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 2005, to all Voting Members of the Society. Offices not affected by this election are those of the Secretary and Treasurer.

Candidate for President

William H. "Bill" Smyrl, is Professor of Chemical Engineering and Materials Science at the University of Minnesota, a position he has held since 1983. He was Director of the Corrosion Center from 1987-1995. He received his BS from Texas Tech University and his PhD from the University of California, Berkeley, and both degrees were in chemistry. He has taught at the University of California, San Francisco, in the School of Pharmacy; then went to the Boeing Scientific Research Laboratory as a Member of the Technical Staff; and then joined Sandia National Laboratory in Albuquerque, NM in 1971 as a Member of the Technical Staff. He has enjoyed participating in the Society while in each of these positions.

Professor Smyrl has been a member of The Electrochemical Society for over 30 years, and is a Fellow of the Society. He received the H. H. Uhlig Award of the Corrosion Division in 1995. During his membership in ECS, he has served on all positions of the executive board of the Corrosion Division, and was chair of the Division from 1990-1992. He has served as a member for several committees of this Division, including the H. H. Uhlig Award Committee and the Morris Cohen Graduate Student Award. He has served on the Technical Affairs Committee of the Society and as an Advisor to two Divisions, as a member of the Palladium Award Committee, as a member of the Education Committee, and as a Divisional Editor for the *Journal of The Electrochemical Society*. He has been an organizer and co-organizer of meetings symposia, and an editor of proceedings volumes for these symposia. He has been active in the Twin Cities Section where he has collaborated in teaching several short courses that were very successful. The most recent Section short course was in Applied Electrochemistry, taught jointly with Professor David Shores (University of Minnesota) and Professor Henry White (University of Utah).

Professor Smyrl chaired the Panel on Electrochemical Corrosion, convened by the National Materials Advisory Board in 1987, which issued a report entitled "Agenda for Advancing Electrochemical

(continued on page 72)

Candidates for Vice-President

Denis N. (Noel) Buckley is Chair of Physics at the University of Limerick, Ireland. He received his BSc (1971) and PhD (1975) from the National University of Ireland. His thesis work in physical electrochemistry under Professor Declan Burke resulted in the first observation of electrochromism in anodic iridium oxide films. He subsequently pursued postdoctoral research at the University of Pennsylvania where he worked under the direction of Professor Wayne Worrell on the high temperature sulphidation/oxidation of nickel.

In 1979, he joined Bell Laboratories, Murray Hill where he remained for seventeen years. Initially, he worked on the development of rechargeable lithium batteries and subsequently on the epitaxial crystal growth and characterization of compound semiconductor films and their application to high performance optoelectronic devices. This period saw an explosive growth in optical fiber communications and Dr. Buckley's work played a key role in the development of the underlying technology, particularly in high performance photodetectors. He also did considerable work on the development of safer precursors for III-V epitaxy. He held teaching positions as adjunct professor at Cooper Union (New York) and the College of St. Elizabeth (Morristown, New Jersey). In 1996, Professor Buckley assumed his present position at the University of Limerick to pursue teaching and research. Currently, his research focuses on the electrical and optical properties of compound semiconductors, particularly indium phosphide and gallium nitride, for photonic and electronic devices, processes at the semiconductor/electrolyte interface, and the electrodeposition and nanostructural characterization of copper metallization.

Professor Buckley has been a member of the Society since 1979 and was elected a Fellow in 1997. As chair of the Electronics Division, he was a member of the Board of Directors. He has served as an Associate Editor of the *Journal of The Electrochemical Society* (1995-2004) and of *Electrochemical and Solid-State Letters* (1998-2004). He has served on the Technical Affairs (1993-1996), Ways and

(continued on page 72)

Cor Claeys is responsible for Technology Business Development at Interuniversity Microelectronics Center (IMEC), Leuven, Belgium, and is also a professor at Katholieke Universiteit Leuven (KU Leuven), Belgium.

He received an electrical-mechanical engineering degree and a PhD degree in applied science from KU Leuven, Belgium, in 1974 and 1979, respectively. From 1974 until 1984 he was, respectively, research assistant and staff member of the Electronics, Systems, Automation, and Technology (ESAT) Laboratory of KU Leuven. In 1984, he joined IMEC as Head of Silicon Processing, responsible for process development and applications in charge coupled devices (CCDs), silicon sensors, complementary metal-oxide-semiconductors (CMOS), nonvolatile memories, silicon-on-insulator (SOI)-CMOS, and bipolar (Bi)CMOS. Since 1990 he has been head of the research group on Radiation Effects, Cryogenic Electronics, and Noise Studies and a professor in materials science at KU Leuven. His main interests are in silicon processing, device physics, low temperature electronics, radiation physics, submicron silicon technologies, and defect engineering.

Dr. Claeys co-edited a book on low temperature electronics and recently wrote a book on radiation effects in advanced semiconductor materials and devices. He has authored and co-authored eight book chapters, more than 600 technical papers, and over 500 conference presentations related to the above fields. He has been actively involved in the organization of international conferences and symposia. In 1999 he was elected as Academician and Professor of the International Information Academy. He is a Senior Member of IEEE and a member of the Materials Research Society. He was the founder and first chair of the IEEE Electron Devices Society (EDS) Benelux Chapter. He is also past-chair of the IEEE Benelux Section. Presently, he is an elected member of the EDS AdCom and a Distinguished Lecturer of EDS, and Vice-President for Chapters and Regions. In 2000 he received the IEEE Third Millennium Medal.

(continued on page 72)

WILLIAM SMYRL

(continued from page 10)

Corrosion Science and Technology." He chaired the Gordon Conference on Aqueous Corrosion in 1996. He was host and principal organizer for the 2nd International Conference on Conducting Polymers, held in Minneapolis in August 1999. Professor Smyrl has over 200 publications in journals and books. His research interests have been dominated by electrochemical engineering, corrosion science, microscopic imaging of reactive surfaces, and mathematical modeling. Recent interests have also included intercalation into oxide materials, high rate intercalation of lithium ions into porous aerogels and nanocomposites, and polymer electrolyte fuel cells. ■

NOEL BUCKLEY

(continued from page 10)

Means (1999-2001) and Nominating (2001-2002) Committees of the Society and as an Advisor to the Electronics and Dielectric Science and Technology Divisions. He has served as chair of the Norman Hackerman Young Author Award Committee (1991-1995) and as a member of a number of other committees and subcommittees including the Fellow Selection Committee, Ad Hoc Committees on Society Prestige and Visibility and Society Internationalization, and the Subcommittee on Division Formation and Consolidation. He has been a member of the Executive Committee of the Electronics Division and its Compound Semiconductor Subcommittee for over 15 years and has served as treasurer (1999-2001) and secretary (2001-2003) of the Division. He has co-organized over 20 symposia, particularly in the SOTAPOCS series, and has coedited fifteen proceedings volumes.

Candidate's Statement

I am honored to be a candidate for Vice-President and I am proud to have served the Society as outlined above. My scientific experience has ranged from electrochemical to solid-state topics, from room temperature to high temperature, and from materials to devices. It has touched on the interests of many of the Divisions, both "wet" and "dry." I have worked in both industry and academia and have spent about half of my career in, and half outside of, the U.S. Thus, I believe that I represent a very broad spectrum of members' interests.

Our Society has a rich history, talented and dedicated members, officers and staff, well-attended meetings at attractive locations, and excellent publications supported by state-of-the-art technology. It is international with members from over 70 countries. We must continue our member-friendly tradition and make the organization more accessible to this broad membership. For example, travel problems are being alleviated by more use of electronic communications, and time constraints in obtaining travel visas to attend meetings can be addressed by timely availability of supporting documentation.

Students are very important to the Society: they are the basis of our future membership. I support the establishment of specific structures for students such as local student chapters at key universities. We must encourage student involvement by making our website more attractive to students and by continuing to support student travel grants and awards, student memberships, and short courses.

In many respects, our website is the face of our Society. We have made great progress in developing our website and it is most important that we continue to improve it as technology evolves. In order to serve our members better and to attract new members and support, we must continue to make it more user-friendly and interactive and introduce new features and functionality.

I believe that a smoothly functioning Divisional structure is very important to the continued success of the Society. This structure has served the Society well and provides a good way to cope with the diversity of the Society's interests. I was involved in setting up the process by which the health of Divisions is periodically reviewed and this provides a good monitoring mechanism. However, matters frequently arise which are interdivisional by their nature. I believe that it is time to review the issues of how Divisions interact with each other and with the Society and, in particular, how Divisions are to be funded in the future. The Society must continue to provide top-quality symposia and publications that attract the best work in their field and the organizational structure should naturally facilitate this. ■

COR CLAEYS

(continued from page 10)

Dr. Claeys became an ECS member in 1980 and for the last decade has been very active in many aspects of the Society. In 2002 he was elected a Fellow of the Society. He has served on the Contributing (now Corporate) Membership Committee (1996-1998), the Honors and Awards Committee (1999-2002), the Carl Wagner Memorial Award committee (chair, 2000-2002), the New Technology Sub-Committee (1998-2001), and the *Journal* Editorial Board (1999-present). He has been serving the Electronics Division as Secretary (1997-1999), Vice-Chair (1999-2001), and Chair (2001-2003). He was Vice-Chair of the European Section of The Electrochemical Society (1999-2001). Cor was a co-organizer of many symposia for the Society, including the Low Temperature Electronics, the ULSI Process Integration, and the High Purity Silicon biannual series, and he coedited 17 proceedings volumes. In 2004 he received the Electronics Division Award. Since 1999 he has been an Associate Editor of the *Journal of The Electrochemical Society*.

Candidacy Statement

Although I have been a Society member for 25 years, I only fully appreciated the Society's important role and mission by becoming actively involved in different aspects the organization. I consider being nominated as a candidate for Vice-President of The Electrochemical Society as a great honor. At the same time it is also a great challenge to provide leadership and drive to support the Society's objectives and goals of serving its members in electrochemistry and solid-state science and technology. As with all professional societies, the move toward becoming more international in nature and the switch over to electronic media necessitate many new actions and often different ways of thinking. The Society has decided to go along this path and to make this switch and I will give strong support to implement the required changes under optimal conditions to safeguard and to improve the benefits of our members. The use of electronic and Web tools should help reduce costs, increase the speed at which information becomes available, and open our information to a broad audience. The switchover from fully paper to fully electronic should occur as fast as possible but not without taking into account the wishes of the majority of our members.

The international character of the Society is demonstrated not only by the global distribution of its membership in over 70 different countries, but also is in recent years more and more accentuated by the organization of biannual spring or fall meetings outside the U.S. and by supporting (technically and/or financially) local meetings in different parts of the world. Recent examples include Europe, Brazil, Japan, and China. Surely, there is no need for the Society to create more conferences, workshops, and/or symposia, but there is a need to become directly involved in high-quality existing ones. The change in professional activities and the requirement of multidisciplinary skills in different fields also lead to a natural collaboration between ECS and other professional societies worldwide. A stronger interaction with other societies should not penalize the identity and character of ECS itself. ECS members should be proud to belong to the Society and should be fully aware of why they are members.

Key activities of the Society are its symposia and its publications. Beside the well-known classical successful symposia for which the Society has built a strong reputation, we must be open-minded and take timely actions for the organization of symposia in new emerging fields related to both electrochemistry and solid-state science and technology. The New Technology Subcommittee is playing a crucial role here. However, the different Divisions must think about their mission statements on a regular basis. Sometimes the scope of topics may need to be changed and/or broadened. Our Society is controlled through its bylaws, but should be flexible and dynamic enough to reply to today's fast-changing professional environment. Symposia should be organized and driven by key scientists in the field and the Society should give optimal support for their organization and advertising. New members from different fields will be attracted in this way. The meaning of electrochemistry and solid-state science and technology should be as broad as possible and not become a barrier to young professionals who want to join the Society. Special attention should continue to be given to make the Society attractive to Student Members because they are the professionals of tomorrow.

The flagship activities of the Society are its publications, such as the *Journal of The Electrochemical Society*, *Electrochemical and Solid-State Letters*, and *Interface*. Both the *Journal* and *Letters* score very high with respect to impact factor and are considered the leading publications in the field. The recent move to full electronic handling from submission through to publication is highly appreciated by the authors and reflects the strong change to electronic communication. The next steps are the introduction of *ECS Transactions* and electronic handling of conference proceedings.

The Electrochemical Society has come to what its stands for today because of the strong involvement of a great many volunteers, whose activities are guided by the Society's officers. Therefore, the Society should create not only an appropriate working environment for these volunteers, but also channels to take into account their comments, criticisms, and suggestions. The volunteers should reflect the expectations of the members. As Vice-President I will try to act as an optimal interface agent between the basic work carried out by the volunteers and the established bodies defined by the Society's bylaws. The most important assets of the Society, i.e., its members and their expectations from a professional viewpoint, control the well-being of the Society.

My 25 years membership in the Society and my wide involvement in different aspects of the Society give me a strong level of confidence in taking on this important duty as Vice-President. ■