AVS Recognition for Excellence in Mentorship: Dr. Alexandra Joshi-Imre

AVS seeks to recognize individuals who have gone above and beyond their regular job duties by leading programs that have a broad impact in training and mentoring, and promoting diversity, belonging, equity, inclusion, and accessibility. In 2022, Dr. Alexandra Joshi-Imre of the University of Texas at Dallas, received the AVS Recognition for Excellence in Mentorship for just such work. She has shown great dedication to mentoring and developing budding young scientists and engineers to their fullest potential. Alexandra works as a Process Engineer in the Cleanroom Research Laboratory that supports thin film microfabrication activities at The University of Texas at Dallas. She is best known for microfabrication processes, microscopy, and microanalysis.

Alexandra has been a dedicated mentor throughout her career, starting back as early as her postgraduate studies at the University of Notre Dame. From there, at Argonne National Laboratory she hosted and mentored high school students and high school teachers. After joining the University of Texas at Dallas, she began working with graduate students and got involved with multiple outreach efforts of the university. Alexandra is an avid participant in the Nanoexplorers Program, where she engages high school students in research activities over a summer semester - and beyond sometimes. She also recruits high school students of disadvantaged backgrounds as part of the Young WISE Investigators Program, with the intent of increasing the diversity of college graduates in the fields of science, technology, engineering and mathematics (STEM). This program runs throughout the entire academic year. Furthermore, Alexandra has served as a faculty mentor every year since 2016. More recently, she became a registered adult leader with the Boy Scouts of America, where she holds Nova Counselor and Supernova Mentor positions, which aim to attract interest in and support intellectual development through STEM activities arranged for kids and teenagers, 7-to-18 years old. For these and many more reasons, others describe her as hard working, motivated, and truly inspirational. You can often find her working and helping others at odd hours. She is also known for being “persistent.” Alexandra enjoys being a mentor, and interestingly she did not have one of her own early in her career. She wishes she had though. On a related note, she is undecided about her next big step in her career, and “the next big step always requires preparation and courage (and mentorship).”

Alexandra lives by the quote, “every day counts,” which explains her active lifestyle inside and outside of work. She describes her typical day as spending the morning inside the cleanroom “dressed in a bunny suit.” She does process qualification, process development, and training. She then spends the afternoon working on research projects and consulting with colleagues. When asked what role her AVS colleagues play in her work life, she explained that AVS meetings and affiliated conferences “typically offer undergraduate and graduate students a platform to present themselves and their work. AVS has a very diverse community where one benefits from obtaining new perspectives of the problems they are working on, and also learning about great developments outside of their own field.” She joined AVS
when she first attended a “three-beams” conference in graduate school. The three-beams, or “International Conference on Electron, Ion and Photon Beam Technology and Nanofabrication” (EIPBN) is supported by AVS, and its conference papers are published in *Journal of Vacuum Science & Technology B (JVST B)*.

As a mentor, when asked what advice Alexandra would give future generations, she answered, “make time for extracurricular activities. Schools distribute knowledge of subjects and professional information, but they don’t typically provide sufficient personal development (think leadership, citizenship, and strengths of personality).” She embodies this practice since her own extracurricular activities are meaningful and important in her own life. She enjoys hiking and camping since it allows her to connect with the natural world. She also finds pleasure in keeping up with her cultural heritage by exploring contemporary Hungarian art or reading the local Hungarian news. She mused that “the internet makes it easy to engage with whatever topic we are interested in, and globalization brings us close to any event.” Luckily for AVS, Alexandra is involved in the Society whenever she can be, and we hope to see her at an AVS event soon! Please join the AVS community in congratulating her on her well-deserved AVS 2022 Recognition for Excellence in Mentorship.