## Paul R. Prucnal



## Bio

Paul R. Pruchal is a Professor of Electrical Engineering at Princeton University. He is best known for his seminal work in Neuromorphic Photonics, optical code division multiple access (OCDMA) and the invention of the terahertz optical asymmetric demultiplexer (TOAD). Prucnal received his A.B. In mathematics and physics from Bowdoin College, graduating summa cum laud. He then earned M.S., M.Phil. and Ph. D. degrees in electrical engineering from Columbia University. After his doctorate, Prucnal joined the faculty at Columbia University in 1979. As a member of the Columbia Radiation Laboratory, he performed groundbreaking work in Optical CDMA, which initiated a new research field in which more than 1000 papers have since been published, exploring applications ranging from information security to communication speed and bandwidth. In 1988, he joined the faculty at Princeton University. Pruchal is author of the book, Neuromorphic Photonics, and editor of the book, Optical Code Division Multiple Access: Fundamentals and Applications. He has authored or co-authored more than 320 journal articles, 400 conference papers and 34 book chapters, and holds 28 U.S. patents. He is a fellow of the Institute of Electrical and Electronics Engineers (IEEE), the Optical Society of America (OSA) and the National Academy of Inventors (NAI), and a member of Phi Beta Kappa and Sigma Xi. He was the recipient of the Gold Medal from the Faculty of Mathematics, Physics, and Informatics at Comenius University, for leadership in the field of optics and numerous teaching awards at Princeton, including the President's Award for Distinguished Teaching, the Distinguished Teacher Award, School of

Engineering and Applied Science, the Engineering Council Lifetime Achievement Award for Excellence in Teaching, the Graduate Mentoring Award, the Walter Curtis Johnson Prize for Teaching Excellence.