AVS Announces Its Major Award Winners of 2018
New York, October 29, 2018 —The AVS has selected its major award winners for 2018. The AVS established an annual awards program to encourage excellence in research and innovation in technical areas of interest to the AVS. Listed below are the major award winners:

**Medard W. Welch Award**— David Castner, University of Washington, “For leading advances in rigorous and state-of-the-art surface analysis methods applied to organic and biological samples.” The award recognizes and encourages outstanding research in the fields of interest to AVS. The award consists of a cash award, a medal, and an honorary lectureship at a regular session of the International Symposium.

**Gaede-Langmuir Award**— Michael Grunze, Ruprecht-Karls-University of Heidelberg, Germany, “For taking surface science beyond small molecules at surfaces to complex liquid/surface interactions, including polymers, biointerphases, and biomedical applications, through development of novel experimental approaches, theoretical simulations, and inventions.” This award recognizes and encourages outstanding discoveries and inventions in the sciences and technologies of interest to AVS. The award is conferred biennially as a suitable candidate may be identified. The award consists of a cash award, a plaque, and an honorary lectureship at a regular session of the International Symposium.

**Peter Mark Memorial Award**— Peter Bruggeman, University of Minnesota, “For studies that have provided fundamental insights into nonequilibrium atmospheric-pressure discharges and the underlying mechanisms enabling biomedical applications.” This award is presented to a young scientist or engineer (35 years of age or under) for outstanding theoretical or experimental work, at least some of which must have been published in an AVS journal. The award consists of a cash award, a plaque, and an honorary lectureship at a regular session of the International Symposium.

A complete list of the Fellows as well as the 2018 graduate student winners is attached. Nominations for the 2019 awards are currently being solicited. For more information, please contact Angela Klink, AVS, 212-248-0200, fax 212-248-0245, e-mail angela@avs.org.
**Additional Awards**

**2018 AVS Fellows**

AVS Fellows are members who have made outstanding contributions in areas of interest to AVS.

Heather Canavan, University of New Mexico, “For innovative and sustained contributions to the understanding of responsive materials and for leading transformative, innovation-focused educational platforms that encourage women and underrepresented minority student participation in STEM fields”

Donna Chen, University of South Carolina, “For ground-breaking research on bimetallic nanoparticles that have elucidated the nature of metal-metal and metal-support interactions on chemical activity”

Jeffrey W. Elam, Argonne National Laboratory, “For significant contributions to the science and technology of thin film coatings using atomic layer deposition”

Daniel Gall, Rensselaer Polytechnic Institute, “For outstanding contributions to the understanding of thin film growth by reactive sputtering, properties of novel transition metal nitrides, and electron transport in nanoscale metallic conductors”

Grzegorz (Greg) Greczynski, Linköping University, Sweden, “For seminal contributions to nondestructive XPS surface analysis, and the development of novel next-generation HiPIMS metal-ion deposition techniques”

Subhadra Gupta, University of Alabama, “For contributions in thin film and vacuum technology for optical, electronic, and magnetic devices leading to commercial applications in the semiconductor and data storage industries”

Jeffrey Hopwood, Tufts University, “For seminal contributions to the understanding, development and applications of microplasmas”

Robert J. Madix, Harvard University, “For ground-breaking research elucidating the fundamental nature of complex, molecular reactions on metal and metal oxide surfaces”

Paul Mayrhofer, Technische Universität Wien (TU Wien), Austria, “For seminal contributions in the development of vapor phase deposited nanostructured materials and self-hardened protective coatings of ternary nitrides and borides”

Leonidas E. Ocola, IBM T.J. Watson Research Center, “For fundamental contributions to the understanding of beam-based nanofabrication processes and of ALD-based infiltration in nanostructured polymers”

Philip Rack, University of Tennessee, “For foundational contributions to the field of processing materials using focused energetic beams”

François Reniers, Université libre de Bruxelles, Belgium, “For seminal contributions to atmospheric plasma synthesis of organic, inorganic and hybrid coatings to attain a wide variety of functional properties and dielectric barrier discharge CO₂ conversion into useful molecules”

E. Charles Sykes, Tufts University, “For pioneering developments in the field of single-atom alloy catalysis and for advancing the fields of molecular motors, molecular self-assembly, and chiral surface chemistry”
AVS Graduate Student Awards

2018 Top-Level Student Finalists

There are five (5) top-level named Graduate Student Awards and three (3) Graduate Research Awards, described below. The recipients of these awards are determined after a general competition with all the graduate research applicants and a presentation to the Awards Committee at the International Symposium.

Russell and Sigurd Varian Award

The Russell and Sigurd Varian Award was established in 1982 to commemorate the pioneering work of Russell and Sigurd Varian. It is presented to recognize and encourage excellence in graduate studies in the sciences and technologies of interest to AVS. The award is supported by Agilent Technologies Vacuum Products Division. It consists of a cash award, a certificate, and reimbursed travel support to attend the International Symposium.

- William DeBenedetti, Cornell University

Nellie Yeoh Whetten Award

The Nellie Yeoh Whetten Award was established in 1989, in the spirit of Nellie Yeoh Whetten, to recognize and encourage excellence by women in graduate studies in the sciences and technologies of interest to AVS. A fund to support the award was established by Timothy J. Whetten, friends and family of Nellie Yeoh Whetten, and AVS. The award consists of a cash award, a certificate, and reimbursed travel support to attend the International Symposium.

- Ann Lii-Rosales, Iowa State University

Dorothy M. and Earl S. Hoffman Award

The Dorothy M. and Earl S. Hoffman Award was established in 2002 to recognize and encourage excellence in graduate studies in the sciences and technologies of interest to AVS. It is funded by a bequest from Dorothy M. Hoffman, who was president of AVS in 1974 and held other positions of responsibility in the Society. The award consists of a cash award, a certificate, and reimbursed travel support to attend the International Symposium.

- Ryan Hackler, Northwestern University

Dorothy M. and Earl S. Hoffman Scholarships

The Dorothy M. and Earl S. Hoffman Scholarships were established in 2002 to recognize and encourage excellence in graduate studies in the sciences and technologies of interest to AVS. They are funded by a bequest from Dorothy M. Hoffman. The scholarships consist of a cash award, a certificate, and reimbursed travel support to attend the International Symposium.

- Angela Hanna, Colorado State University
- Phuong Anh Nguyen, University of New Mexico

2018 Graduate Research Awards

The Graduate Research Awards were established in 1984 to recognize and encourage excellence in graduate studies in the sciences and technologies of interest to AVS. Each consists of a cash award, a certificate, and reimbursed travel support to attend the International Symposium.

- Zahra Hooshmand, University of Central Florida
- Monu Mishra, CSIR-National Physical Laboratory
- Jiancheng Yang, University of Florida

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