

Bio: Seongsin Margaret Kim

Dr. Margaret Kim currently serves as a Program Director for the Electronics, Photonics, and Magnetic Devices (EPMD) program within the Electrical, Communication, and Cyber Systems (ECCS) Division of the Directorate for Engineering (ENG) at the National Science Foundation (NSF). She is also a Professor of Electrical and Computer Engineering at the University of Alabama.

Dr. Kim earned her Ph.D. in Electrical and Computer Engineering and M.S. in Physics from Northwestern University, following a B.S. in Physics from Yonsei University in South Korea. Prior to joining the University of Alabama, she held research and academic positions at Stanford University as a Research Associate and Consulting Assistant/Associate Professor. She also worked in industry at Agilent Technologies and Samsung.

Her research spans photonics, metamaterials, and terahertz (THz) technologies, with applications in next-generation biomedical diagnostics, quantum sensing, quantum networks, 6G/7G communications, AI-assisted bio-imaging, space and underwater exploration, and neuromer photonics.

At NSF, Dr. Kim manages a broad portfolio of high-impact programs, including the *Future of Semiconductors*, the NSF-NIH joint initiative on quantum sensors for biomedical applications, the NSF-AFRL collaboration on Floquet-engineered quantum systems, *Addressing Systems Challenges through Engineering Teams* (ASCENT), Major Research Instrumentation Program (MRI) in addition to the core programs and among others. She is an active member of the *Quantum Information Science and Engineering* (QISE) working group. She is also deeply committed to advancing human-centered technologies across her programs.

Dr. Kim has authored over 180 publications, holds three patents, and is the recipient of the NSF CAREER Award. She is a Fellow of OPTICA, recognized for her pioneering contributions to photonics and THz science.

