

Nomination of Vincent S Smentkowski, GE Global Research, for the AVS Excellence in Leadership Recognition

smentkow@ge.com,

<http://ge.geglobalresearch.com/profiles/vincent-smentkowski/>

Scientific/engineering Accomplishments:

Vincent holds 6 U.S. patents, >90 publications in referred journals, >100 internal manuscripts or reports, numerous contributed and invited talks, and has co-authored 3 book chapters. His h-index (according to the Web of Science) is 18. His most famous paper is a monograph, Trends in Sputtering, that was published in 2000 has been cited more than 100 times. As a post-doctoral associate at Argonne National Laboratory he was part of a multi-laboratory team that designed, built, and tested a novel reflectron analyzer for real-time, *in situ*, studies of surfaces during film growth at mTorr pressures using pulsed ion beam techniques - the work resulted in a 1997 R&D 100 Award. In 2009, he received the MVP Award at GE-GRC. Vin was named a Fellow of AVS in 2010 "for exceptional contributions in the field of industrial surface analysis, including multivariate statistical analysis of ToF-SIMS data"



Mentoring: Vincent has a passion for mentoring and teamwork; he serves as a mentor to many researchers. Vin comments: "I am proud of the teams, the way we interact, the high impact external publications we have written based on the methods, as well as the impact the new methods have for the data we routinely collect at GE." He enjoys working with students; he has hosted many summer interns – and all, so far, happen to have been women. Vin kids: "I spend a lot of time mentoring people. Regardless of how busy I am, I always find time.... often I do this in the morning and buy coffee for the person I am helping (maybe this is why I get so many requests)." In 2013 he piloted a "buddy" program at the AVS60 to connect new members to seasoned AVS veterans. Based on the success of this program, the Ambassador program has been spawned, retaining all of the original ideas and casting a larger net to get more involvement across the AVS. Each ambassador will meet with a new member several times throughout the international symposium, introduce them to senior people in the field, point out key events or talks, and get her or him more engaged in the society. This effort will help individuals who are the least-connected in the society – those who are young, from small institutions, working alone in their field at their company, etc. – the Ambassador program has and will likely continue to have a significant positive impact for members of underrepresented groups.

Biography: Vincent S. Smentkowski is a Senior Scientist in the Nanostructures and Surfaces Laboratory at General Electric Global Research (GEGR) where he performs surface analysis to support research programs at GEGR, GE businesses, and strategic partners. Vin obtained a B.S. degree in chemistry from Marshall University in 1987 and a Ph.D. in physical chemistry (1994) from the University of Pittsburgh, under the guidance of Prof. John T. Yates, Jr. After completing his degree, Vin accepted a post-doctoral position at Argonne National Laboratory where he was part of a multi-laboratory team that designed, built, and tested a novel reflectron analyzer for real-time, in-situ, studies of surfaces during film growth at mTorr pressures using pulsed ion beam techniques - the work resulted in a 1997 R&D 100 Award. Currently, his research is focused on the applications of ToF-SIMS analysis, emphasizing how multivariate statistical analysis tools facilitate data reduction. Vin is also working with external laboratories in order to evaluate advanced microstructural characterization techniques such as Atom Probe Tomography and Helium Ion Microscopy and show the benefits these techniques have for industrial materials. Vin has served numerous roles within AVS: he was the founding Chair of the AVS Hudson Mohawk Chapter (2009-2010), Co-Chair of the 33rd Symposium on Applied Surface Analysis (Surface Analysis 2011), 2011 Chair of the Applied Surface Science Division (ASSD), 2012 Program Chair for the ASSD, and was recently appointed the AVS-61 (2014) Symposium Program Chair.