

Michael Rosenfield is the Director of Deep Computing at the IBM Research Division in Yorktown Heights, NY. A major goal of the Deep Computing organization is to develop high performance computing for traditional HPC users and enable HPC for industries and organizations which have not yet leveraged its computational capabilities. Major research areas in Deep Computing include next generation Blue Gene system development, exascale systems, the Computational Biology Center, and the Computational System Center.

Prior to his current position, he was Director of Smarter Energy focusing on the coordination, strategy, and plan for IBM Research's worldwide activities. Smarter Energy ranges from photovoltaics, energy storage, chip, system and datacenter level power through smart grid enablement, standards, and joint partnerships – working closely with IBM's Energy and Utilities industry team as well as IBM's Services, Software, and Hardware Divisions.

Before becoming Director of Smarter Energy, Mike was the Director of VLSI Systems at the IBM Research Division in Yorktown Heights, NY. VLSI Systems focused on high performance microprocessor design, microarchitecture, lower power design techniques, improved designer productivity, the management of technology complexity, and design automation tools in support of IBM's microprocessor and ASIC design teams. He was also the Research Division Area Strategist for Microprocessors and Tools.

Previous to becoming Director of VLSI Systems, Mike was the Director of the Austin Research Lab (*ARL*), one of IBM's first worldwide research labs. At *ARL*, he focused on new server systems architectures, systems-level power management/optimization, VLSI design, and design automation tools. Before joining *ARL*, he was the Senior Manager of VLSI Design and Microarchitecture at IBM Research and has held management positions in parallel communication architectures and electron-beam lithography for integrated circuit manufacturing. He started his career at IBM working on electron-beam lithography modeling and proximity correction techniques. He has a BS in Physics from the University of Vermont and a MS and Ph.D from the University of California, Berkeley.