

James E. West
Research Professor, Johns Hopkins

Doctor of Science, New Jersey Institute of Technology



James E. West, co-inventor of the electret microphone used in most telephones, tape recorders and other devices, joined the faculty of the Whiting School of Engineering at Johns Hopkins University. He is serving as a research professor in the department of electrical and computer engineering.

When West retired after more than forty years as a researcher at Bell Labs, he decided to look into the academic life. "I'd had a great life in research," he says. "So I set up interviews with ten universities, and discovered that Johns Hopkins is a lot like Bell Labs, where the doors were always open and we were free to collaborate with researchers in other disciplines."

West looks forward to engaging in joint research with faculty members in areas like ME, materials science and biomedical engineering. He also plans research to improve teleconferencing technology by transmitting stereophonic sound over the Internet.

"I like the fact that I won't be locked into one small niche here. I want to be in an environment that allows 360 degrees of vision," he says with pleasure.

West was born in Prince Edward County, VA. He studied physics at Temple University, despite his father's warnings that he would never find a job in the field. "Dad said I was taking the long road toward working at the post office," he recalls with amusement.

He began working as an intern at Bell Labs during summer breaks, and joined full time in 1957. In 1962, West and his colleague Gerhard Sessler patented the electret microphone; some 90 percent of all mics produced today are based on the principles they developed.

West has more than 200 U.S. and foreign patents and has authored or contributed to more than 100 technical papers and several books on acoustics, solid-state physics and materials science.

His professional honors include election to the National Academy of Engineering and induction into the National Inventors Hall of Fame. He is a Fellow of the IEEE. He is also past-president, as well as a silver medalist, of the Acoustical Society of America. He has received a Golden Torch award from NSBE, and an honorary doctor of science degree from the New Jersey Institute of Technology.

West is also active in programs aimed at encouraging more minorities and women to enter the fields of science, technology and engineering. At Johns Hopkins he plans to help recruit more minority and women faculty members and students, and will mentor undergraduate engineering students.