CANDIDATES FOR SOCIETY OFFICE

The following are biographical sketches and candidacy statements of the nominated candidates for the annual election of ECS officers. As the Society will discontinue the mail proxy process, electronic ballots and instructions will be sent in January 2017 to all members of the Society. The offices not affected by this election are that of the Secretary and the Treasurer.

Candidate for President

Johna Leddy is Associate Professor of Chemistry at the University of Iowa. After earning her BA in chemistry at Rice University and PhD at the University of Texas, she was a postdoctoral researcher in the Fuel Cell Program at Los Alamos National Labs. After five years at Queens College, City University of New York, she moved to Iowa. Her research interests are in physical manipulation of electrocatalysis as by ultrasound in a thin layer and by modifying electrodes with various materials that include magnetic microparticles and algae. Leddy models these and other electrochemical systems through transport, kinetics, and thermodynamics. Her fundamental research maps to advanced electrochemical energy technologies. Together with her group, Leddy holds 26 US patents. Leddy has served as Treasurer and President of the Society for Electroanalytical Chemistry. For ECS, she has served as Chair of the Physical and Analytical Electrochemistry Division, Society Secretary, and Vice President. She is a Fellow of The Electrochemical Society and featured on ECS trading card #30.

Statement of Candidacy

The nexus that is ECS links researchers, their communications, and the world beyond the lab by disseminating research through the discourse of publications and meetings. ECS is the professional home to many, where members share ideas and enthusiasms and invest energy in the advancement of science and the organization. Dissemination mechanisms change, but the enthusiastic support of the members for the research and for ECS remains unabated. With the rise of commercial publishers, forces of profit threaten to override the review integrity that is critical to vet quality science. To protect the integrity and dissemination of science, ECS has committed to eliminate all cost to publish open access, to make electrochemical and solid state research freely available to all. To support this bold and novel plan, the *Free the Science*

Candidates for Vice-President

Andrew Hoff is Professor and Graduate Coordinator of Electrical Engineering at the University of South Florida in Tampa. He received his doctorate in Electrical Engineering from The Pennsylvania State University in 1988 and joined the faculty at USF the same year as a founding member of the Center for Microelectronics Research. He is past Director of the CMR Metrology Laboratory and Co-Director of the Agile, state workforce training, Initiative (1998-2004). He has directed or collaborated on NSF-ATE workforce development programs in Florida since 2002. Hoff's research has focused on diverse applications of plasma processing in material and biomedical realms. These include afterglow chemical processes, Corona-Kelvin Metrology, and drug and DNA molecular delivery for cancer treatment. He received a Pioneering Award for Non-Contact Metrology (2000) and Outstanding Engineering Educator award from Florida West Coast IEEE (2013). He has authored over 100 papers and holds 12 patents.

Hoff joined ECS as a student member in the late 1970s and began attending conferences in the late 1980s. His activities in the Electronics and Photonics Division membership began in 2003 and he has consistently served the society through that division in the following capacities: symposium organizer, division representative to the Publication Committee (2005-2009), Interface Advisory Board (2005-2011), Secretary (2007-2009), Vice-Chair (2009-2011), Chair (2011-2013), and Past Chair (2013-present).

Statement of Candidacy

Nearly two decades into its second century, ECS strives to enable and advance electrochemical and solid state science and technology exploration and knowledge generation through the active participation of its members. Members, nonmembers and ECS staff accomplish this through timely dissemination of research at biannual and select inter-organization meetings and by publishing high quality content for utilization by this community.

Stefan De Gendt is a full professor of chemistry at Catholic University of Leuven and a Research Manager at imec. He received a Doctor of Science degree from University of Antwerp in 1995 which included a sabbatical at the University of Florida. He was subsequently recruited by imec, the world's largest independent research institute in nano electronics and technology. Over his 20-year career at imec, research activities included metrology, semiconductor cleaning and passivation, high-k and metal gate unit process research, and post-CMOS nanotechnology (including nanowires, carbon nanotubes, graphene and related 2D materials). De Gendt was program manager for imec's high-k and metal gate program from 2000, pioneering the exploration of alternative gate dielectrics and electrodes for CMOS technologies, and program manager for imec's post CMOS nano program pioneering nanowire-based TFET's, CNT-based interconnect applications and 2D material research. In 2003, he was appointed Research Professor at the Catholic University of Leuven and, since then, has mentored almost 25 PhD students and a multitude of master degree students in the various aforementioned research domains. With his respective teams, he co-authored 500+ peer-reviewed journal publications and edited 20+ proceeding volumes. De Gendt has received research project grants from the Belgian Science Foundation and European Union. He served as technical program chair of the 2016 IEEE International Electron Devices Meeting (IEDM) has delivered several invited presentations for the leading scientific professional societies, ECS, MRS and AVS, among them.

De Gendt's first contact with The Electrochemical Society was in 1996. After regular conference attendance, he became an active member in 2000 and participated in the organization of several symposia. He serves as technical editor of the *ECS Journal of Solid State Science and Technology*. De Gendt has served the

Johna Leddy

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Campaign is launched. As ECS sails into uncharted domains, ahead of the ill winds of profit, I ask members to advocate to *Free the Science*. It is important. As President of ECS, I will ensure a steady flow of information and ideas about how to engage *Free the Science*. Information plus energy will set the research free.

Andrew Hoff

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As such, a vibrant, diverse and engaged membership is both the strength of ECS and most important, the motivation for individuals, new and existing in the community that ECS serves, to join the society. As the electronic age continues to link to a broader cross-section of the global population, ECS has positioned itself well to serve and engage with existing and emerging communities of scientific practice. If elected, my focus will be on; (i) continuation of the effort to provide open access to ECS publications; (ii) increased student participation and membership development; (iii) promotion of the Society's growth through international outreach and inter-organization cooperation; (iv) expanding symposia and activities that bridge the gap between electrochemical and solid state topics, such as bioelectric topics; and (v) work to expand and enhance the Society's web presence and interactions with ECS allied communities.

Stafan De Gendt

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Electronics & Photonics and Dielectric Science &Technology divisions as an executive committee member since 2005. He has been instrumental in promoting the Society internationally as a member of the Europe Section. De Gendt became a Fellow of The Electrochemical Society in 2012.

Statement of Candidacy

Advancing science and technology is not just the mission of The Electrochemical Society, it should be the goal of every scientifically educated individual. In the past century, ECS has achieved its goals through encouraging research, dissemination of knowledge, and the education of its members. Education in Science, Technology, Engineering and Mathematics (STEM) of generations to come is a crucial pillar of our societal responsibility. With a network of over 8,000 scientists and engineers, ECS is invaluable for enriching people's scientific and professional career. Expanding this membership base on a global level, leaving ample opportunities for active participation by young, as well as established researchers, from traditional and emerging countries, should be our target. We should use our tools for dissemination of knowledge efficiently. Our vibrant conferences should further expand globally and bring science to the people, such that the world has access to updated knowledge and international experience. It is important to maintain and strengthen our publication pillar by raising the impact factor through definition of focus areas, critical reviews and contributions by the leaders in technological domains. Pivotal in this are our publications and the pioneering role played with the *Free the Science* initiative toward open access. Only by opening, and democratizing research, science can more rapidly advance society at large. Sustaining further growth in ECS membership is crucial, yet it is equally important to make sure that our members feel engaged with the Society. Encouraging members to participate in conference organization, rewarding outstanding achievements and bringing together technical experts to discuss emerging and established research will maintain the Society at the forefront of electrochemical and solid state science and technology for many years to come. Strong leadership is a prerequisite to develop content and innovativeness in a changing world and if elected, I will serve ECS and its members to the fullest of my capacities. Thank you for your consideration of my candidacy.

In the NEXT *issue of* INTERFACE

- The spring 2017 issue of *Interface* will be a special issue on the theme of molecular design for next generation polymer electrolytes used in electrochemical devices. The issue will be guest edited by **Christopher Arges** from Louisiana State University. The following contributions are envisaged (list of authors and titles are tentative and subject to change): "Alignment of Ionic Domains in Microphase Separated Polymer Electrolytes," by **Paul Nealey** and co-authors; "Molecular Modeling of Electrolytes for Metal-Air Batteries," by **Revati Kuman** and **Ryan Jorn**; "PFSAs with High Ionic Conductivity at Low Relative Humidities through Novel Sulfono-imide Side Chains," by **Michael Yandrasits**; and "Synthetic Routes for Stable and Functional Anion Exchange Membranes," by **Michael Hickner**.
- **E. J. Taylor** will write about intellectual property and patent issues in the first of a series of columns on these topics to appear in *Interface*.
- **ECS Spring 2017 Meeting in New Orleans**. The spring issue will feature a special section on the upcoming ECS meeting, with information on special lectures and symposia.
- **Tech Highlights** continues to provide readers with free access to some of the most interesting papers published in the ECS journals.