

Arogyaswami Paulraj

Professor (Emeritus) Arogyaswami Paulraj, Stanford University, is the inventor of MIMO wireless communications, a technology breakthrough that enables improved wireless performance. MIMO is now incorporated into all broadband wireless systems. He also pioneered MIMO-OFDMA that is now the core physical layer technology for 4G, 5G mobile, and WiFi networks.

Paulraj has authored / co-authored of over 400 research papers, two textbooks and is a co-inventor in 80 US patents. Paulraj has won several awards, notably the 2018 US Govt. Patent and Trademark Office's National Inventors Hall of fame, 2014 Marconi Prize and Fellowship and the 2011 IEEE Alexander Graham Bell Medal. He is a fellow of nine National Scientific / Engineering academies including those in the US, China, India and Europe. He is a fellow of IEEE and AAAS.

In 1999, Paulraj founded Iospan Wireless Inc. – which developed MIMO-OFDMA technology. Iospan was acquired by Intel Corporation in 2003. In 2004, Paulraj co-founded Beceem Communications Inc. The company became the market leader in 4G-WiMAX semiconductors and was acquired by Broadcom Corp. in 2010.

During his 25 years in the Indian (Navy) (1965-1991), he founded three national level laboratories in India and led one of India's most successful military R&D projects – APSOH sonar. He has received over a dozen awards in India including the Padma Bhushan, the country's third highest national award.