The following are biographical sketches and candidacy statements of the nominated candidates for the annual election of officers for ECS. Ballots (and instructions for voting either online or by mail) will be sent in January 2011 to all Voting Members of the Society. The offices not affected by this election are that of the Secretary and the Treasurer.

Candidate for President

Esther S. Takeuchi holds the rank of SUNY Distinguished Professor at the University at Buffalo SUNY in the Departments of Chemical and Biological Engineering, Electrical Engineering, and Chemistry. Her interests focus on materials, electrochemical power sources, and medical devices. She joined the University in 2007 after a 22-year career at Greatbatch, Inc., where she was involved in power source research and development. She was a key contributor to the lithium/SVO battery system that is used still to power the majority of life-saving implantable cardiac defibrillators. She received her bachelor's degree from the University of Pennsylvania with a double major in chemistry and history. She completed her PhD at The Ohio State University in chemistry and subsequently conducted postdoctoral work at the University of North Carolina and at the State University of New York at Buffalo in electrochemistry. She is author of over 60 publications, editor or author of five books or book chapters, has delivered over 100 presentations, and is inventor on over 140 patents. She is active in several professional organizations including the American Chemical Society (ACS), the American Association for Medical Instrumentation (AAMI), and most notably ECS where she has been a member since 1984. Her activities with ECS have included Secretary, Treasurer, and then Chair of the Battery Division, and Chair of the Battery Division Research Award Committee. She has organized several symposia and edited their proceedings volumes. In addition, she has served on the Technical Affairs, Development, and Ways and Means committees of ECS.

Dr. Takeuchi's work has been honored by several organizations. These include the Jacob F. Schoellkopf Award given by the WNY American Chemical Society, the ECS Battery Division Technology Award (1995), and the Community Advisory Council of the State University of New York at Buffalo for outstanding achievement in science. Dr. Takeuchi was inducted into the WNY Women's Hall of Fame and she is a Fellow

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Candidates for Vice-President

Paul A. Kohl is a Regents' Professor and Hercules Inc./Thomas L. Gossage Chair in Chemical and Biomolecular Engineering at the Georgia Institute of Technology. He received a PhD in Chemistry from The University of Texas at Austin under Allen J. Bard. He was employed by AT&T Bell Laboratories from 1978 to 1989, where he was involved in creating new chemical processes for electronic components, including photoelectrochemical processing of semiconductors, high-speed electrodeposition, analysis of next generation semiconductor materials components, including electron and surface microscopy, and new materials and structures for advanced packaging of integrated circuits.

In 1989, he joined the faculty of Georgia Tech, where he is currently Director of the Interconnect Focus Center, one of six Semiconductor Research Corporation/DARPA MARCO Focus Centers. His research interests include electrochemical devices for energy conversion and storage, such as fuel cells and batteries, electrochemical deposition of metals for electronic packaging, new low dielectric constant materials for electronic devices and packages, and novel materials for electronic interconnect. Paul Kohl has 200 journal publications, 49 U.S. patents, and 300 conference presentations.

Paul Kohl has been a member of ECS since 1976. He is an ECS Fellow and has received the Carl Wagner and Thomas D. Callinan Awards. He has held a number of editorial positions including Founding Editor of *Interface* (1992-1995), Editor of the *Journal of The Electrochemical Society* (1995-2007), Founding Editor of *Electrochemical and Solid-State Letters* (1998-2003), and a *Journal* Divisional Editor (1985-1990). He was the first Chair (1995-1996) and cofounder of the Georgia Section. He has held a number of ECS volunteer positions including member of the Publication Committee (1987-2008), Technical Affairs Committee (1991-1994), Electronics Division advisor

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Krishnan Rajeshwar's research contributions include: the first demonstrated use of molten salt electrolytes for electrode stabilization in photoelectrochemical (PEC) devices; the electrosynthesis of new classes of binary and ternary semiconductor thin films; the discovery and development of new protective electrode coatings in PEC cells; the detailed study of ion transport in polymer electrodes; development of new *in situ* techniques for monitoring electrochemical processes; and the mechanistic aspects of heterogeneous photocatalysis based on titanium (IV) oxide. He has also co-authored several invited reviews, book chapters, a monograph on the environmental applications of electrochemistry and photoelectrochemistry, and another on renewable hydrogen generation. He is the author of over 450 refereed publications in reputed journals, including several in the *Journal of The Electrochemical Society* and *Electrochemical and Solid-State Letters*.

Dr. Rajeshwar has served on several peer review panels including the National Science Foundation, American Water Works Association, Research Corporation, and the Department of Energy. He has organized many national and international symposia in solar energy conversion and conducting polymers for both the American Chemical Society and ECS. Dr. Rajeshwar received the Distinguished Research Award from the University of Texas at Arlington. He is also the recipient of the Wilfred T. Doherty Award of the American Chemical Society. He was inducted into the Academy of Distinguished Scholars at UT Arlington as a charter member and now holds the title of Distinguished University Professor.

Dr. Rajeshwar has been a member of ECS since 1978. He has rotated through several leadership positions within the Society including Chair of the Energy Technology Division, Chair of the New Technology Subcommittee, and has served as a member of the Technical Affairs, Finance, and Honors and Awards committees. He is currently serving as the Editor of *Interface* and has edited

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Esther S. Takeuchi

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of the American Institute for Medical and Biological Engineering (AIMBE). In 2003, she was presented the Achievement in Healthcare Award by D'Youville College and received the Woman of Distinction Award presented by the Buffalo Branch of the American Association of University Women. In 2004, Dr. Takeuchi was elected a member of the National Academy of Engineering. She also received the Pioneers of Science Award, presented by Hauptman Woodward Medical Research Institute. *USA Today* noted in the December 13, 2005 issue, in an article by Kevin Maney, "You Really Can Find Identities of Top Patent Holders," she (Esther Takeuchi) is indeed the most prolific female inventor. In 2006, the Lincoln Gries Distinguished Alumni Award was presented by Old Trail School, Bath, Ohio, in recognition of outstanding alumni. In 2007, Dr. Takeuchi was recognized by a Lifetime Achievement Award presented by The Technical Societies Council and the Niagara Frontier Intellectual Property Law Association for contributions to advancement of science through intellectual property. She has been inducted into the Western New York Women's Hall of Fame, and in 2008, she was selected for an inaugural Astellas Foundation Award by the American Chemical Society for scientific work impacting public health. In 2009, Dr. Takeuchi was awarded the prestigious National Medal of Technology and Innovation by President Obama. Recently, she was the recipient of the 2010 Chancellor Charles P. Norton Medal, the highest honor conferred by the University at Buffalo.

Paul A. Kohl

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(1991-1994), Energy Division advisor (1991-1994), Editor selection committee (1990 and 2003), and Long Range Planning Committee (1991-1995). He is currently the Chair of the Honors and Awards Committee.

Candidate's Statement

ECS was founded in 1902 by members who saw benefit in scientific and technological exchanges in areas created by the use of electrical energy in chemistry and electronics. The ECS mission has been redefined many times over the past 108 years as electronics and electrochemistry have evolved in content and subject matter. Today, the ECS mission of information dissemination and professional growth for its members is as fresh and vibrant as ever. However, the needs of the members have changed and evolved, creating new challenges for the ECS leadership.

The biannual meetings remain the primary activity for scientific and interpersonal exchange. An extraordinary effort is made each year by dedicated Division and Group volunteers and ECS staff to produce a diverse technical program. It is imperative that the location and program be responsive to the needs of the members. I can recall nearly every event from the first ECS biannual meeting I attended in Seattle in 1978. It would be wonderful to increase the number of student attendees and have them experience the same opportunity. It would also be valuable to offer more meeting and membership opportunities in areas such as Asia, Europe, and South America. This could expand the professional growth opportunities for existing members and encourage others to join.

The ECS archival publication, *Transactions of the American Electrochemical Society*, was originally used to capture the technical content from the biannual meetings. It was converted to the *Journal* to meet the broader needs of the members to publish scholarly works beyond those presented at meetings. Today, the ECS serial publications face new challenges brought about by the proliferation of commercial and society journals, and the economics of electronic publishing. The erosion of the impact factor of the ECS publications must be aggressively addressed. I believe the ECS serial publications can attract more and higher impact manuscripts by adding benefits. Author benefits include the open access of current content, rapid reviews, and no page charges. Open access would provide authors with the widest possible dissemination of their scholarly work. Members would benefit from broader, higher impact publications since access remains a benefit of membership. The ECS mission of capturing the archival content from the biannual meetings needs to be reinvigorated, including the use of special issues. The Society needs to take immediate actions to strengthen the impact and breadth of its serial publications and keep them on a stable financial footing.

ECS has provided opportunities to many early career scientists and engineers through Sections, fellowships, and travel grants to meetings. It is important to continue and expand this outreach to students and others through attendance at biannual meetings, educational growth programs, and publication opportunities.

ECS is an integral part of the wider, international scientific community. A proactive role in international events, including biannual meetings, jointly sponsored meetings, publications, and Sections, would allow the ECS to reach new members. A high level of cooperation and interaction with other societies, especially international ones, should be fostered.

ECS has been an important part of the professional life of many members and nonmembers, including my own. Each year, new and interesting topics in energy, electrochemistry, and solid-state technologies appear in ECS meetings and publications. The evolution of the Society has been guided by the efforts and wisdom of past ECS leaders. It is an honor and privilege to be considered for this position.

Krishnan Rajeshwar

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several proceedings volumes and an *ECS Transactions* volume for the Society. He is a Fellow of The Electrochemical Society and received the Energy Technology Division Research Award of the Society in 2009.

Candidate's Statement

I am honored and privileged to be a candidate for Vice-President of the Society and would be delighted to continue my service to the Society in a leadership role. The Society has been an integral part of my professional life during the past three decades and I have treasured the numerous friendships made over all these years through my continuing involvement with it. It has been a pleasure to watch the Society grow and expand its leadership role in electrochemical and solid state science and technology on a global scale. It is critical to continue this growth and further expand the Society's reaches in countries in Asia and the Far East (such as India, Singapore, Japan, and other nations), and in Latin America. I believe that my background and experience in forging collaborative ties in these parts of the world will stand me in good stead with these initiatives.

Another crucial strategic area for the Society is maintaining or even enhancing its leadership role in journals and publications. The challenges presented by a constantly changing world of scientific publishing and declining revenues from library subscriptions and traditional revenue streams have been well-recognized by the Society leadership. I look forward to being a member of the leadership team confronting the issues head-on and taking appropriate measures to safeguard the Society's pre-eminent role in many technical areas in electrochemical and solid-state science and technology. Along with these challenges come unique opportunities in the areas of energy, materials science, and bio-technology. ECS is a well-run organization that has successfully overcome challenges and captured opportunities that have come its way in the past. I am excited by what the future holds for the Society.