

2019 NSE Grantees Conference

Mark Tuominen
University of Massachusetts Amherst



Bio: Professor Mark Tuominen is the Associate Dean of Research and Innovation in the College of Natural Sciences at the University of Massachusetts Amherst and a Professor in Physics at the University of Massachusetts (UMass) Amherst. For 12 years, he served as Director of the National Nanomanufacturing Network and Co-Director of the Center for Hierarchical Manufacturing, a NSF Nanoscale Science and Engineering Center. He has a bachelor's degree in Chemical Engineering (1986) and a PhD in Condensed Matter Physics (1990), both from the University of Minnesota. His current research is in the area of nanomanufacturing R&D, magnetism, and nanoscale charge transport. He currently serves on the National Academies committee to review the National Nanotechnology Initiative. He testified to the House Committee on Science in 2010 on nanomanufacturing and was a contributing author to the comprehensive report "Nanotechnology Research Directions for Societal Needs in 2020: Retrospective and Outlook" (Springer, 2011). Mark served as a U.S. delegate to the ISO TC-229 Committee on Nanotechnologies and as leader of the ISO nanomanufacturing processes terminology (ISO/TS 80004-8:2013) standard. He is also co-founder of a successful interdisciplinary team-based learning undergraduate concentration at UMass Amherst called iCons (Integrated Concentration in Science), which focuses on research learning on real-world challenges having significant societal impact.