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 2010 to all Voting Members of the Society. The office not affected by this election is that of the Secretary.

Candidate for President

William (Bill) D. Brown holds the title of Distinguished Professor Emeritus since retiring from the University of Arkansas in 2008. During his tenure at the university he served as head of the Department of Electrical Engineering, Associate Dean of Engineering for Research, Associate Dean for Academic Programs, and Director of the High Density Electronics Center (HiDEC), a world-class electronics packaging center that he established in 1991. Brown's research has resulted in more than 350 scientific papers, 353 conference/workshop presentations, and 22 educational publications. In addition, he has coauthored and/or co-edited four textbooks and four book chapters. He holds 13 U.S. patents with two others pending. He has received honors for both his teaching and research. Dr. Brown received the Thomas D. Callinan Award from the ECS Dielectric Science and Technology Division in 1996 and was elected to Fellow status by the Society in 2002. He was elected to Fellow status by the IEEE in 2005.

From 1969 to 1977, Dr. Brown was a Member of the Technical Staff at Sandia National Laboratories in Albuquerque, New Mexico, where he designed electronic test equipment, developed semiconductor device fabrication technologies, and studied the effects of defects and radiation on semiconductor devices. After joining the University of Arkansas in 1977, his research interests included microelectronic fabrication technology, semiconductor device physics and reliability, material synthesis and characterization, and materials applications. He received his BS from the University of Arkansas in 1969, his MS from Pennsylvania State University in 1970, and his PhD from the University of New Mexico in 1975, all in electrical engineering.

Dr. Brown has been a member of the Society since 1983 and is an Emeritus Member. He has served The Electrochemical Society as Vice-President (2007-2010) and as Treasurer (1998-2002); and the Dielectric Science and Technology Division as Secretary, Vice-Chair, and Chair. He has served

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Candidates for Vice-President

Dennie T. Mah (a/k/a "Doctor Electro") is a Senior Consultant, Reaction Engineering & Thermodynamics, DuPont Engineering Research & Technology (DuET), DuPont Company, with 36 years of broad chemical engineering (ChE) experience. He earned his BSChE (1971) and MSChE (1973, photochemical reaction engineering thesis) at Northeastern University, Boston, MA, and he worked in the Department of ChE as an Instructor ChE, unit operations supervisor, and purchasing agent. In 1973, he then entered DuPont's premier engineering career development program, Engineering Service Division (ESD) Field Program, and held various assignments involving: pigment dispersion at Marshall Laboratory, Philadelphia, PA (1973-75), introducing high speed dispersers in coating manufacturing; nylon 6,6 textile fiber spinning, Martinsville, VA (1975-78), leading to major reduction of warp knit textile defects; dimethylterephthalate (DMT) refining, Cape Fear, NC (1978-80), achieving energy reductions; solids washing and electrochemical engineering research, Experimental Station, Wilmington, DE (1980-82), before permanently transferring into ESD.

He remains in ESD (today's DuET) providing ChE consultation to DuPont businesses and R&D organizations. He was a visiting Principal Investigator to DuPont Fuel Cells Hydrogen FC (2000-03), DuPont Applied Biofuels cellulosic ethanol pretreatment (2006-07), and DuPont Crop Protection solvent recovery (2009). A U.S. citizen of immigrants from diverse cultures (Chinese/Swiss), he has dealt with multicultural assimilations throughout his life in school, work, and community. His career has involved many multidisciplinary teams aimed at exploiting the synergy that abounds in seeking the reduction to practice of science and engineering to provide commercial products for the benefit of the world.

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Tetsuya Osaka is a professor in the Department of Applied Chemistry, Faculty of Science and Engineering, Waseda University, Tokyo, Japan, a position he has held since 1986. He currently serves as Director of the Waseda Research Institute for Science and Engineering, and Deputy Dean of Faculty of Research and Engineering, Waseda University. At Waseda University, he was Director of the Department of Applied Chemistry from 1996 to 1998, Dean of Graduate School of Science and Engineering from 1998 to 2002, Provost of Research Promotion Division from 2002 to 2006. He received his Doctor of Engineering degree in 1974 from Waseda University. In 1975, he was a post-doctoral fellow at Georgetown University, and in 1989 he served as a Visiting Professor at the University of Minnesota.

Dr. Osaka is an immediate past President of the Magnetics Society of Japan after serving as President of the Electrochemical Society of Japan, President of the Japan Institute of Electronic Packaging, Vice-President of the Surface Finishing Society of Japan, Vice-President of the International Society of Electrochemistry (ISE), and Chair of the ECS Japan Section.

His research field is electrochemical technology, and his recent work is focused on electrochemical nanotechnology, including electro- and electroless-deposition/surface finishing, electronic packaging materials, magnetic storage and energy storage devices, and chemical- and bio-sensors. He has contributed as an author and/or editor to more than 65 books and published more than 740 original and review papers in these fields. He has been identified as one of the Highly Cited Researchers in the Materials Science category in Thomson ISI's ISIHighlyCited.com (http://isihighlycited.com/).

His technical contributions have been recognized by many awards including Prizes for Science and Technology in Development Category of the Commendation for Science and Technology by the Minister of

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Candidates for Treasurer

Christina Bock is a Senior Research Scientist at the National Research Council in Ottawa, Canada, where she is leading the research group on Electrocatalysis and Electrochemical Processes. She joined NRC, after graduating from the University of Calgary, in May 1997. Her research focuses on electrocatalysis for waste water treatment, fuel cells, and electrochemical water splitting reactions. She is also conducting research on the lowering of NO_x emissions using electrochemical reduction techniques. Much of her research work is devoted to the preparation of catalysts and electrode structures, as well as their characterization and incorporation into real devices. She has developed several novel approaches for the characterization and the determination of relevant performance properties of electrocatalysts. She has obtained a U.S. patent for her catalyst formulations, and was awarded the Lash Miller Award of the ECS Canadian Section in 2005. She has authored and co-authored numerous original research articles in well-regarded journals, authored and co-authored five book chapters, and has written numerous reports for industrial collaborative projects. She is currently writing a textbook about methanol fuel cells. Her research at the NRC consists of a variety of projects that encompass both fundamental research work, including the guiding of graduate students in association with the University of Ottawa, and applied investigations for industrial collaborations. She has been working closely with Hydrogenics since 2005 and with Ballard and AFCC for the past two years.

Dr. Bock joined ECS in 1993 during her graduate studies in Canada, shortly after she had finished her BSc in Chemistry and Chemical Engineering in Switzerland. Since becoming a member, she has attended many meetings and has been actively involved with ECS at many levels. She has served on the Canadian Section Executive Committee (1998-2006), as Chair of the Canadian Section (2002-2003), on the Executive Committee of the Council of Sections (2000-2005 and as Chair in 2003-2004), on the ECS Board member (2003-2005), representative to the Individual Membership (2002-2003) and Education Committees (2004-2005), served as a member of the Ways and Means Committee (2004-2006), and on the Fuel Cell Coordinating Committee (2006- present). She is currently the Chair of the New Technology Subcommittee and reports directly to the Technical Affairs Committee.

Dr. Bock has organized and co-organized many symposia and takes part in Divisional Executive committee meetings. Her activities with ECS have given her a solid and broad understanding of the Society. She joined the Society as a student member because she realized the importance of presenting her research work and of receiving feedback and interacting with ECS members who are experts in the field of electrochemical science and technology. She is a proud member of ECS and has benefited from the wide diversity the Society provides, which stretches from fundamental to applied research, and importantly providing an opportunity for meeting and exchanging scientific information and ideas with researches from university, governmental institutions, and industry.

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E. Jennings (EJ) Taylor has a BA in Chemistry (1976) from Wittenberg University, and MS and PhD degrees in Materials Science (1981) from the University of Virginia where he studied under Glenn Stoner. His dissertation research was directed toward oxygen reduction kinetics related to fuel cells and conducted at Brookhaven National Laboratory under the direction of S. Srinivasan, W. O'Grady, and J. McBreen. Subsequently, he obtained an MS in Technology Strategy and Policy (1991) from Boston University and is admitted to the U.S. Patent & Trademark Office bar (Reg. No. 53,676).

Dr. Taylor has been active at ECS meetings since 1979 and has presented numerous technical presentations and judged student posters. He is the author/co-author of approximately 120 technical publications and is the inventor/co-inventor on 27 U.S. patents. He has served as Secretary, Treasurer, Vice-Chair, and Chair of the Boston Section of the Society. He currently chairs the Sponsorship Committee and serves on the Development Committee. He presents an ECS Tutorial titled "Intellectual Property for Electrochemical Scientists, Engineers, and Technologists," and recently presented an ECS "Hot Topic" breakfast briefing entitled, "The Role of Small Businesses in the Innovation Ecosystem."

Dr. Taylor received the 1995 Dayton Small Business Development Center Client of the Year Award, the Wittenberg University Alumni Association Class of 1914 Award in 1997, the 2001 Dayton Affiliates Society Outstanding Professional Achievement Award, and the 2008 William Blum Scientific Achievement Award of the National Association of Surface Finishers.

Taylor's work experience includes battery research at the corporate R&D center for International Nickel Corp., Manager of Fuel Cell Research at Giner Inc., and Manager of Electrochemical Technologies at Physical Sciences Inc. In 1991, he founded Faraday Technology Inc. with the vision of developing and commercializing innovative technologies using pulse/pulse reverse electrochemistry. To date, this vision has been applied to electrodeposition, electrochemical polishing, electrochemical deburring/radiusing, and electrophoretic processes and has resulted in 31 U.S. patents with additional patents pending and foreign counterparts.

Dr. Taylor is passionate about innovation and Faraday's technology is commercialized through the process of "open innovation" whereby Faraday assists corporate clients in demonstrating and validating engineering readiness and manufacturability. The competitive advantage associated with the technology is transferred to the corporate client via patent licensing or acquisition. In addition, he is committed to workforce development and Faraday provides intern opportunities for undergraduate and graduate students, patent law students, and high school science and math teachers. He has recently guided Faraday through a strategic acquisition and continues to serve as Chief Technical Officer at Faraday and IP Counsel for the parent corporation, Physical Sciences Inc.

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William (Bill) D. Brown

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on the Education Committee (1993-1998) and as its chair from 1994 to 1998. During that time, he was instrumental in the initiation of the highly successful Student Poster Session held at each ECS meeting. He also has served on the Technical Affairs Committee (2007-2009), the Ways and Means Committee (2007-2010), the Finance Committee (1998-2002), the Financial Policy Advisory Committee (1998-2007; Chair: 2002-2007), and the Audit Subcommittee (2006-2007). In addition, he served on the Society Meeting Committee (1998-2002), the Honors and Awards Subcommittee for the Henry B. Linford Award (1994-1997), the Fellows Selection Subcommittee of the Honors and Award Committee (2003-present), on the Search Committee for the Editor of *Electrochemical and Solid-State Letters* (2002-2004), the Nominating Committee (2005-2006; 2007-2008), the Individual Membership Committee (2007-2008), the Corporate Sponsorship Committee (2009-2012), the Development Committee (2004-2009), the Ad Hoc Gift Acceptance Committee (2001-2009), and the Solicitation Subcommittee of the Corporate Sponsorship Committee (2009-2012).

While serving in these positions, Bill has been an ardent supporter of the Society's efforts to disseminate technical information and expand the Society's international activities. As a Society member, he has co-organized 28 symposia, including the well-regarded Silicon Nitride and Silicon Dioxide Thin Insulating Films, Low Temperature Electronics and High Temperature Superconductivity, Diamond Materials, and the III-V Nitride series. He has contributed a substantial number of papers to the *Journal of The Electrochemical Society*, the *Letters* journal, and ECS proceedings volumes.

Dennie T. Mah

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A myriad of DuPont technical accomplishments have included electrolytic reduction of uranyl to uranous ions (Purex process) and novel 300 GPM reverse osmosis system to separate radioisotopes at DoE's Savannah River site; fluorocarbons via Kolbe electrosynthesis; product recovery resulting in Adipure®, the world's purest commercial form of adipic acid; industrial scale-up of gas phase electrolytic recovery of chlorine from anhydrous hydrogen chloride employing very large membrane electrode assemblies (44" x 32") earning six U.S. Patents; 2000 Chemical Solutions Enterprise Technology Excellence Award for co-inventing low temperature electrolytic alkali metal process employing ionic liquids; 2003 Engineering Excellence Award for implementing DuPont Fuel Cells in-house hydrogen fuel cell test stations and protocols; 2006 Certificate of Global Excellence Award for process engineering of a Hybrid Membrane Technology market development facility for nanofiber nonwovens employing novel electroblowing technology; and consultant to DuPont's electrolytic nitrogen trifluoride (NF_3) process development.

He joined ECS in 1994 and has served as the IE&EE Division's Secretary/Treasurer (2002-04), Vice-Chair (2004-06) and Chair (2006-08), ECS Board of Directors (2006-08), and Finance and Education Committees. He is a member of AIChE, ACS, and ISE. He authored electrochemical sections of Perry's *Chemical Engineering Handbook*. His interests include photography, scuba diving, guitar, and the Boy Scouts of America.

Candidate's Statement

The objectives of the ECS are:

- to advance the theory and practice of electrochemistry, solid-state science and allied subjects;
- to encourage research and dissemination of knowledge in these fields; and
- to assure the availability of adequate training and education of fundamental and applied scientists and engineers in these fields.

From a global perspective, we need to provide solutions to the future needs of society such as energy and its storage, water preservation and its availability, environmental sustainability, and an adequate food and health supply chain by employing electrochemical and solid-state technology in harmony with other sciences and engineering.

The world is quickly changing and the venues of R&D are shifting every day. We must be able to offer these new emerging centers of science and engineering in Asia Pacific, Middle East, Latin America, and Africa, along with the venerable institutions of Europe and North America access to our knowledge distribution system. The recent ECS Vienna meeting is a step in that direction; however, conferences outside the U.S. have proven to be very expensive. I will strive to develop a global business model to enhance the ECS's ability to serve the world's need for electrochemical and solid-state technology dissemination emphasizing reduction to practice.

I foresee an increasing need to educate the public to exactly what we do and how it may benefit the world. We need the brightest minds to become interested in our endeavors. The ECS student posters, awards, fellowships, chapters, and travel grants need to be maintained and even expanded. I, with several ECS colleagues, have been reaching out to local high school students for the past seven ECS meetings to stimulate and acquaint our youth with the possibilities of a career in our fields.

Finally, the above challenges must be met while preserving our core values in a sustainable and fiscally sound manner that promotes growth in our Society and creates the recognition of being the global leader in electrochemical and solid-state technology. Join me in my vision and vote!

Tetsuya Osaka

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Education, Culture, Sports, Science, and Technology in 2008; the Society Award of the Magnetics Society of Japan in 2006; and the Chemical Society of Japan's Award for 2003; the Pergamon Electrochimica Acta Gold Medal of ISE in 1998; the Society Award of The Electrochemical Society of Japan in 2001; the Society Award of the Surface Finishing Society of Japan in 1999; and the Simon Wernic International Award of the International Union for Surface Finishing in 1996. A member of ECS since 1979, Dr. Osaka served as a leading organizer and a co-editor of many proceedings volumes. He received the Research Award of the ECS Electrodeposition Division in 1996 and was elected a Fellow of ECS (2002), IEEE (2002), IUPAC (2004), and ISE (2006).

Candidate's Statement

A long term member of ECS, I have participated in many activities of the Society as a member residing in Japan. I consider it to be of special importance for ECS to expand its activities on the international scale. Japan and other Asian countries are becoming more strongly tied with the U.S. in recent years, not only economically and financially, but also in the fields of science and technology. I believe an increase in international activities of ECS will strengthen the Society's leadership on the global scale and consequently reinforce the significance of the existence of our Society. I am honored to be a candidate for Vice-President of ECS, and I would be delighted to help ECS continue to fulfill its leadership role in the areas of electrochemical and solid-state science and engineering.

Christina Bock

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Candidate's Statement

I am deeply honored to be considered for the Treasurer's position of ECS. As the Treasurer, I will work dutifully to maintain the high standards and international recognition of this Society. I joined ECS as a student and have since remained a member, as I have greatly benefited from and truly enjoyed the open forum of discussions and interactions that ECS provides. The size and large scope of this Society, which includes many different areas of solid-state and electrochemical science and technology, enables the members to broadly interact and educate themselves. I have always been impressed by the Society's dedication and capability to grow into new areas, encouraging students to participate at meetings, and maintaining the involvement and support of industry.

During my years of service with ECS, I have been involved in stimulating the involvement of students (*e.g.*, the establishment of student travel grants and young author symposia for the Canadian Section). I have organized tutorials during Society meetings and initiated new symposium topics. I am well aware of the importance of the sound fiscal and financial position of our Society, which is crucial to its future success and strength in the electrochemical community.

As ECS Treasurer, I will work to make certain that the Society continues to remain financially secure, and devote my energies to developing strategies to not only maintain this position, but also to expand it for the future. As well, my vision as Treasurer is to also support and foster the scientific and technical activities of the ECS in new research topics relevant to electrochemical science and technology, provide educational courses and tutorials with discussion sessions, and promote ECS to members and students as a place to interact and discuss research. This is also the basis for a financially sound Society. I fully understand that the uniqueness of this Society also depends on the continuous support and feedback from industry, hence, the further bridging and maintaining close ties between the Society and industry will be of major importance for me. I will be working with all bodies of governance of this Society, the senior executive committee, and the various Divisions and committees to achieve these goals and maintain and secure the position of ECS as an outstanding and internationally recognized Society, with a secure financial future.

I am humbled to be nominated for the Treasurer's position of this Society and look forward to working with all bodies of the Society and the outstanding ECS staff if my election is successful. I believe that my broad and active involvement with all aspects of this Society over the past one-and-a-half decades has given me an understanding and appreciation of the functioning of the Society, and has positioned me well to assume the position of Treasurer, if elected.

E. Jennings (EJ) Taylor

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Taylor serves on various National Science Foundation Advisory Committees including as past Chair and current member of the Small Business Innovation Research program AdComm, member of the Engineering Directorate AdComm, and member of the Business and Operations AdComm. He also serves on several nonprofit boards as Chair of the Board of Trustees for the Edison Materials and Manufacturing Technology Center, a technology based economic development corporation funded in part by the state of Ohio. He is also a member of the Board of Directors of the Wright Brothers Institute, a "collaboratory" whose mission is to promote innovative solutions related to U.S. Air Force mission requirements. Finally, he is a member of the National Academies University Industry Demonstration Partnership whose goal is to promote collaborative relationships between the academic, federal laboratory, and commercial sector.

Candidate's Statement

I am certainly honored to be nominated for the position of Treasurer of ECS. I understand both the stewardship and fiduciary responsibilities associated with being a Board member and officer of ECS and I accept the responsibilities without reservation.

As a long-time member of ECS and participant in Society meetings, I am very committed to the well-being of ECS. I believe that my experiences on various ECS committees and nonprofit boards, as well as my entrepreneurial experience could provide a useful perspective regarding ECS governance issues.

I am passionate about innovation and student education and will continue to look for ways for ECS to promote these issues whether or not I am elected Treasurer.