

## **Ranga Komanduri**

Dr. Ranga Komanduri earned his B.E. (Mechanical) and M.E. (Heat Power) from Regional Engineering College, Warangal which was affiliated to the Osmania University, Hyderabad, Andhra Pradesh, India. He earned his Ph.D. (1972) and D. Eng. (1992) from Monash University, Melbourne, Australia. He came to the U.S. in 1972 and had been a citizen since 1982. He started his career as a Research Engineer and Assistant Professor in the Mechanical Engineering Department at Carnegie-Mellon University, Pittsburgh (1972-77). He then moved to General Electric Corporate Research at Schenectady, NY, where he was a member of the Scientific Staff (1977-1989). He was also an Adjunct Full Professor at Rensselaer Polytechnic Institute, Troy, NY (1977-1986). He was on Research Sabbatical at the National Science Foundation, Washington, DC, where he was a Program Director for several programs including the Material Engineering and Processing, Tribology, and Manufacturing Processes. He was also a Deputy Division Director and an Acting Division Director of the Division of Design, Manufacture and Computer Integrated Manufacturing (1986-1989) at NSF. He joined OSU in 1989 as a Professor and MOST Chair in Intelligent Manufacturing in the School of Mechanical and Aerospace Engineering. His current position is Regents Professor and A. H. Nelson, Jr. Endowed Chair in Engineering.

Dr. Komanduri's research interests are focused on advanced manufacturing processes and materials. At OSU, he developed a state-of-the-art research laboratory in this area, which is located in the newly built Advanced Technology Research Center (ATRC) at OSU. He works with some 15 graduate students, 2 Postdoctoral Fellows, and 2-3 U.S.-born undergraduate students, on the average. His research activities at OSU include finishing of advanced ceramics for ball and roller bearing applications; hard, wear-resistant coatings on cutting tools, including low-pressure diamond coatings on cutting tools and multiple nanocoatings on cutting tools; molecular dynamics (MD) simulation of nanometric cutting and tribology (in collaboration with Prof. L. M. Raff); thermal aspects of various manufacturing processes (in collaboration with Prof. Hou), including polishing, machining, welding, heat treatment, and tribology; laser assisted material processing. He has published some 150 technical papers including several chapters in Encyclopedias and other specialized books, 20 Editorship of Conference Proceedings, and 21 patents. He has delivered several keynote papers at various national and international conferences and has delivered lectures at various universities and industry throughout the world. He interacts extensively with leading researchers from various countries. His research is supported by the National Science Foundation, Department of Defense (DARPA, DEPCoR), OSU's University Center for Energy Research (UCER), and industry. The pride of Dr. Komanduri's publications is two recent booklets on the Splendor of Sri Padmanabha Swamy of Tiruvananthapuram and the Splendor of Sri Narasimha Swamy of Ahobila Kshetram. The main purpose of these booklets is to raise funds towards preserving these ancient temples in India.

Dr. Komanduri has been very active in various professional societies. He was Chairman of the Production Engineering Division (now Manufacturing Division) and Vice-President of the Manufacturing Group (1989-1993). He is a fellow of ASME and SME; Vice President of ASME Manufacturing Group; President of North American Manufacturing Research Institution (NAMRI). He is an Active Member of the International Institution for Production Engineering Research (CIRP). His honors include the Pi Tau Sigma-Charles Russ Richards Memorial Award of ASME (1990); Technology Award by the Industrial Equipment News (1983); Blackall Machine Tool & Gauge Award, American Society of Mechanical Engineers (1981); F. W. Taylor Medal of CIRP (the International Institution for Production Engineering Research) (1977); General Electric Managerial Award (1981); NSF's Sustained Superior Performance Award; and OSU President's Distinguished Service Award (2001), and ASME William T Ennor Manufacturing Technology award (2002). At OSU, he co-organized the North American Manufacturing Research Conference in 1993 and organized a unique symposium on the U.S. Contributions in the Machining and Grinding Research in the 20<sup>th</sup> Century, in which the pioneers of this field participated.

Dr. Komanduri lives in Stillwater, OK with his wife, Sri, and two children – daughter, Sangeetha, and son, Mukund.