



## Tutorial Presenter Biographies

**James E. Smith** is a professor in the Department of Electrical and Computer Engineering at the University of Wisconsin Madison. He received his PhD in 1976 from the University of Illinois. Since then, he has been involved in a number of computer research and development projects as a faculty member at Wisconsin and in industry (Control Data Corporation, Astronautics Corporation, Cray Research). Currently, he and his research group are studying the virtual machine abstraction as a technique for providing high performance and power efficiency through co-design and tight coupling of virtual machine hardware and software.

Professor Smith received the ACM/IEEE 1999 Eckert-Mauchly Award for contributions to the field of computer architecture. He is co-author with Ravi Nair of a book on virtual machines recently published by Morgan-Kaufmann.

**Kevin J. Nowka** received the B.S. degree in Computer Engineering from Iowa State University, Ames, in 1986 and the M.S. and Ph.D. degrees in Electrical Engineering from Stanford University in 1988 and 1995, respectively.

He joined the IBM Austin Research Laboratory in 1996 where he has conducted research on high-frequency microprocessors and low-power system-on-a-chip designs.

He currently manages the Exploratory VLSI Design department of the IBM Austin Research Laboratory. His current research includes power-efficient circuits for high-performance processors, power-efficient wireline communications, and process characterization circuits.

**Pradip Bose** received his B.Tech (Hons.) degree in electronics and electrical communication engineering from I.I.T Kharagpur, India in 1977 and his M.S. and Ph.D degrees in electrical and computer engineering from University of Illinois at Urbana-Champaign in 1981 and 1983 respectively.

He joined IBM T. J. Watson Research Center in 1983, where he currently manages a group on reliability- and power-aware microarchitectures. His research interests are in computer architecture, power-performance evaluation and fault-tolerant computing.

**Sani Nassif** received his PhD from Carnegie-Mellon university in the eighties. He worked for ten years at Bell Laboratories on various aspects of design and technology coupling including device modeling, parameter extraction, worst case analysis, design optimization and circuit simulation. He joined the IBM Austin Research Laboratory in 1996 where he is presently managing the tools and technology department, which is focused on design/technology coupling.