

## **Biography Prof Lorenz**

Robert D. Lorenz (S'83–M'84–SM'91–F'98) received the B.S., M.S., and Ph.D. degrees from the University of Wisconsin, Madison, and the M.B.A. degree from the University of Rochester, Rochester, NY. He conducted his Master thesis research in adaptive control of machine tools at the Technical University of Aachen, Aachen, Germany, from 1969 to 1970.

Since 1984, he has been a member of the faculty of the University of Wisconsin, Madison, where he is the Mead Witter Foundation Consolidated Papers Professor of Controls Engineering in the Department of Mechanical Engineering. He is Codirector of the Wisconsin Electric Machines and Power Electronics Consortium, which celebrated its 28th anniversary in 2009. It is the largest industrial research consortium on motor drives and power electronics in the world. From 1972 to 1982, he was a Member of the Research Staff with the Gleason Works, Rochester, NY, working principally on high-performance drives and synchronized motion control. He was a Visiting Research Professor with the Electrical Drives Group of the Catholic University of Leuven, Belgium, in the summer of 1989 and with the Power Electronics and Electrical Drives Institute of the Technical University of Aachen, Germany, in the summers of 1987, 1991, 1995, 1997, and 1999, and was the SEW Eurodrive Guest Professor from September 1, 2000 to July 7, 2001. His current research interests include sensorless electromagnetic motor/actuator technologies, power electronic device junction temperature estimation and real-time control, fast signal processing and estimation techniques, precision multiaxis motion control, and ac/dc drive and high-precision machine control technologies. He has authored over 200 published technical papers and is the holder of 23 patents with three more pending.

Dr. Lorenz is a Registered Professional Engineer in the States of New York and Wisconsin. He is also a member of the American Society of Mechanical Engineers, Instrument Society of America, and The International Society for Optical Engineers. He was IEEE Division II Director for 2005/2006, was the IEEE Industry Applications Society (IAS) President for 2001, a Distinguished Lecturer of the IEEE IAS for 2000/2001, past Chair of the IAS Awards Department, past Chairman of the IAS Industrial Drives Committee, and is a member of the IAS Industrial Drives, Electric Machines, Industrial Power Converter, and Industrial Automation and Control Committees. He is immediate past Chair of the Periodicals Committee and current Chair of the Periodicals Review Committee for the IEEE Technical Activities Board. He is a member of the IEEE Sensors Council AdCom. He is a long-time member of the EPE International Steering Committee and, in 2006, he received the EPE PEMC Outstanding Achievement Award. He has won 22 prize paper awards. He was awarded the 2003 IEEE IAS Outstanding Achievement Award, which honors his outstanding contributions and technological developments in the application of electricity to industry.

