European Section

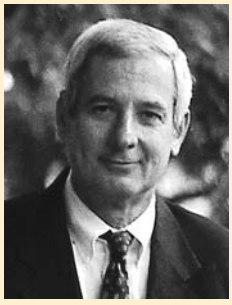
Some of the meeting participants from the European Section meeting; in the first row are the organizers M. Sedlarikova (left) and J. Vondrak (right). Plenary speaker Ch. Poinsignon, CNRS-Grenoble, is pictured in the middle.

At the European Section meeting this past June, sessions were held in a beautifully appointed meeting room with a pipe organ and the ECS banner proudly displayed.

The meeting on Advanced Batteries and Accumulators (ABA) in Brno, Czech Republic (June 4-7, 2006), was the seventh annual meeting on the energy and power source related topics. This year the meeting was co-sponsored for the first time by ECS. With that co-sponsorship, the meeting was also announced as the European Section meeting. Petr Vanýsek, Secretary of the Society, gave a presentation on the State of the Society and introduced the many non-member attendees to the organization of ECS and the benefits of being a member. Because the meeting had large student attendance, Dr. Vanýsek also spoke about student involvement in the Society and the possibilities to organize student groups.

In its three days of activities the participants heard presentations spanning not only battery topics, but also research of novel materials applicable to power sources, including those for fuel cells. In addition to oral presentations, 21 posters were on display throughout the meeting. In the European tradition, the scientific activities were complemented by evening social gatherings.

The next meeting in Brno is planned for June 3-7, 2007. It will expand its topics to nanosized or layered materials, novel solid or polymeric conductors and intercalation materials with application in the research and development of batteries, electrocatalysts for fuel cells, and other industrial applications for special electro-technical components (supercapacitors, electrochromics, etc.).



Bruno Scrosati Receives European Section Volta Award

Bruno Scrosati will receive the 2006 Volta Award of the ECS European Section at the 2006 Joint International Meeting in Cancun, Mexico. Prof. Scrosati is a full professor of electrochemistry at the University of Rome, Italy. Prof. Scrosati has contributed significantly to the advancement of electrochemistry and solid-state science and technology. His major achievements concern the progress of rechargeable lithium batteries with non-metal electrodes, particularly with respect to their components, including new types of lithium conducting membranes and nanocomposite polymer electrolytes. Prof. Scrosati has been called the first to demonstrate the feasibility of lithium batteries based on a cyclic transfer of lithium ions from one electrode to the other. Scrosati's research has contributed to the development of new types of lithium ion polymer batteries characterized by a high degree of safety, low cost, and compatibility with the environment, to be proposed as power sources for low emission, hybrid vehicles. More recently, his research activities have been extended to supercapacitors, photoelectrochemical cells, electrochromics, and fuel cells where he has proposed new types of composite proton membranes formed by swelling with acid solution polymer matrices containing dispersed ceramic fillers. He has published over 370 research papers in peer-reviewed scientific journals and numerous reviews or invited book chapters. He is an inventor or co-inventor of many patents.

Prof. Scrosati has received many other awards and distinctions: the ECS Battery Division Research Award in 1997, the 2004 winner of the XVI Edition of the Italgas Prize, named Fellow of The Electrochemical Society in 2005, and Doctor Honoris Causa from the University of St. Andrews, Scotland. He has been invited to serve as an editor or a member of editorial boards for many scientific journals and periodicals.

Finally, Bruno Scrosati has been very active in ECS, serving as the Society's 2003-2004 President and serving on various several committees. He has contributed significantly to the development of the European Section by not only serving as its Chair but also by promoting new and various activities that have revitalized the Section.

Section News

Brazilian

The Brazilian Section sponsored the XV Simpósio Brasileiro de Eletroquímica e Eletroanalítica (SIBEE) that was held on December 4-7, 2005 in the city of Londrina in the State of Paraná, and granted six award certificates for the best student presentations. The Section participation in this well-attended national symposium devoted to electrochemistry and electroanalytical chemistry aims to encourage student participation in national meetings as well as to invite all members of the Brazilian electrochemistry community to join ECS.

The XV SIBEE had almost 500 participants, more that 400 papers were presented and students presented approximately 150 posters in different areas of solid-state, electrochemical science and technology, and electroanalytical chemistry. Two distinguished members of ECS—Prof. Krishnan Rajeshwar from University of Texas at Arlington and Prof. Richard G. Compton from University of Oxford—participated as plenary lecturers.

The Student Poster Section winners were: Martina C. Reis from DQUI-UFPR, Curitiba (PR) for her work in fundamental electrochemistry (co-authors: A. P. Franco, A. L. R. Mercê and A. Carubelli); André L. Martins from IQSC-USP, São Carlos (SP), for his work in electrocatalysis (co-author: H. Varela); Sérgio L. Castanheiro from IQ-UNESP, Araraquara (SP) for his work in corrosion (co-authors: P. Suegama and A. V. Benedetti); Antonio Albuquerque de Souza from DQ-UFAL, Maceió (AL) for his work in organic electrochemistry (co-authors: F. S. de Paula, M. O. F. Goulart, C. A. M. Fraga, E. F. da Silva, S. D. Carvalho); Eduardo Winter from IQ-UNICAMP, Campinas (SP) for his work in electroanalytical chemistry (co-authors: L. Codognoto and S. Rath); and Thiago R. L. C. Paixão from IQ-USP, São Paulo (SP) for his work in electrochemical sensors (co-authors: M. H. G. Medeiros, M. Bertotti).

Canadian

The Canadian Section announced the winners of two of its awards. Mathieu Toupin, of the Université du Québec à Montréal, won the 2006 Canadian Section Student Award; and Jeff R. Dahn, a professor at Dalhousie University, won the 2006 Canadian Section Electrochemical Award.

Detroit

In October 2005, Michael Quah, Vice-President and CTO of NextEnergy, addressed an audience of about 40 people at the NextEnergy Center in Detroit, Michigan. Dr. Quah gave a talk entitled, "Fuel Cells and Industrial Electrochemistry: Lessons from an Established 'Reverse' Industry." Dr. Quah's talk included a brief description of NextEnergy's activities and programs, as well as a discussion of industrial electrochemistry from the perspectives of two industries that involve membrane technology: the "emerging" fuel cell marketplace and the well-established "reverse" industry (membrane electrolysis for chlor-alkali). James Saber, Director of Business Development, gave a tour of the NextEnergy facilities, which included a microgrid power pavilion comprised of fuel cell generators, internal and external combustion engine generators, and renewable power generation.

In November 2005, Phil Gow, Vice-President of Research, Development, and Manufacturing at Sion Power in Tucson, Arizona, addressed the Section at Lawrence Technological University in Southfield, Michigan. Charles Chambers, President of Lawrence Technology University, welcomed ECS and provided opening remarks that encouraged and inspired the audience. There was a strong student presence, both from Lawrence as well as Lansing Community College. Mr. Gow spoke about the fundamentals and recent developments of lithium sulfur battery technology. Lithium sulfur batteries hold great promise to be among the next generation of secondary batteries.

The Section held its seventh and final meeting of the 2006-2007 season on May 23. Rosa Young gave an interesting presentation on "Metal Hydrides for On-Board Hydrogen Storage." Dr. Young, Vice-President in charge of Ovonic Hydrogen Storage Systems, a subsidiary of Energy Conversion Devices, Inc. also arranged for display of a hydrogen-powered Toyota Prius conversion that has demonstrated over 200 miles range utilizing Ovonic hydrogen storage tanks. There was a lively discussion of scientific and engineering aspects of hydrogen storage materials with 30 in attendance from the Detroit area electrochemical community.

The next meeting of the Section will be held in September/October 2006 at Lawrence Technological University in Southfield, Michigan.

San Francisco

This past June, the San Francisco Section sponsored two short courses. The first short course, "Wafer Electroplating," was taught by Thomas Dinan, President of Electrolytics, Inc. This course covered the techniques and equipment used for electroplating thin-films of metal onto semiconductor or ceramic wafers for the semiconductor, disk drive storage, electronic packaging, and MEMS industries. Dr. Dinan used a large number of case studies in the course, and the course was very practical and informative. Dr. Dinan also kindly provided a list of vendors related to the electroplating industry.

The second short course, "Electrochemical Impedance Spectroscopy (EIS) and Applications," was taught by Hong Shih, technical director of Lam Research. This course was designed for corrosion studies, and the semiconductor equipment and aerospace industries. Dr. Shih adopted the equivalent circuit approach of EIS. He pointed out that relatively few models could account for most systems. EIS is the only technique capable of studying nearly non-conducting systems, such as anodized aluminum. Dr. Shih's lecture was very practical and informative.

Council of Sections of the Society

Council of Section Officers

V. Srinivasan, Chair • L. Bottomley, Vice-Chair
J. Noel, Secretary • D. Gervasio, Past-Chair

ARIZONA
D. Gervasio, Chair
Don.Gervasio@asu.edu
K. Sieradzki, Secretary
C. Baker, Treasurer

BRAZILIAN
H. Villullas, Chair
Mercedes@unesp.br
J. Swart, Vice-Chair
J. Scarminio, 2nd Vice-Chair
A. Angelo, Secretary
G. Maia, Treasurer
E. Gonzalez*

CANADIAN
G. Jerkiewicz, Chair
gregoryj@chem.queensu.ca
D. Bizzoto, Vice-Chair
S. Omanovic, Vice-Chair
J. Noel, Past-Chair
A. Chen, Secretary
R. Menini, Treasurer
M. Odziemkowski*
E. Babes-Dornea*

CHICAGO
K. Lian, Chair
k.k.lian@comcast.net
G. Marchetti, Vice-Chair
C. Berney, Secretary
S. H. Kang, Treasurer
P. Vanýsek*

CINCINNATI
M. Cahay, Chair
Marc.cahay@uc.edu
C. Ahn, Vice-Chair
S. Zou, Secretary
M. Cahay, Treasurer

CLEVELAND
I. Serebrennikova, Chair
Irina.serebrennikova@energizer.com
H. Martin, Vice-Chair
J. Burgess, Secretary
G. Zheng, Treasurer
D. Scherson*

DETROIT
D. Corrigan, Chair
dcorrigan@ovonic.com
A. Nazri, Vice-Chair
A. Masias, Secretary
G. Less, Treasurer
P. Faguy*
L. Wang*

EUROPEAN
P. Kulesza, Chair
pkulesza@alfa.chem.uw.edu.pl
C. Levy-Clement, Vice-Chair
C. Breslin, Secretary/Treasurer
P. Agarwal*
D. Walton*

GEORGIA
P. Hesketh, Chair
Peter.hesketh@me.gatech.edu
C. Kranz, Secretary/Treasurer

Israel
D. Aurbach, Chair
aurbach@mail.biu.ac.il
A. Zaban, Secretary
M. Levi, Treasurer

JAPAN
S. Oda, Chair
soda@pe.titech.ac.jp
T. Fuchigami, Vice-Chair
T. Homma, Secretary/Treasurer
Y. Yamazaki*
T. Watanabe*

KOREA
J. Kwak, Chair
jhkwak@kaist.ac.kr
K. B. Kim, Vice-Chair
Y. E. Sung, Secretary/Treasurer
H. S. Kwon*
I. H. Yeo*

NATIONAL CAPITAL
Not Available

NEW ENGLAND
K. White, Chair
kwhite@psicorp.com
M. Evans, Vice-Chair
J. Reardon, Secretary
Q. Horn, Treasurer
T. Blakley*

PITTSBURGH
W. Peng, Chair
wpeng@indsci.com
R. Morales, Secretary/Treasurer

SAN FRANCISCO
H. Hafezi, Chair
hhafezi@proteusbiomed.com
Z. Liu, 1st Vice-Chair
A. Weber, 2nd Vice-Chair
K. Lux, Announcements Secretary
J. Christensen, Recording Secretary
O. Leonte, Treasurer
E. Guyer*
V. Srinivasan*

TEXAS
A. Manthiram, Chair*
rmanth@utexas.edu
H. Wheat, Vice Chair
Z. Minevski, Secretary*
K. Stevenson, Treasurer

TWIN CITIES
W. Jin, Chair
Wenzhong.Jin@seagate.com
K. Chen, Vice-Chair
P. Waszczuk, Secretary
S. Kelley, Treasurer
R. Atanasoski*
W. Howard*

*Councilors