LOCAL SECTION NEWS

The Society welcomed the new Korea Local Section this past year. Pictured here at their inaugural meeting are: (back row - from left to right) Kwang B. Kim, Soo-Gil Park, Dai-Hoo Lee, I. H. Yeo, Il C. Jeon, and Chi Kym Choi; and (front row - from left to right) Hasuck Kim, Barry Miller (ECS 1997-98 President), Su-Moon Park, Kyung, Chi-Woo Lee, and K.J. Kim.

Daniel Cubicciotti Student Award Winner Named

Craig R. Horne was recently named the Daniel Cubicciotti Student Award winner on May 13, 1998 at the San Francisco Local Section Meeting. He received an etched metal plaque and a monetary award of $1,000 intended to assist him in pursuing his career in Engineering.

Horne received a BS in Materials Science and Engineering (with high honors) from the University of Florida in 1988. Upon graduation he took a position as a member of the Solid Oxide Fuel Cell development team at AlliedSignal Aerospace in Torrance, CA, where he participated in fabrication and cell testing activities. He was also a co-recipient of three U.S. patents. While at AlliedSignal, Mr. Horne earned an MS in Materials Science and Engineering from the University of California, Los Angeles.

In the Fall of 1993, Mr. Horne became a graduate student in the Materials Science and Mineral Engineering Department at the University of California, Berkeley. He works with Elton J. Cairns of the Chemical Engineering Department using x-ray absorption spectroscopy to probe the structure-property performance relationship of manganese oxide materials for Li batteries.

Canadian

The Section held a day-long symposium on Industrial Electrochemistry to coincide with the 81st Canadian Society for Chemistry Conference and Exhibit on June 5, 1998 at the Whistler Conference Center in Whistler, BC.

Featuring five presentations covering such topics as Fuel Cells, Battery Management Systems, Considerations in Chlorate Cell Design, and Electrochemical Studies of Corrosion in Pulp and Paper Kraft Digesters.

Two Canadian Local Section awards were presented during the reported period: The 1998 Electrochemical Award, which is the most prestigious Canadian Section award, given every 4 years, was given to Dr. Jacek Lipkowski of Guelph University; and the 1998 Student Award went to Ian A. Courtney of Dalhousie University, Halifax, NS.

Israel

The section created two new awards to recognize and encourage the next generation of electrochemists. The Student Lecture (made possible through the Electro-Chemical-Research, Ltd., Rehovot) and The Student Poster Research (made possible through Electric Fuel, Ltd., Jerusalem) Awards consist of a parchment certificate, a monetary award, and student membership in the Society. The students are encouraged to present their research at the annual symposium.

National Capital

The Section's fifth meeting was held on Tuesday, April 14, 1998, at the University of Virginia in Charlottesville, VA. The featured speaker was Dr. Andrew C. Hillier, Assistant Professor in the Department of Chemical Engineering at the University. Dr. Hillier discussed his current research activities which demonstrate a variety of high-resolution, interfacial imaging tools applied to electrochemical systems, focusing on atomic force microscopy (AFM) and scanning electrochemical microscopy (SECM).

Current advances in the application of AFM in electrochemical systems were described in detail, as well as the application of SECM techniques for characterizing the structure and surface kinetics of electrocatalytic reactions at composite metal surfaces, and examining ion transport near electroactive polymer interfaces.

On May 12, the section held its 1998 awards banquet in College Park, MD, witnessed the presentation of the 1998 William Blum Award, the presentation of this year's Junior High and High School science fair winners, and the nominations for next year's section officers. The evening began with a social hour sponsored by EG&G Princeton Applied Research.

Dr. Stephen Jones, currently the Section's Chairman, announced the 1998-99 officers: Chairman, Carlos Beauchamp; 1st Vice-Chairman, Pat Hagans; 2nd Vice-Chairman, Andy Hillier; Secretary, David Shifler; Treasurer, Lori Krebs; Councilors, Robert Kelly and Steven Jones; and Membership Committee Representative, Graham Cheek.

New England

The Section met on April 14, 1998 to hold its seventh and final dinner meeting of the 1997-1998 season at the Best Western Hotel in Waltham, MA. The featured speaker was Professor Steven Suib of the University of Connecticut Chemistry Department, who gave a talk entitled, "Electron Transfer in Mixed Valent Microporous Manganese Oxides." These materials are prepared via sol-gel techniques to give a variety of tunnel and layered structures incorporating various alkaline and alkaline earth cations, and with varying oxidation states as well as on their structural features.

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Council of Local Section Officers

Daniel T. Schwartz, Chairman of the Council, received his Ph.D. from the University of California, Davis. He then took a postdoctoral position at Lawrence Berkeley Laboratory, where he worked for a number of years before joining the faculty of the University of Washington in 1991.

Since moving to Seattle, Dr. Schwartz has been active in the Society's Pacific Northwest Local Section, serving as Chairman and Secretary-Treasurer. He is also a regular contributor to ECS symposia and to the **Journal**.

Often recognized for his research work, Dr. Schwartz has been honored in the past with a DOE Junior Faculty Award in Environmental Restoration/Waste Management, an NSF Young Investigator Award, and a University of Washington Award for Outstanding Faculty Achievement.

Peter G. Bruce, Vice-Chairman of the Council, graduated from the University of Aberdeen (Scotland), where he remained following graduation to carry our his doctoral studies under the direction of Professor A. R. West. His thesis work concerned the synthesis and characterization of new solid electrolytes with a high lithium ion conductivity.

Dr. Bruce then spent several years at the University of Oxford working with Professor J. B. Goodenough on the solid-state chemistry and electrochemistry of intercalation compounds. He took his first tenured academic position at Heriot-Watt University in Edinburgh, moving from there six years ago to take a teaching position at St. Andrews University, where he is now Head of Department.

Dr. Bruce's research interests have centered on solid-state chemistry and electrochemistry in ionically conducting solids. During this work he was involved in the discovery of the spinel electrode $LiMn_2O_4$, which is now used in commercial rechargeable lithium ion batteries. Recently, he has developed a new method for solving crystal structures using only powder diffraction data. This technique is now being applied to pioneering structural studies of polymer electrolytes.

Gessie Brisard, Secretary of the Council, received her BSc degree in Chemistry from the University of Sherbrooke (Sherbrooke, Québec) in 1984, and then pursued her research interests in electrochemistry with her work on the kinetics of metal deposition in non-aqueous solvents under the direction of Prof. A. Lasia; this led to her receiving a PhD degree from the University of Sherbrooke in the 1990. She worked for one-and-a-half years as Post-Doctoral Research Fellow in the Environmental Energy Technologies Division of the Lawrence Berkeley National Laboratory (Berkeley, California) in Prof. Elton Cairns's group.

Gessie Brisard was appointed Assistant Professor in the University of Sherbrooke in 1992, where she has developed an active research program into the kinetics and dynamics of the metal-on-metal underpotential deposition process using single crystal surfaces (Cu, Ag, Au), the development of new electrolytes for the lithium battery systems and characterization of the Li/electrolyte interface, and the spectroscopic characterization of functionalized-metallic interfaces under potentioststic control. This work has lead to her advancement to her present rank of Associate Professor in 1997. Her collaboration with the Lawrence National Laboratory continues to this day with Dr. Phillip Ross's group on the spectroscopic characterization of electrochemical interfaces, and the application of surface analyical techniques (LEED, Auger electron spectroscopy) to the atomic-scale understanding of the structure and composition of the systems.

Gessie Brisard has been involved with the Executive Committee of the Canadian Section of the Society since 1993. She was the chairperson in 1997-1998 and the chairperson of the host committee of the Montréal meeting in May 1997. Since April 1998, she has been the immediate past-chairperson and the Vice-chairperson of Membership. Over the year, she has also been co-organizer of the Surface Canada Meeting (Sherbrooke May 1997) and the New Materials for Fuel Cells and Batteries Symposia (Montréal, 1995 and 1997).

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Pacific Northwest

The section held a joint Local Section Meeting with the Canadian Section on June 5, 1998 in Vancouver, BC. The meeting was scheduled to coincide with the Canadian Society for Chemistry meeting that was being held in Whistler, BC.

The meeting focused on industrial electrochemistry and over 50 attendees were present to hear Dr. Carl Osburn (of North Carolina State University and Vice-President of The Electrochemical Society) report on activities from Society Headquarters. Kavita Jeerage of the Department of Chemical Engineering at the University of Washington was presented with an award for best student poster. Her poster was on alkali cation selectivity in nickel hexacyanoferrate derivatized electrodes. Second place went to Elod Gyeng of the Department of Chemical Engineering at the University of British Columbia for his poster on in-situ electrochemically mediated oxygen delignification of wood pulp with manganese (III) aminopolycarboxylate complex.

The section also held its election for the Pacific Northwest officers. Elected wer: Chairman, Walter A. van Schalkwijk; Vice-Chairman, Olga Kargina; Secretary/Treasurer, Weihong (Wendy) Li; Representative to the Council of Local Sections, Daniel Schwartz; and members-at-large, Stephen Campbell and Jean St. Pierre.

Philadelphia

The May meeting of the section was held on May 26, 1998, in Allentown, Pennsylvania. Featured was a lecture by Professor Janet Robinson entitled "Silicon Micromachining.

Prof. Robinson's talk concentrated on surface and bulk micromachining and the processes used to etch three-dimensional structures. The problems of incorporating micromachining into a standard integrated circuit manufacturing line were also discussed.

Pittsburgh

The 1998 Annual Business Meeting was held on May 21, 1998 at the Evergreen Chinese Restaurant in Monroeville, PA. Robert F. Savinell, of Case Western Reserve University, presented "High Temperature Polymer Electrolyte Membrane Fuel Cells."

Dr. Savinell is a Professor of Chemical Engineering at CWRU in Cleveland, Ohio and director of the Yeager Center for Electrochemical Sciences. He is Chairman of the IE&EE Division of the ECS and a member of its Board of Directors.

San Francisco SSS&T

The Section held a dinner meeting on June 3 which featured a presentation by Harry Levinson, of Sierra Semiconductor and Advanced Micro Devices, entitled "Lithography: Does It Have a Future?" The meeting was held at the National Semiconductor Federal Credit Union in Sunnyvale, California.

Levinson began his presentation by explaining how the future of lithography, as applied to microelectronics manufacturing, appears uncertain. Significant advances in optics, reticle technology and photoresists will be required for it to become the reality that everyone expects. The problem, he explains, is that all considerable options for the successor of 193 nm lithography have shown serious technological problems which must first be addressed.

South Texas

The Section held its 10th Meeting on July 11 at Texas A&M University, College Station, Texas. After opening remarks by Liliana Minevski, there were several lectures. The first was "Interfacial Electric Fields in Chemistry" given by David Cocke and Robert Schennach. It was followed by "Corrosion of Titanium and Stainless Steel in Supercritical Water Oxidation Environments" by H. G. Wheat; Zoran Minevshi and Charles Tennakoon then presented "Electrochemically Deposited High Temperature Tolerant, Corrosion Resistant Composite Coatings." J. Kim and A. Manthiram gave a talk entitled "Composite Manganese Oxides for Lithium Batteries" and finally "Iron in Perchlorate Solutions." Vladislava Jovanovic and Norman Hackerman presented.

Southern Wisconsin

On May 12 the Section held a joint meeting with the ASM Milwaukee Chapter at the Miller Brewing Company in Milwaukee, Wisconsin. Alan M. Gemer, Engineer/Owner of Emerald City Metallurgical, presented "Recurring Topics in Failure Analysis." The event began with a Poster viewing, and judging and was followed by dinner and Mr. Gemer's address.

The Section met on June 25, in Waukesha, Wisconsin where Roderick P. Donaldson, director of Technical Services at Rayovac Corporation in Madison, Wisconsin, was the guest speaker. Current technologies of manganese were reviewed and discussed along with new areas being developed.

Twin Cities

The Section met on May 26 at the University of Minnesota's Amundson Hall. Dr. Oscar Khaselev, postdoctoral fellow at National Renewable Energy Laboratory in Golden, Colorado, spoke on "Anodizing of Mg-Al Alloys" in which the constant voltage and current anodizing of pure Mg and binary Mg-Al alloys in KOH-aluminate solutions was studied. The meeting began with wine, cheese and refreshments and was followed by the presentation. ■