ECS Welcomes New Staff

Paul Grote joined the ECS staff as Director of Finance. Paul is a graduate of Seton Hall University with a Bachelor of Science in Accounting and became a Certified Public Accountant in the State of New Jersey in 1993. Most recently, he served as an Audit Supervisor and Manager with the accounting firm of WithumSmith+Brown and its predecessor, M. D. Oppenheim & Company for the last nine years. His duties included performing financial statement audits of not-for-profit organizations as well as grant contract audits on behalf of state and federal government agencies.

Prior to his tenure with WithumSmith+Brown, Paul worked as an Accounting Manager and Controller for a variety of not-for-profit organizations, mostly in the healthcare field. His responsibilities included preparation of financial reports, budgeting, internal control, and preparation of cost reporting to governmental agencies.

ECS Executive Director Roque Calvo said, "Paul has joined the ECS staff at just the right time. With the growth in ECS publishing and our international meeting activities, the financial management of ECS has become more sophisticated and challenging. Paul has worked as a CFO or Controller for a number of different organizations, and his audit experience is very valuable to insure effective financial management and transparency with the members.

"Good fiscal management has been an ECS trademark; but in view of the new challenges and the greater government scrutiny of nonprofit organizations, the ECS Board has already acted to appoint a Certified Public Accountant to the ECS Board. This new appointment has provided the Board with greater financial knowledge and assisted the ECS Officers, Division Chairs, and Paul in the analysis and management of our finances. It's a great step for ECS to hire somebody with Paul's level of experience as the ECS Director Finance."

David W. Harkness joined ECS as Director of Constituent Services. Previously, he worked with the New Jersey Bankers Association for three years as Vice-President and Director of Business Development/ Education. Prior to joining NJ Bankers, he worked with the New Jersey State League of Municipalities for 13 years as manager of the League's seminar programs. He also helped manage its annual conference in Atlantic City. In addition, he was administrator of the pensions and elections subcommittee for the League's legislative committee.

David was Advertising Manager for New Jersey Municipalities magazine and editor of the Mayor's Newsline, a monthly newsletter distributed to mayors throughout the state.

His current responsibilities include directing and the administration of constituent services activities and programs for ECS.

He holds a Bachelor of Arts degree in Political Science and a Master of Arts degree in Modern Studies, both from Loyola College in Maryland.

ECS Executive Director Roque Calvo noted that "David spent the past 16 years working in various management positions for two different New Jersey based nonprofit associations. He has great experience in association management and a lot of enthusiasm for his opportunity to work on the staff of ECS. David and the Constituent Services Department will provide an improved level of service to ECS members through an emphasis on the management of our constituent data and profiles, and the delivery of our products and services. This area of support is very important to ECS and I feel that we are very fortunate to have David as the Director of our Constituents Services Department."

Society News
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Division News

Division Officer Slates Announced

New officers for a 2011-2013 term have been nominated for the following Divisions. Election results will be reported in the summer 2011 issue of *Interface*.

Electronics & Photonics Division

Chair
Pablo Chang, Northrop Grumman
1st Vice-Chair
Andrew Hoff, University of South Florida
2nd Vice-Chair
Fan Ren, University of Florida
Secretary
Mark Overberg, Sandia National Laboratories
Treasurer
Ed Stokes, University of North Carolina, Charlotte
Members-at-Large (up to 34 to be elected)
Albert Baca, Sandia National Laboratories
D. Noel Buckley, University of Limerick
George Celler, Rutgers University
Cor Claeys, IMEC
Sorin Cristoloveanu, IMEP-INPG-Minatec
Suman Datta, Pennsylvania State University
Jamal Deen, McMaster University
Stefan DeGendt, IMEC
Manfred Engelhardt, Infineon Technologies AG
Jennifer Gan, Northop Grumman
Dennis Hess, Georgia Institute of Technology
Howard Huff, Sematech, Emeritus
Takeshi Hattori, Hattori Consulting International
Bernd Kolbesen, University of Frankfurt
Jeffrey Laroche, Raytheon
Qilang Li, George Mason University
Hisham Massoud, Duke University
Durgamadhab Misra, New Jersey Institute of Technology
Junichi Murota, Tohoku University
Colm O'Dwyer, University of Limerick
Gerald Oleszek, University of Colorado at Colorado Springs
Carl Osburn, North Carolina State University
Fred Roozeboom, Eindhoven University of Technology
George A. Rozgonyi, North Carolina State University
Jerzy Ruzyllo, Pennsylvania State University
Sumant Sood, Suss Microtec, Inc.
Tadatomo Suga, University of Tokyo
Ravi Todi, IBM Corporation
Masaharu Watanabe, SEZ Japan Inc.

Energy Technology Division

Chair
Jean St-Pierre, University of Hawaii at Manoa
Vice-Chair
Jeremy Meyers, University of Texas at Austin
Secretary
Adam Weber, Lawrence Berkeley National Laboratory
Treasurer
To be announced in an upcoming Division communication.
Members-at-Large (up to 30 elected)
To be announced in an upcoming Division communication.

Organic & Biological Electrochemistry Division

Chair
Dennis Peters, Indiana University
Vice-Chair
James Burgess, Case Western Reserve University
Secretary Treasurer
Mekki Bayachou, Cleveland State University
Members-at-Large (up to eight to be elected)
Dennis Peters, Indiana University
Toshio Fuchigami, Tokyo Institute of Technology
Christine Kranz, University of Ulm, Germany
Donal Leech, National University of Ireland Galway
Kevin Moeller, Washington University (St. Louis)
Ikuzo Nishiguchi, Nagaoka University of Technology
James F. Rusling, University of Connecticut
Hideo Tanaka, Okayama University

Physical & Analytical Electrochemistry Division

Chair
Shelley Minteer, Saint Louis University
Vice-Chair
Robert Mantz, Army Research Office
Secretary Treasurer
Pawel Kulesza, University of Warsaw
Treasurer
Andrew Hillier, Iowa State University
Members-at-Large (up to 6 to be elected)
Mark R. Anderson, University of Colorado, Denver
Plamen Atanassov, University of New Mexico
Robert L. Calhoun, United States Naval Academy
David Cliffel, Vanderbilt University
Alanah Fitch, Loyola University
Takashi Ito, Kansas State University
Alice Harper Suroviec, Berry College
Petr Vanýsek, Northern Illinois University

Society News
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websites of note

by Zoltan Nagy

Graphene-based Electrochemical Sensors and Biosensors: A Review

Graphene, emerging as a true 2-dimensional material, has received increasing attention due to its unique physicochemical properties (high surface area, excellent conductivity, high mechanical strength, and ease of functionalization and mass production). This article selectively reviews recent advances in graphene-based electrochemical sensors and biosensors. In particular, graphene for direct electrochemistry of enzyme, its electrocatalytic activity toward small biomolecules (hydrogen peroxide, NADH, dopamine, etc.), and graphene-based enzyme biosensors have been summarized in more detail; graphene-based DNA sensing and environmental analysis have been discussed. Future perspectives in this rapidly developing field are also discussed.

- Y. Shao, *et al.*, Pacific Northwest National Laboratory
- http://www.princeton.edu/~cml/assets/pdf/pu_10_22shao.pdf

Graphene-based Electrochemical Supercapacitors

Graphenes prepared by three different methods have been investigated as electrode materials in electrochemical supercapacitors. The samples prepared by exfoliation of graphitic oxide and by the transformation of nano diamond exhibit high specific capacitance in aq. sulphuric acid, the value reaching up to 117 F/g. By using an ionic liquid, the operating voltage has been extended to 3·5 V (instead of 1 V in the case of aq. sulphuric acid), the specific capacitance and energy density being 75 F/g and 31·9 Wh/kg respectively. This value of the energy density is one of the highest values reported to date. The performance characteristics of the graphenes which are directly related to the quality, in terms of the number of layers and the surface area, are superior to that of single-walled and multi-walled carbon nanotubes.

- S. R. C. Vivekchand, *et al.*, Jawaharlal Nehru Centre for Advanced Scientific Research
- http://www.ias.ac.in/chemsci/Pdf-Jan2008/9.pdf

Public Domain Information – Free Software for Electrochemistry

Visit this site if you need computer programs to simulate or evaluate data from a wide variety of electrochemical techniques. Impedance spectroscopy, voltammetry, cyclic voltammetry, square wave voltammetry, chronoamperometry, sampled dc polarography, potentiometric titration curves, pH and acid-base equilibrium calculations, controlled-potential/controlled-current transient methods, and chemical reaction network toolbox. Links are also included to a number of bibliographies: books, proceedings, review chapters, and research papers.

- Ernest B. Yeager Center for Electrochemical Sciences (YCES)
- http://electrochem.cwru.edu/estir/pdi.htm

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 nagyz@email.unc.edu.

In the NEXT *issue of* INTERFACE

- **Electrodeposition for Energy Conversion** is the featured topic in the summer 2011 issue, guest edited by Giovanni Zangari. There will be a "Chalkboard" article on electrochemical atomic layer epitaxy by John Stickney. J.-M. Tarascon will write about electrodeposition of 3D nanostructures for battery and supercapacitor applications. Radoslav Adzic will report on electrodeposited and dealloyed electrocatalysts for fuel cells. Electrochemical synthesis methods in solar cell manufacturing will be the subject of an article by Lili Deligianni.
- **Seattle Meeting Call for Papers**... The summer issue will contain the complete Call for Papers for ECS's 221st meeting in Seattle, Washington. The meeting will be held May 6-11, 2012 and abstracts are due November 2011.
- **2010 ECS Annual Report** will appear in the summer issue. This annual feature of *Interface* will take a look at the year past, including a photo summary and a thank you to all the people who make ECS the leading international, nonprofit Society in electrochemistry and solid-state science and technology.

Annual Society Luncheon and Meeting

219th ECS Meeting

Montréal

May 1-6, 2011

The Annual Society Luncheon and Business Meeting will take place on **Tuesday, May 3**, 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 $27.00 in advance and $32.00 onsite.

ECS Cosponsored Conferences for 2011

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 2011. Please visit the ECS website for a list of all co-sponsored meetings.

- **China Semiconductor Technology International Conference 2011 (CSTIC 2011)**, March 13-14, 2011, Shanghai, China
- **Workshop on Novel Sampling and Sensing for Improving Food Safety**, March 24-25, 2011, Atlanta, Georgia
- **9th Spring Meeting of the International Society of Electrochemistry**, May 8-11, 2011, Turku-Åbo, Finland
- **62nd Annual Meeting of the International Society of Electrochemistry**, September 11-16, 2011, Niigata, Japan
- **4th International Conference on Electrophoretic Deposition: Fundamentals and Applications (EPD 2011)**, October 2-7, 2011, Puerto Vallarta, Mexico (Sponsored by ECS Electrodeposition Division)
- **Fray International Symposium on Metals and Materials Processing in a Clean Environment**, November 27-December 1, 2011, Cancun, Mexico

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.