

2022 Medard W. Welch Awardee: Susan Sinnott – *“For outstanding contributions to the development and utilization of computational methods to advance atomic-scale insights into the mechanisms associated with surface chemistry, thin-film growth, and materials discovery”*

AVS has honored the extraordinary contributions of Dr. Susan Sinnott, Penn State University-University Park, with the 2022 Medard W. Welch Award. This award acknowledges Susan’s exceptional contributions to research in her field, as well as her professional service to the greater scientific community and to AVS. The Society established this award in 1969 to commemorate the pioneering efforts of M.W. Welch in founding and supporting the AVS. Susan has joined a list of remarkable awardees, and today we have the opportunity to get to know Susan a little better. She graciously granted AVS an interview.



The AVS community got extremely lucky when Susan found her niche in the Society. While working as a junior faculty member in the '90s, Susan had taken the advice of her mentor to pursue an active role in a technical society to “build her network” and “expand her expertise.” Susan reached out to several professional associations about volunteer opportunities, but only heard back from AVS! From there, she went on to serve as a volunteer or in an elected leadership position within AVS for nearly twenty years. She continues to stay involved today, and the Society honored Susan’s dedication by naming her a 2005 AVS Fellow.

Susan appreciates AVS because she feels that the Society “is a truly interdisciplinary technical Society with an emphasis on [her] favorite aspects of materials science and engineering – surfaces and interfaces!” Susan finds this important due to her role as a Professor and the Head of the Department of Materials Science and Engineering at Penn State University-University Park, where she teaches, advises graduate students, and carries out research in computational materials science. She “love[s] working to advance the field in this dynamic environment!” A leader in her field, Susan enjoys the intellectual stimulation she finds within AVS. She also appreciates the camaraderie. She reminisced, saying, “I have very fond memories of the awards ceremony at the annual meeting and exhibition in Long Beach in 2013 when we celebrated the 60th anniversary of the AVS. The group photo of the AVS presidents is one of my favorites!” See photo to the right.



Susan started as a volunteer with AVS on the Student Issues Committee (1998-2000). From there she went on to serve in

the following roles or committees: Topical Conferences Committee (2003-2005); Trustee & Trustee Chair (2008); Chapters, Groups, & Division Committee (2006-2008); Director (2009-2011); Symposium Program Vice-Chair (2010); Symposium Program Chair (2011); Compensation Committee (20213); and President (2013). Since her presidential term, she has also served on the Diversity & Inclusion Committee (2014-2015), and more recently she acted as a panelist for an AVS professional development webinar and always strongly encourages her students to attend AVS meetings to give presentations. We are also looking forward to her invited presentation at the [48th International Conference on Metallurgical Coatings and Thin Films](#) (ICMCTF 2022).

While Susan has a dynamic professional life, she enjoys a lively personal life as well. She characterizes herself as a “prolific, lifelong reader,” and likes running, although she professes to be “very slow!” She is the “proud mother” of two grown sons, and just celebrated her 34th wedding anniversary. When asked about what she feels passionately about, she answered, “enhancing diversity, equity, and inclusion at work and in my everyday life.” This revealed the type of person Susan is, as evidenced by others describing her as an advocate, as well as her response to what true leadership means. She replied, “Serving others and finding ways to enable those with whom you work function at their personal best.” On a lighter note, the best place she has ever traveled to was Paris. She loved walking everywhere and taking in the sights, while “periodically enjoying a coffee in a sidewalk café.” That aligns with her personal mantra, which she described as “today I kick butt and make dreams happen . . . but first, coffee.” Finally, along with many of our members, Susan already knew what she wanted to be at age ten. “I knew that I wanted to be a scientist at that age. I had a home chemistry set, and I was very much inspired by the original Star Trek and Carl Sagan’s Cosmos.” Clearly, the foundations for her success began quite early. Others characterize Susan as funny, easy to talk to, and kind. She is also described as humble while being quite talented and smart. For these, and many more reasons, we are so glad she joined the Society. Dr. Susan Sinnot is a deserving awardee, and we hope you will join AVS in congratulating her!