

Corporate Member News

Spotlight on SWITCH Materials

SWITCH MATERIALS INC. (www.switchmaterials.com) is the Society's newest Corporate Member. SWITCH was founded in 2006 by Dr. Neil Branda to develop a price-competitive smart-window solution for automotive manufacturers and building architects/owners. Using its patented technology, SWITCH delivers an innovative variable transmission film (VTF) that dynamically provides protection from heat, glare, and UV, thereby reducing energy costs while allowing users to

control and maximize natural lighting conditions. Located in Vancouver (BC, Canada), SWITCH provides advanced R&D, manufacturing capacity, and global distribution to serve the rapidly growing smart window market in North America, Europe, and Asia.

SWITCH's VTF is based on patented photo/electrochromic hybrid dyes that automatically darken when exposed to the sun to reduce solar heat gain and to shield building occupants and furnishings from the harmful effects of UV light. In low light conditions the tint can be cleared by the application of low voltage electricity to allow maximum benefit of natural lighting while saving on electric lighting costs.

SWITCH's unique materials can be processed from solution using inexpensive roll-to-roll film laminating techniques, allowing significant cost savings over alternative technologies and can be incorporated into OEM and window fabricator's product lines at low cost to maximize the leverage of existing distribution channels and minimize the requirement for capital-intensive manufacturing facilities. Currently in the commercialization phase, SWITCH is actively working to provide a full range of smart window films aimed at key suppliers for implementation into luxury automotive packages and new/retrofit building window systems. ■



websites of note

by Zoltan Nagy

Nomenclature, Definitions, and Standards

"When I use a word," (Alice was told in Wonderland) "it means just what I choose it to mean—neither more nor less". Well, scientists and engineers beg to differ. To permit meaningful communication in science and technology, there are some internationally agreed (or, at least, suggested) definitions and standards listed in the "IUPAC Recommendations and Technical Reports." Many of them are about electrochemistry, and hopefully they are followed by all.

- International Union of Pure and Applied Chemistry
- <http://electrochem.cwru.edu/estir/nom.htm>

Application Notes for Electrochemical Instrumentation and Methods

Detailed notes on instrumentation and primers on measuring techniques for electrochemistry, electroanalysis, plating, and corrosion. Voltammetry, polarography, impedance measurements, potentiostats, reference electrodes, and much more.

- Princeton Applied Research
- <http://www.princetonappliedresearch.com/products/apnotes.cfm>

Walther Nernst Memorial

A website dedicated to the memory of Walther Hermann Nernst (1864-1941). Nernst was the founder of the Physicochemical Institute (1895) at the University of Göttingen, the first institute fully devoted to physical chemistry and electrochemistry, and he was the second chair (after Leipzig). He was the discoverer of the "Nernst equation of electrode potentials" (1890) among many other accomplishments; and the winner of the Nobel Prize in Chemistry (1920).

- Ulrich Schmitt, University of Göttingen
- <http://www.nernst.de/>

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.

Division News

Division Officer Slates Announced

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



Dielectric Science & Technology Division

Chair

Kalpathy Sundaram, University of Central Florida

Vice-Chair

Oana Leonte, Berkeley Polymer Technologies, Inc.

Secretary

Hazara S. Rathore, Semiconductor Reliability Consultants

Treasurer

Dolf Landheer, National Research Council – Canada

Awards Chair

Peter Mascher, McMaster University

Symposium Chair

Ana Londergan, Qualcomm MEMS Technologies

Membership Chair

Purushothaman Srinivasan, Texas Instruments, Inc.

Members-at-Large

Gautam Banerjee
Albert S. Bergendahl
William Brown
Stefan De Gendt
Vimal Desai Chaitanya
John Flake
Reenu Garg
Merrill Garnett
Dennis Hess
Hiroshi Iwai
P. C. Joshi
Samares Kar
Zia Karim
Paul Kohl
G. Swami Mathad
Meyya Meyyappan
Durgamadhab Misra
Yaw Obeng
R. Ekwil Sah
Sudipta Seal
Mahendra Sunkara
John Susko
Robin Susko
Ravi M. Todi
Katalin Voros
Jerry Woodall
Kerstin Worhoff
Jian Fu Zhang



Fullerenes, Nanotubes, and Carbon Nanostructures Division

Chair

Dirk Guldi, University of Erlangen-Nurnberg

Vice-Chair

R. Bruce Weisman, Rice University

Secretary

Jean-François Nierengarten, Laboratoire de Chimie de Coordination

Treasurer

Francis D'Souza, Wichita State University

Members-at-Large

Prashant Kamat, University of Notre Dame
Shunichi Fukuzumi, Osaka University
Karl M. Kadish, University of Houston
Nazario Martin, Universidad Complutense de Madrid
Maurizio Prato, University of Trieste
David Schuster, New York University
Lon Wilson, Rice University
Luis Echegoyen, Clemson University



Industrial Electrochemistry & Electrochemical Engineering Division

Chair

Vijay Ramani, Illinois Institute of Technology

Vice-Chair

Gerardine Botte, Ohio University

Secretary/Treasurer

Venkat Subramanian, Washington University at St. Louis

Annual Society Luncheon



217th ECS Meeting

Vancouver

BC, Canada

Tuesday, April 27, 2010

The Annual Society Luncheon and Business Meeting will take place on **Tuesday, April 27**, starting at **1215h**. The President, Secretary, and the Treasurer will give brief reports on the current state of the Society, and the Student Poster Award presentation will take place at this annual business luncheon. All members and meeting attendees are encouraged to participate in this event. Tickets are \$25.00 in advance and \$30.00 onsite.

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.

- **Fuel Cell Seminar & Exposition**, October 18-21, 2010, San Antonio, Texas, USA, www.fuelcellseminar.com
- **61st Annual Meeting of the International Society of Electrochemistry (ISE)**, September 26-October 1, 2010, Nice, France, event10.ise-online.org/
- **11th International Conference on Advanced Batteries and Accumulations**, September 19-23, 2010, Czech Republic
- **25th Symposium on Microelectronics Technology and Devices (SBMicro 2010)**, September 6-9, 2010, Sao Paulo, Brazil, www.lsi.usp.br/chipinsampa/
- **IMLB 2010: 15th International Meeting on Lithium Batteries**, June 27-July 2, 2010, Montréal, Canada, www.imlb.org
- **International Conference on Electrified Interfaces**, June 20-25, 2010, Geneva, New York, USA, icei2010.com/
- **XXV Congress of the Mexican Society of Electrochemistry -and- 3rd Meeting of the ECS Mexican Section**, May 31-June 4, 2010, Zacatecas, Mexico, smeq.reduaz.mx/congreso/
- **8th Spring Meeting of the International Society of Electrochemistry (ISE)**, May 3-6, 2010, Columbus, Ohio, USA, spring10.ise-online.org/
- **China Semiconductor Technology International Conference 2010 (CSTIC 2010)**, March 18-19, 2010, Shanghai, China, semiconchina.semi.org/SCCHINA-EN/ProgramsEvents/CTR_012200

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.

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

- **THE OLYMPICS OF ELECTROCHEMISTRY...** The summer 2010 issue will feature highlights from the ECS meeting in Vancouver (April 25-30). The official Olympics will be over, but the ECS meeting will bring the best of electrochemistry and solid-state science and technology.
- The **INDUSTRIAL ELECTROCHEMISTRY & ELECTROCHEMICAL ENGINEERING (IE&EE) DIVISION** will be the focus of the issue, with feature articles and commentary from one of ECS's most active technical Divisions.
- The **CALL FOR PAPERS** for the 219th ECS meeting in **MONTREAL, CANADA** will be published. The meeting will be held May 1-6, 2011.

Erratum

In the print version of the winter 2009-2010 issue (Vol. 18, No. 4) of *Interface*, in "Tech Highlights," the page number given for the first entry ("Improved Electrochemical Performance of $\text{Li}_2\text{MnSiO}_4/\text{C}$ Composite Synthesized by Combustion Technique") was incorrect. The correct page number is A677. The page number is correct in the online version.