

Manufacturing USA® - A Primer for NSF Grantees

Robert Rudnitsky, Associate Director for Policy at the at the National Institute of Standards and Technology (NIST) Advanced Manufacturing National Program Office, will speak about how NSF grantees can work with the institutes in the Manufacturing USA network.

The *Manufacturing USA* network is a public-private program designed with a vision of U.S. global leadership in advanced manufacturing. Its institutes have a mission to develop game-changing technology and the skills needed to equip our future U.S. manufacturing workforce. Institutes also provide education and training so that American workers have “improved job opportunities and increased economic opportunity in promising technology areas that result in higher wages.”

There are now a total of 14 Manufacturing USA institutes, sponsored by the departments of Energy, Defense and Commerce. Manufacturing USA helps to move discoveries in the nation’s universities and research laboratories to manufacturing shop floors here in America.

Dr. Rudnitsky will discuss the progress of Manufacturing USA and how NSF supports collaboration with between grantees working in nanoscale science and technology and institutes to increase the competitiveness of U.S. manufacturing.

Robert Rudnitsky, Associate Director for Policy

Robert Rudnitsky is the Associate Director for Policy at the National Institute of Standards and Technology (NIST) Advanced Manufacturing National Program Office (AMNPO). Robert received a Ph.D. in Applied Physics from Stanford University, where he was a Hertz Fellow, and a B.A. from Yale University. At Stanford, his research was at the intersection of biotechnology and nanotechnology. He fabricated advanced nanoscale sensors to detect the single molecule binding forces of cellular adhesion proteins common to animals and plants.

Prior to coming to NIST in September 2009 as Scientific Advisor to the Director the Center for Nanoscale Science and Technology, Robert worked as a Physicist in the U.S. State Department in the Office of Space and Advanced Technology, where he chaired the U.S. National Nanotechnology Initiative (NNI) Global Issues in Nanotechnology Working Group, which coordinated United States Government international activities related to nanotechnology. He has served as Chair of the NATO Science for Peace and Security (SPS) Advisory Committee, which evaluated and recommended the allocation of foreign assistance resources for programs in NATO partner countries and Afghanistan. He was also elected the founding chair of the international Organisation for Economic Cooperation and Development (OECD) Working Party on Nanotechnology. His private sector experience includes working in New York as an investment banker specializing in acquisitions of privately held companies, including manufacturing companies, and as president of a small company.

Robert has research experience in biophysics, biotechnology, cellular mechanics, biomaterials, microfluidics, MEMS, and sensors. As Associate Director for Policy, Robert provides technical, scientific, and policy guidance for the Manufacturing USA program and for the formation of Manufacturing Innovation Institutes funded by the Department of Commerce.