Candidates for Society Office

The following are biographical sketches and candidacy statements of the nominated candidates for the annual election of officers for the Society. Ballots will be mailed, in January 2000, to all Voting Members of the Society. Offices not affected by this election are those of the other Vice-Presidents—Jan B. Talbot and Karl Spear, and of Treasurer—William D. Brown.

Candidate for President

Carlton M. Osburn is professor of electrical and computer engineering at North Carolina State University in Raleigh, North Carolina, where from 1983 to 1993 he was also director of advanced semiconductor technology at the Microelectronics Center of North Carolina's Center for Microelectronic Systems Technologies. At NCSU, he is a member of the Center for Advanced Electronic Materials Processing, where his research interests include deep submicron semiconductor devices, materials, and processing. He received his BS degree in engineering sciences and his PhD in electrical engineering from Purdue University, in the area of electroceramics.

In 1970, Osburn joined IBM Research as a research staff member studying the dielectric properties of insulators. At IBM, he was manager of exploratory fabrication technology with responsibility for research studies and fabrication of advanced semiconductor devices including micron and sub-micron structures. In this capacity he was responsible for managing the Yorktown silicon processing facility.

Osburn has published over 130 papers and has 23 patents and patent publications. He received honorable mention as Eta Kappa Nu's Outstanding Electrical Engineer of the Year in 1975. In that same year, he also received the T. D. Callinan Award from the Dielectrics and Insulation Division of The Electrochemical Society. He received the 1989 Maurice Simpson Award of the Institute of Environmental Sciences and the Electronics Division Award of The Electrochemical Society in 1991.

A Society member for the past 30 years and vice president for the last three, Osburn is currently a Fellow of The Electrochemical Society and past chairman of the Electronics Division. He has been chairman or served on the organizing committee of numerous Society symposia, including "Ultra Large Scale Integration Science" and "Technology and Semiconductor Silicon." He is a Fellow of IEEE, for which he is on the technical program committee for the Symposium on VLSI Technology. In addition, he is a member of Sigma Xi and has previously served on the Semiconductor Research Corporation's university advisory board. ■

Candidates for Vice-President

Charles L. Hussey is professor of chemistry and chair of the Department of Chemistry at the University of Mississippi. He received his BS in chemistry in 1971 and PhD in analytical chemistry in 1974 from the University of Mississippi. After graduation he served on active duty in the United States Air Force for four years and was assigned to the Frank J. Seiler Research Laboratory at the United States Air Force Academy as a chemical research officer. At the Seiler Laboratory he was involved in the development of thermal batteries based on chloroaluminate molten salts. He joined the University of Mississippi as an assistant professor in 1978, was promoted to professor in 1988, and became chair in 1997.

Since joining the faculty at the University of Mississippi, Dr. Hussey has carried out research on a wide variety of topics including molten salt chemistry and electrochemistry, self-assembled monolayers, spectroelectrochemistry, and electrogenerated reagents. He has authored or coauthored more than 100 publications on these topics. In addition, he is the co-editor of three Society proceedings volumes about molten salt chemistry and is the coinventor on four patents describing molten salt thermal batteries and electrometallurgical processes. His current research efforts are directed at the electrodeposition of metals and alloys from room-temperature chloroaluminate molten salts.

Hussey joined The Electrochemical Society in 1976 and was vice-president of the Rocky Mountain Section in 1977. He has served on several Society committees including the Ways and Means Committee (1990-92), Finance Committee (1993-96), and Honors and Awards Committee (1995-99). He has twice served as chair of the Max Bredig Award in Molten Salt Chemistry selection committee of the Physical Electrochemistry Division (1991 and 1993) and as chair of the Olin Palladium Medal Subcommittee of the Honors and Awards Committee (1996 and 1998). He was co-organizer of the seventh and ninth "International Symposia on Molten Salts" and co-organizer of the 1993 "Symposium on Electrochemistry in Nonaqueous Solvents."

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Bruno Scrosati is professor of electrochemistry in the Department of Chemistry at the University of Rome "La Sapienza." He received a degree in chemistry in 1966, and a doctoral degree in electrochemistry in 1969, both at the University of Rome. He was a research associate from 1964 to 1966 in the Department of Chemistry at the University of Illinois, and in 1970 and 1971, he was a summer visiting scientist at Bell Telephone Laboratories in Murray Hill, NJ. In the fall of 1990, he was the George T. Piercy Distinguished Visiting Professor in the Department of Chemical Engineering & Materials Science at the University of Minnesota; and in the fall of 1991, he was a visiting professor in the Department of Chemical Engineering & Materials Science at the University of Pennsylvania.

He was elected vice-president and president of the International Society of Solid-State Ionics for 1988-1991. He was elected president of the Italian Chemical Society for 1996-1998, and since 1989, he has been a member of the Italian Commission of the International Union of Pure and Applied Chemistry (IUPAC). For the International Society of Electrochemistry (ISE), he has served as chair of Division V (Electrochemical Energy Conversion) for 1988-90, and since 1997 as the chair of Division 2 (Electronically and Ionically Conducting Polymers). In 1996, he received the title of Doctor of Science (Hon. Dsc.) "honoris causa," from the University of St. Andrews in Scotland.

Professor Scrosati has been a member of ECS for 30 years. He has served the Society in many capacities: as chairman of the European Local Section (1996-present); as a member of the Battery Division (1993-present); as a member of the Technical Affairs Committee (1995-present); as a member of the Long Planning Committee (1996-98); and as an advisory member to the executive committees of the Luminescence & Display and Energy Technology Divisions (1999-present). In 1997, he received the ECS Battery Division Research Award.

Professor Scrosati is the European editor of the *Journal of Power Sources*, and a member of the editorial boards of various international journals, which include *Solid*

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Candidates for Secretary

Paul Natishan is a research materials scientist in the Center for Corrosion Science and Technology at the Naval Research Laboratory (NRL) in Washington, DC. Born in Wilkes-Barre, PA, he received a BS in biology from Wilkes College. He received an MS and a PhD in materials science and engineering from the University of Virginia for his work on dental materials and the electrochemical disinfection of recirculating fluids, respectively. Natishan then went to NRL as a National Research Council post-doctoral fellow to study the use of surface modification techniques for the prevention of pitting corrosion. He joined NRL on a permanent basis as a research metallurgist in 1985. Dr. Natishan's main research focus has been on causes and prevention of localized corrosion. He has also worked in the areas of microbiologically influenced corrosion and the production and use of diamond and diamond-like materials. Dr. Natishan has over 45 publications and two patents. He was elected a Fellow of NACE International in 1998.

Dr. Natishan has been active in the Society for more than 15 years. He was Chairman (1996-97) and a member of the Executive Committee (1994-98) of the Council of Local Sections and a member of the Board of Directors (1996-98). He has also served on the Society's Ways and Means Committee (1993-95), Education Committee (1996-97), and Individual Membership Committee (1995-96). He has also served as the Society's alternate trustee to the Federation of Materials Societies since 1995. He was the editor of the Society booklet "What is the Electrochemical Society?" (1997). He has been a member of the Corrosion Division Executive Committee since 1996 and has organized five symposia and edited four proceedings volumes. He served the National Capital Section as its chairman (1991-92), a member of its Executive Committee (1987-1992), its representative to the Individual Membership Committee (1986-94), and its councilor (1992-98).

Candidacy Statement

I have been a member of the Electrochemical Society for 17 years and active in committee work with the National Capital Local Section and the Society since the mid-80s. Through these activities I have come to understand the workings of the Society on a variety of levels and have interacted with many members whose areas of interest differ from my own. As a result of these experiences, I have gained

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Thomas F. Soules has a BS from the University of Detroit and PhD in physical chemistry from Purdue University. He has been working at GE Lighting for the past 31 years in various roles: as individual contributor; project leader; technical leader; and in different areas, including phosphors, glass, heat transfer, optical modeling, electrodes, and lamp modeling. He has received numerous innovation and management awards and has 20 issued U.S. patents and 10 issued U.S. design patents. He has published 45 articles in reviewed scientific journals and made over 30 invited presentations at various places around the world. Soules has been a Society member over many years and has often presented results of his work at Society meetings. He served as chairman of the Luminescence and Display Materials Division from 1989 to 1993. He has also served on the Honors and Awards Committee.

Soules is currently senior scientist/engineer at GE Lighting in Cleveland, Ohio, responsible for the development of improved fluorescent lamps and process improvements in the manufacture of phosphors. Recent work includes development of an improved method of firing phosphor powders, leading to an increase in plant capacity by 20%; the development of a method of tailoring phosphor particle sizes to avoid color separation in blends; and the development of software for formulating phosphors and blending phosphors for desired lamp characteristics. Other responsibilities include providing technical leadership for new hires, fire-fighting halophosphate manufacturing, and patent review coordination.

Candidacy Statement

The secretary of the Society works closely with headquarters, the Board, and members of the Society. As one who has worked in industry on numerous successful projects, I know the importance of obtaining the support of different groups within the company, and sometimes outside. I also know the importance of seeing a project through to completion, on time, and with controls in place. As chairman of the LDM group, it was necessary to express our desire to become a Division to the other Division chairpersons, then come up with a credible plan for growth and execute that plan communicating results to the Technical Affairs Committee and other committees of the ECS in order to win their support.

As Secretary, I will work to bring in the support of the different Society functions together in order to ensure progress on several

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Hussey *(continued from page 12)*

Hussey is a member of the American Chemical Society, the Society of Electroanalytical Chemists, and the Materials Research Society and has been elected to membership in Phi Kappa Phi and Sigma Xi. He has presented numerous invited lectures both in the U.S. and Europe. He was a member of the National Research Council Committee on Electrometallurgical Techniques for DOE Spent Fuel Treatment (1997-99), and has served as vice-chair (1995) and chair (1997) of the Gordon Research Conference on Molten Salts and Liquid Metals.

Candidacy Statement

Since its inception nearly 100 hundred years ago, The Electrochemical Society has undergone numerous changes in response to the needs of its members and to the challenges of the times. As we approach the Society's Centennial Celebration in 2002, we must be vigilant to safeguard those activities that have led to the success of the Society and be ready to quickly take advantage of those changes that will ensure its future success.

At the present time the Society finds itself in an identity crisis due to a rapid growth in international membership and an increase in the number of members whose interests lie in the area of solid-state science and technology. Recommendations by the Long Range Planning Committee to refer to the Society by its acronym and to add a tag line that more properly reflects the diversity of its membership should be given careful attention.

As the Society's international membership continues to expand, new ways must be found to increase the participation of international members in the Society's meetings and decision-making processes. The Society's past and future international meetings in Paris, Canada, and Hawaii, as well as the establishment of Sections in several countries, is testimony to the Society's good faith efforts to improve its accessibility to its global members. If more meetings were held at sites outside of the U.S., greater participation by international members in both the technical aspects and governance of the Society would be facilitated. The Society needs to identify and forge links to scientific organizations in other parts of the world including those in the southern hemisphere that might serve as co-sponsors for international meetings.

In spite of considerable effort by many dedicated members, some Local Sections of the Society continue to struggle. Perhaps it is time to reconsider the "Local Section" concept altogether. For example, regional sections that encompass more extensive areas than local sections and have fewer, but more intensive meetings organized around one or two day symposia might find that they enjoy better health than Local Sections. Regional sections would reduce the isolation of members like myself that live in areas where there are insufficient members to form Local Sections. The symposia associated with such meetings would also provide low cost opportunities to increase the participation of student members in Society activities.

As we approach the 21st century and our Society continues to evolve and grow, we are faced with many exciting challenges. The Electrochemical Society is a first-class international scientific organization that is endowed with a large number of loyal members and many conscientious, dedicated leaders. I am honored to be a candidate for vice-president. I have enjoyed my previous service to the Society, and if elected, I pledge to carry out the duties of my office to the best of my ability. ■

Scrosati *(continued from page 12)*

State Ionics, the *Journal of Applied Electrochemistry, Progress in Solid State Chemistry*, and *La Chimica e l'Industria.*

He has organized and been the chairman of various international conferences, including, among many others, the International Meeting on Lithium Batteries (IMLB-1 and IMLB-10), the International Meeting on Electrochromics (IME-1), and New Trends in Photoelectrochemistry (NTP-1). He is the author of more than 300 scientific publications, nine books, ten chapters in books, and 16 patents.

Candidacy Statement

The Electrochemical Society was founded as one of the first organizations to provide a forum for the exchange of technical information. In succeeding years, its scope has broadened to encompass a wide range of subjects associated with both electrochemical and solid-state phenomena. The synergy created by this unique blend of electrochemistry and solid-state science, as well as academic and research & development influences, entices researchers from around the world to participate in the technical meetings and to publish their research results in the journals. Thus, in this sense and under its present status, ECS members recognize the Society as a true international scientific organization. Because ECS has ensured that all members receive equal opportunities to participate in every aspect, not only scientifically, but also organizationally, I have always felt that the Society has been deserving of such important status.

The Society has been working hard to continue this trend, by including an increasing number of international members on its committees, by adding European editors to the Journal and Letters, by holding joint international meetings in Europe and Hawaii, and now by considering the first non-American member for an elected officer position.

It is a great honor to be proposed as a candidate for this highly respected position and I am ready to devote my best efforts to continue the international initiatives of the Society. It is important that these initiatives proceed without the risk of conflict with other technical societies that have common scientific interests, but rather with the aim of improving reciprocal collaboration. The success of the joint international meetings with both the International Society of Electrochemistry and The Electrochemical Society of Japan are convincing examples, which, in my opinion, should be extended to other scientific societies around the world.

The many physical barriers that once separated us, such as language and distance, are rapidly decreasing. Because English is the common language of all scientific organizations and computer-aided communications link the many corners of world, we can collaborate much more easily and effectively. Thus, international interactions are now a common and vital practice in the success of our scientific community.

We are approaching the Society's centennial anniversary, which appropriately will be celebrated in Philadelphia, where the founding group of 30 enthusiastic scientists met back in 1902. Today, we consist of a membership that has grown to over 7,000 still very enthusiastic scientists representing more than 65 countries. As we prepare for the new millennium, we can reflect on the success of this initiative as together we proudly face a future that is full of many unimaginable discoveries.

It is our responsibility to continue this trend and to enable the Society to grow and prosper in its electrochemical and solid-state scientific milieu. In my opinion, this can be assured by a very simple operation, which may seem paradoxical in words, but which in practice is self-enforcing; and that is by combining tradition, which has assured efficiency and high scientific progress, with evolution, which will favor interactions and collaboration first among all its members and then in concert with other technical societies from around the world. ■

Natishan *(continued from page 13)*

a valuable understanding of the Society and its diversity. As our activities expand around the globe, the Society is becoming more international in character and the composition of our Board of Directors, committees, and Divisions are changing to reflect this increasing diversity of our membership. The Society must be aware of, and meet the needs of its diverse membership around the world whether they are affiliated with academia, government, or industry. As a candidate for Secretary, I view my main role as an advocate for all the diverse interests of our members as well as for our various member services.

I believe that the main purposes of the Society are to serve its members and to promote electrochemistry and solid-state science. The two main strengths of the Society that promote these purposes are the members who devote their time and efforts to Society, divisional, and Local Section activities, and the ECS staff. Together, the volunteers and the staff have helped the Society grow and meet the challenges of growth. One of the more important duties of the Secretary is as a liaison between the Board of Directors, the members, and the ECS staff. Anyone who has interacted with the ECS staff appreciates their helpfulness and professionalism. As Secretary, I would work to ensure that the staff has the resources necessary to support the volunteers

and to continue to provide a high level of service to the members.

The Society is growing and changing. The best way to retain and serve our membership and to continue to attract new members is to provide high quality meetings and publications. The Secretary sits on the committees that are responsible for the publications and meetings. As Secretary, I would work to ensure the quality of ECS publications and work to maintain the vitality and value of the meetings. I have especially enjoyed and will continue to support the joint international meetings which the Society has undertaken. These meetings provide additional exposure for the Society and provide members an enlarged forum for the exchange of ideas.

I have also had the pleasure of interacting with the Federation of Materials Societies (FMS) as the alternate ECS trustee. FMS is a consortium of technical and professional societies and associations whose constituencies include scientists, engineers, and other professionals. An important FMS goal is to help the materials community arrive at consensus materials policy and to assist in informing policy makers of materials concerns including research funding. As this policy directly effects a large portion of the membership, and in a day of waning federal funding, I believe it is important that ECS continues to work through FMS to educate lawmakers and the public on the benefits that are gained through research.

In summary, the membership is the Society. I would be honored to serve the Society as Secretary and would work to ensure that the membership continues to receive the high quality of service that they have come to expect and deserve. ■

Soules *(continued from page 13)*

important current projects. In general the Society is in a healthy state. Thanks to prudent financial planning, it not only functions with a balanced budget, but, has a significant endowment. I am committed to the success of The Electrochemical Society because it represents the areas I work in and the way I work. It is unique in providing a forum for presenting creative out-of-the-box solutions to real world technical problems based on sound science. The technical areas represented by the different Divisions are diverse and applied, and ideas and contacts in one area cross-pollinate others. ECS also maintains sterling unifying characteristics: its members, high technical standards for talks and publications, a focus on new materials and how they can enable new technologies, total integrity - celebrating technical successes and quickly determining and admitting technical failures, and a well known and respected reputation around the world.

As Secretary I would be an advocate of evolutionary, not revolutionary change. In the search for identity, one current project is to modernize the name to include the diversity of the Divisions, while maintaining the unity of the ECS philosophy. The move to a new headquarters is not only an exciting move for both the staff and members, but it will provide an opportunity to modernize many of the headquarter functions. Moving forward as expeditiously as possible in updating the publication and Society software, leading ultimately to e-publication or compact discs as a publication vehicle, is important, and ECS can become a leader in this area. Incorporating other new technologies where new materials are resulting in whole new ways of doing things will improve the vitality of the Society. Attracting new membership by encouraging graduate student participation is essential, as is establishing local sections outside the U.S., and indeed, bringing in similar groups throughout the world. As Secretary, I will serve the Society by facilitating these and other projects, and will serve as an advocate for further modernizing the Society and making it as accessible as possible for serving your technical needs. ■