







## Dr. Hy Tran

Senior Scientist
Sandia National Laboratories

## Citation of Accomplishments

Outstanding and sustained contributions in measurement science in support of Sandia National Laboratories' missions, support of measurement standards and the engineering profession, and mentorship of future generations of engineers and technologists.

Dr. Tran joined Sandia National Laboratories in 2004 in the Primary Standards Lab (PSL) and served PSL as project lead for length, mass, and force metrology (measurement science) from 2005 to 2015. He is now helping develop and implement research and development strategy for PSL. PSL develops, maintains, and calibrates precision measurement standards; conducts measurement assurance training and consulting, and performs technical surveys and audits across the nuclear security enterprise (NSE).

Dr. Tran established and maintained a vibrant research and development program in measurement science, supporting the calibration needs of the NSE. He led the development of the silicon micromachined dimensional calibration artifact that won a R&D 100 award in 2008. Dr. Tran chairs Sandia's Exploratory Express Laboratory Directed Research and Development Investment Area Team (ExpExp LDRD IAT). The ExpExp IAT seeds small, short term research projects across all of Sandia to help ascertain feasibility or technical path for future, larger research and development investments. In 2016, this IAT's investments in 24 projects resulted in 24 manuscript submissions, 31 conference presentations, seven awards and seven patent applications, and impact for 29 early career personnel.

Dr. Tran is active with NCSL International, a professional society for calibration and standards laboratories, where he has served on the board of directors since 2014, and as editor-in-chief for the journal *NCSLI Measure* since 2016. Dr. Tran serves the American Society of Mechanical Engineers (ASME) as a program evaluation volunteer for ABET (formerly Accreditation Board for Engineering and Technology). In 2016, Dr. Tran joined ASME's Committee on Engineering Technology Accreditation (CETA), to help coordinate and revise criteria for engineering technology education and harmonize the criteria across engineering and technology disciplines. In 2016, Dr. Tran was elected Fellow of ASME.

Dr. Tran also enjoys participating in volunteer activities—most typically in those that have a component in educational outreach, such as demonstrating science and engineering in local school classrooms. He was appointed by the New Mexico Secretary of Education to the Math and Science Advisory Council (MSAC) from 2013 to 2017. MSAC is a volunteer advisory body to the math and science bureau in the public education department (NMPED), to advise NMPED on issues to improve performance of New Mexico students in Science, Technology, Engineering, and Mathematics (STEM). Dr. Tran also has served on the board of New Mexico Woodturners since 2012.