

Biography

Dr. Jayant Baliga, N.C. State University

Professor Baliga is recognized as a leading expert on power semiconductor devices. He is the inventor of the IGBT, which he commercialized at GE in the 1980s. He is considered the father of wide band gap semiconductor power devices. He derived the theory relating the performance of power devices to material properties in 1979. The first wide bandgap semiconductor power devices were made under his leadership from GaAs at GE in the 1980s and from SiC at NCSU in the 1990s. His awards include the National Medal of Technology and Innovation from President Obama in 2011, the IEEE Medal of Honor in 2014, the Global Energy Prize in 2015, and induction into the National Inventors Hall of Fame in 2016.