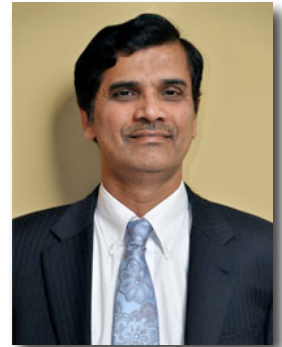


# Mechanical Engineering Department Seminar

3:35pm February 13, 2013  
1130 Mechanical Engineering

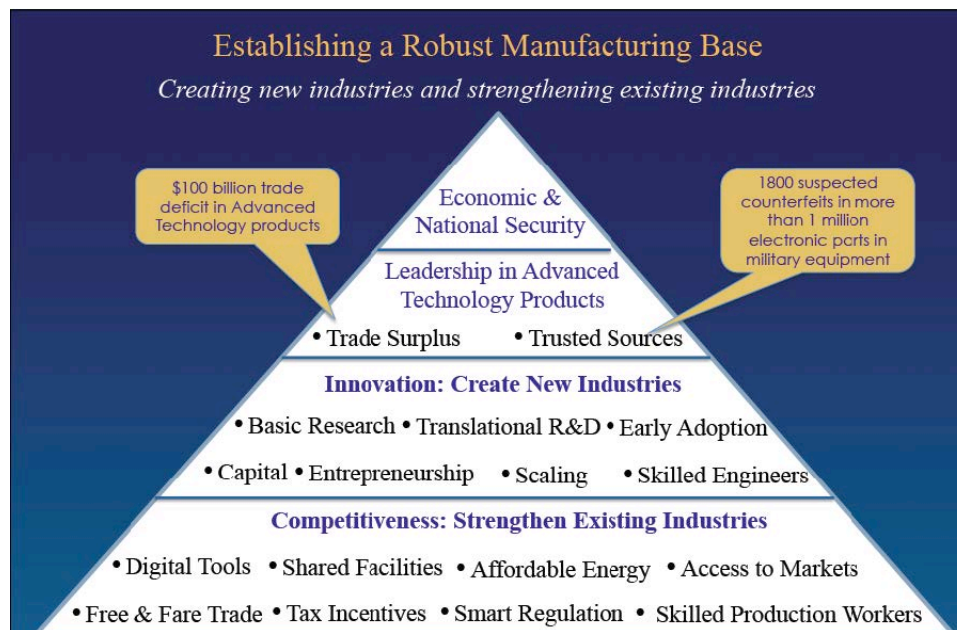
## Innovation Policies and Initiatives to Revitalize American Manufacturing

Sridhar Kota



Professor, Department of Mechanical Engineering; University of Michigan

Innovation and manufacturing are intricately linked, but not just in the direction usually conceived—from innovation to manufacturing. During the scale-up and manufacturing phases that follow the initial discovery phase, many improvements in design and efficiency arise, feeding back to new cycles of innovation. Thus, if we fail to manufacture today's advanced technology products, we risk losing our ability to innovate next-generation products. Being the world's best in scientific discoveries is still vital to our success but is not sufficient to compete in the global economy. A renewed focus on application of scientific knowledge, through world-class engineering, is needed to close our innovation gap. This talk highlights various challenges and new federal initiatives to enhance U.S. manufacturing competitiveness, including the innovation policies that led to establishment of Manufacturing Innovation Institutes and other initiatives to ensure economic and national security.



**Bio:** Sridhar Kota is a Professor of Mechanical Engineering at the University of Michigan-Ann Arbor. He received M.S.M.E and Ph.D. degrees from the University of Minnesota. Kota authored over 200 technical papers on product design and bio-inspired engineering systems, over 25 patents and served as an engineering consultant to numerous organizations. He is the recipient of the American Society of Mechanical Engineers (ASME) Machine Design Award, Leonardo da Vinci Award, and the Outstanding Educator Award. He is the founding President and CEO of FlexSys Inc. specializing in bio-inspired design of aircraft wings, wind turbine blades etc.

Between 2009-2012 Prof. Kota served as the Assistant Director for Advanced Manufacturing at the White House Office of Science and Technology Policy (OSTP). In this role, he developed policy recommendations and implementation strategies to enhance U.S. manufacturing competitiveness, and to foster innovation-based manufacturing and commercialization of emerging technologies. He played an instrumental role in launching several initiatives including National Manufacturing Innovation Institutes, National Robotics Initiative, National Digital Engineering and Manufacturing Consortium (NDEMC) and Connecting American Manufacturing (CAM) to defense needs.