

Dr. James A. Warren is the Technical Director for Materials Genomics in the Materials Measurement Laboratory of NIST. His aspirations of an academic physicist's career took a turn in 1992 when he received an NRC post-doctoral appointment at NIST. He came to the Metallurgy Division after receiving his Ph.D. in Theoretical Physics at the University of California, Santa Barbara, which was preceded by an A.B. (also in Physics) from Dartmouth College. In 1995, with three other junior NIST staff members, he co-founded the NIST Center for Theoretical and Computational Materials Science, which he has directed since 2001. From 2005-2013 he was the Leader of the Thermodynamics and Kinetics Group. His research has been broadly concerned with developing both models of materials phenomena, and the tools to enable the solution of these models. Specific foci over the years has included solidification, pattern formation, grain structures, creep, diffusion, wetting, and spreading in metals. In 2010-11, Dr. Warren was part of the ad hoc committee within the National Science and Technology Council (NSTC) that crafted the founding whitepaper on the Administration's Materials Genome Initiative (MGI), and has served as the Executive Secretary of the NSTC MGI Subcommittee since 2012.