

Phaedon Avouris - Bio

Phaedon Avouris is an IBM Fellow and manager of Nanometer Scale Science and Technology at the IBM T.J. Watson Research Center, Yorktown Heights, New York. He received his B.S. degree from the Aristotelian University in Greece, and his Ph.D. degree in Physical Chemistry from Michigan State University in 1974. After postdoctoral work at UCLA and AT&T Bell Laboratories, he joined the Research Division of IBM in 1978.

Over the years, his research has involved a wide variety of subjects ranging from laser spectroscopy, surface physics and chemistry, scanning tunneling microscopy, atom manipulation, to nanoelectronics. His current research is focused on experimental and theoretical studies of the electrical properties and transport mechanisms in carbon nanotubes, molecules and nanowires. The work includes the design, fabrication and study of model nanoelectronic devices and circuits.

Dr. Avouris has published over 300 scientific papers. He has been Adjunct Professor of Chemistry at Columbia University and Adjunct Professor of Electrical & Computer Engineering at the University of Illinois at Urbana-Champaign. He is a Fellow of the American Academy of Arts and Sciences, the American Physical Society, the Institute of Physics of the U.K., the Academy of Athens, the IBM Academy of Technology, the American Association for the Advancement of Science, American Vacuum Society and the New York Academy of Sciences. He received the Irving Langmuir Prize of the American Physical Society, the Medard W. Welch Award of the American Vacuum Society, the Feynman Prize for Molecular Nanotechnology, the ACSIN Nanoscience Prize, the Raper Award of IEEE, the Distinguished Alumnus Award from Michigan State University, and a number of IBM Corporation "Outstanding Technical Achievement" awards. He is co-editor of the Springer-Verlag book series on Nanoscience and is currently serving on the Advisory Editorial Boards of Nano Letters, Nanotechnology, Intl. Journal of Nanoscience, Journal of Nanoengineering and Nanosystems, Journal of Computational and Theoretical Nanoscience, Surface Review and Letters, and the Journal of Electron Spectroscopy.