacatecas, Mexico from May 31 to June 4. These events were hosted by the Autonomous University of Zacatecas. During the opening ceremony Daniel A. Scherson, Director of the Ernest B. Yeager Center of Electrochemical Sciences from Case Western Reserve University, and Editor of the *Journal of The Electrochemical Society*, delivered the plenary lecture entitled, "Time and Space Resolved Dynamics at Single Crystal Metal-Electrolyte Interfaces," which was well received by the audience.

The meeting included a total of 232 works, including plenary and keynotes conferences, technical oral presentations, and a posters section. A great number of the participants were from Mexico, representing 22 Mexican institutions, including electrochemistry research centers, industries, and universities. In addition, there was extensive international participation with renowned electrochemists from different countries such as the U.S., Venezuela, Chile, England, Italy, Spain, and Colombia. Most of the topics covered in the event covered research areas currently developed in Mexico: electrochemical engineering, energy conversion and storage, corrosion and surface treatment, education in electrochemistry, electrodeposits, environmental electrochemistry, analytical electrochemistry, biomolecular electrochemistry, organic and nanoelectrochemistry, and natural products electrochemistry.

As a part of the traditional activities, there was a competition to award the best poster and thesis work for bachelor's, master's, and doctoral levels. At this meeting, the best poster was awarded to the doctoral candidate Cesia Ávila-González for the work entitled, "Use of Silica Nanotubes for the Storage of

Corrosion Inhibitors." The prize, sponsored by ECS, includes a registration fee for the 219th ECS meeting in Montréal, Canada, and travel support.

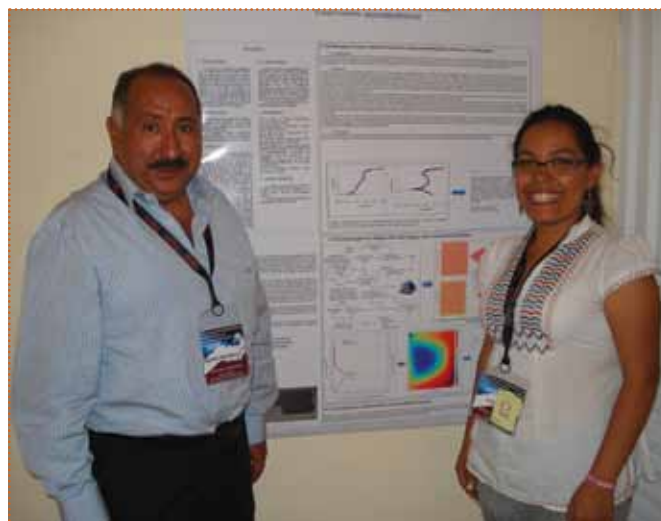
Technical activities of the meetings were accompanied by an attractive and profuse cultural and musical program. The closing ceremony was held on June 4. According to the number of participants registered for these meetings, it is evident that not only has the attendance for this meeting increased, but the level of scientific and academic quality has increased as well. Some of the papers will be published in *ECS Transactions*, which will be available soon from the ECS website. ■



Participants at the joint meeting of SMEQ and the ECS Mexican Section in June.



DANIEL A. SCHERSON, delivering the plenary lecture at the opening ceremony of the ECS-sponsored joint meeting of the Mexican Society of Electrochemistry (XXV) and the ECS Mexico Section (3rd).



CESIA AVILA (right), winner of the best student poster session award at the joint meeting of the SMEQ and the ECS Mexican Section. IGNACIO GONZALEZ (left), Chair of the ECS Mexican Section announced the award.

12th International Conference on Electrified Interfaces



Attendees of the 12th International Conference on Electrified Interfaces in June.

In late June of this year, Daniel Scherson (Case Western Reserve University) and John Stickney (University of Georgia) organized the highly successful 12th International Conference on Electrified Interfaces (ICEI2010) at Hobart and Williams Smith (HWS) Colleges, in Geneva, New York. Geneva is a charming small town conveniently located between Rochester, Syracuse, and Ithaca, New York, at the top end of Seneca Lake, one of the well known “finger lakes,” regarded as New York’s premier outdoor recreation paradise. Although centrally located, Geneva is fairly isolated providing the proper atmosphere for close interactions between speakers, faculty, and students.

The conference was co-sponsored by ECS, the International Society of Electrochemistry (ISE), The University of Georgia Department of Chemistry, and the Ernest B. Yeager Center for Electrochemical Sciences (YCES) at Case Western Reserve University. About 85 participants attended the meeting which highlighted, in addition to traditional topics, the timely areas of energy storage and energy conversion, including batteries, supercapacitors, fuel cells, and solar cells with heavy emphasis on science rather than technology. The ICEI series started in Snowmass in 1977 and has been held nearly every three years at sites around the world, including Logan, Utah; Telaviv; Berlin; Bologna; Asilomar; Harlech; Povoia de Varzim; Wolfville; Spa; Sahoro; and now Geneva NY.

Scenes from IMLB 2010

Sponsored by ECS, the 15th International Meeting on Lithium Batteries (IMLB 2010) was held in Montréal, Canada from June 27 to July 2. Attendees were able to choose from 842 oral and poster presentations on the state of lithium battery science and technology, as well as current and future applications in transportation, commercial, aerospace, biomedical, and other promising sectors.

The meeting was held in honor of John B. Goodenough. Since 1986, he has held a chair in the Materials Science and Engineering Center of the University of Texas at Austin where he has identified the LiFePO₄ cathode for the Li⁺-ion battery, developed new electrolyte and electrode materials for the solid oxide fuel cell, and contributed significantly to the understanding of the unusual physical phenomena encountered at the crossover from localized to itinerant electronic behavior.

The meeting featured a gala dinner with private performance by Cirque du Soleil, a Canadian entertainment company, based in Montréal, self-described as a “dramatic mix of circus arts and street entertainment.” The meeting also included tours of Hydro-Québec’s Research Institute for a visit to the High Voltage Lab and facilities devoted to research on battery materials: Dry Room, Nano Powder Room, and battery safety test installations. Attendees could also take advantage of an electric vehicle demonstration, and could try out production-ready or prototypes of electric cars on the Gilles-Villeneuve Formula One Circuit on Notre-Dame Island.



KARIM ZAGHIB, of IREQ, Hydro-Québec, Québec, Canada, was the Chair of the 15th International Meeting on Lithium Batteries.

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SOCIETY NEWS

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The international organizing and scientific committees was a virtual list of “who’s who” in the lithium battery field. Chaired by Karim Zaghib of IREQ, Hydro-Québec, Québec, Canada; co-chairs included Jeff Dahn, Dalhousie University, Nova Scotia, Canada; Linda F. Nazar, Waterloo University, Canada; Jiqiang Wang, Tianjin Institute of Power Sources; and Jung-Ki Park, Korea Advanced Institute of Science and Technology, Korea. ■

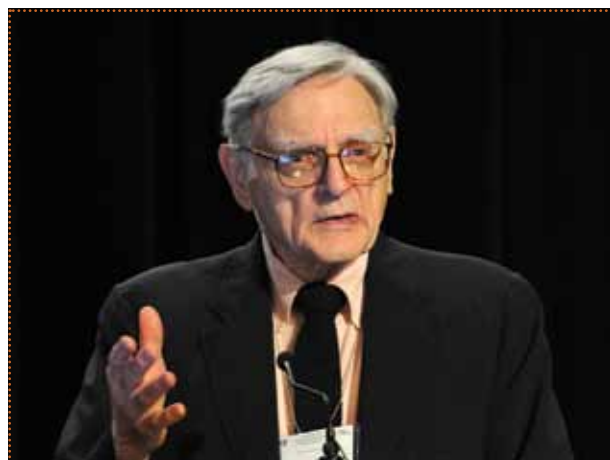
All photos by Normand Huberdeau.



THIERRY VANDAL, President/Director General of Hydro-Québec and Honorary Chair of the meeting, welcomed attendees to IMLB 2010.



A scene from the gala dinner, which included a private performance by Cirque du Soleil.



IMLB 2010 was held in honor of **JOHN B. GOODENOUGH** of the University of Texas at Austin.



A view of the poster session at IMLB 2010.



BRUNO SCROSATI, an Honorary Member of the international organizing committee, is a past President of ECS (2003-2004), founder of IMLB, and past Chair of IMLB (2000).



The audience at IMLB 2010.

Corporate Member News

Spotlight on



Greatbatch (www.greatbatch.com) has been a Corporate Member of ECS since 1985 and recently received a Gold Level award for their 25 years of membership.

For forty years, Greatbatch has maintained a reputation for exceptional innovation and reliability by providing top-quality technologies to industries that depend on consistent, long-lasting performance through its brands Greatbatch Medical and Electrochem.

The company is best known for its development of long-lived primary batteries to fuel the pacemaker. In 1972, the company's first battery, lithium iodine, was implanted in a patient. This technology remains the industry standard. Over the last 40 years, the company has developed many power technologies including the high-rate silver vanadium oxide (SVO) chemistry, a SVO/CFx combination in a novel, laminated-plate cathode design for both medium-rate, QMR[®] and high-rate QHR[®] applications, as well as QCAPS[™], a wet-tantalum high-voltage capacitor. These power sources are all specifically designed for cardiac rhythm management (CRM) and neuromodulation applications.

Between 2000 and 2009, the company grew through market expansion and diversification to begin developing and manufacturing active stimulation components, vascular access delivery systems and devices, orthopaedic implants, trays and cases, and wireless sensing solutions. In 2010, the company received its first 510(k) approval under Greatbatch Medical. This device, OptiSeal[™] Valved Peelable Introducer, is used in the percutaneous insertion of pacing leads or catheters in the venous system.

As Greatbatch celebrates 40 years of scientific advancements, from the ever-expanding critical CRM, neuromodulation, vascular access, and orthopaedic technologies of Greatbatch Medical, to the battery and wireless sensor innovations of Electrochem, it continues to serve its customers through its investments in the development of promising technologies and through continuous delivery of unparalleled reliability in the world's most critical applications.



ASHISH SHAH (left) and **RANDY LEISING** (center), both of Greatbatch, received a Leadership Circle Award, on behalf of the company, from ECS President **PAUL NATISHAN** (right) at the ECS meeting in Vancouver.

ECS Cosponsored Conferences for 2010

In addition to the regular ECS biannual meetings, ECS, its Divisions, and Sections cosponsor meetings and symposia of interest to the technical audience ECS serves. The following is a list of the cosponsored meetings for 2010. Please visit the ECS website for a list of all co-sponsored meetings.

- **25th Symposium on Microelectronics Technology and Devices (SBMicro 2010)**, September 6-9, 2010, Sao Paolo, Brazil, www.lsi.usp.br/chipinsampa/
- **11th International Conference on Advanced Batteries and Accumulations**, September 19-23, 2010, Czech Republic
- **61st Annual Meeting of the International Society of Electrochemistry (ISE)**, September 26-October 1, 2010, Nice, France, event10.ise-online.org/
- **Fuel Cell Seminar & Exposition**, October 18-21, 2010, San Antonio, Texas, USA, www.fuelcellseminar.com

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.



websites of note

by Zoltan Nagy

Cyclic Voltammetry and the Frontiers of Electrochemistry

In contrast to numerous other introductory books and lecture notes, which are largely thermodynamics oriented, this is a fairly detailed textbook of modern electrochemistry. Covering interfacial processes, charge-transfer kinetics and diffusion, adsorption, surface effects, redox processes, catalysis and inhibition, deposition/dissolution at the monolayer and bulk levels, photoelectrochemistry at metal and semiconductor electrodes, and some electroanalytical techniques in seventeen chapters available in PDF format.

- M. Noel and K. I. Vasu, CECRI
- michael-noel-electrochemistry.tripod.com/cvm.htm

Resources for Electrochemistry

Information and collection of links about a wide variety of electrochemical topics that are difficult to find anywhere else. Reference electrodes, the Luggin probe, potentiostats, cyclic voltammetry, electrochemical impedance spectroscopy, quartz-crystal microbalance technique, meetings and short courses, bookstore, etc.

- Robert S. Rodgers, Research Solutions & Resources
- www.consultrsr.com/index.htm

Fuel Cell History

This two-part paper gives a somewhat whimsical description of the development of the fuel cell from William Robert Grove through Charles Langer and Ludwig Mond, Francis Thomas Bacon, Harry Karl Ihrig, Willard Thomas Grub, Leonard Niedrach, Karl Kordesch, up to the 1980s. This history is written in the context of the hydrogen fueled automobile (transportation in general), a brief history of which is included with a number of examples and some nice old pictures.

George Wand, Fuel Cell Today

- www.fuelcelltoday.com/events/archive/2006-06/Fuel-Cell-History--Part-1
- www.fuelcelltoday.com/events/archive/2007-01/Fuel-Cell-History--Part-2

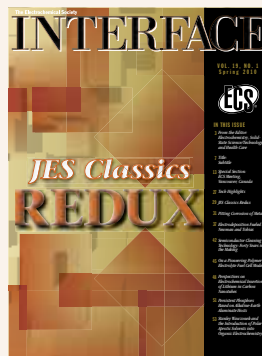
About the Author

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.

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

- The winter issue will feature the **ECS SENSOR DIVISION**, guest edited by Peter Hesketh, Georgia Tech Institute of Technology. Articles will include bio/nano sensors (quantum dots, disease screening and detection), sensors for energy and environmental security, smart sensors and sensor integration, and sensors for food safety and agriculture.
- **TECH HIGHLIGHTS** will continue to provide readers with free access to some of the most interesting papers published in the ECS journals.
- **HIGHLIGHTS FROM LAS VEGAS...** The winter 2010 issue will feature photos and reports from the 218th ECS meeting in Las Vegas.
- Don't miss the next edition of **WEBSITES OF NOTE** which gives readers a look at some little-known, but useful sites.

Erratum



In the spring 2010 issue of *Interface*, on page 59, the Canadian Section News item listed David James as second place winner in the student poster awards for the November Canadian Section symposium in Halifax. The correct second place winner was awarded to Rodney Smith, Department of Chemistry, Memorial University of Newfoundland.