
Prof. Dr. Karthik Kumar



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Prof. Dr. Karthik Kumar is currently Director of the Chemicals, Materials, Urban and GreenTech Cluster and the Urban and GreenTech Office (UGTO) in the Science and Engineering Research Council (SERC) in the Agency for Science, Technology and Research (A*STAR). A 22 year veteran of the Singapore Public Service and awardee of The Commendation Medal (*Pingat Kepujian*) as part of the 2019 Singapore National Day Awards, he has been in this current position since December 2015. He is in charge of developing the R&D strategy in this sector and initiating research programmes that will lead to economic outcomes. He is concurrently appointed as adjunct faculty in the School of Materials Science and Engineering, Nanyang Technological University, Singapore since September 2017, and elected as a Committee Member (2018-2020) of the Materials Research Society, Singapore Chapter.

Karthik joined the Institute of Materials Research and Engineering (IMRE), A*STAR in 2010 as a research scientist. His topic of research was the study of light interactions with nano-patterned metal structures, and is credited as one of the inventors of the 100,000 dpi ultra-high resolution colour-printing technology.

Karthik moved to the Biomedical Research Council (BMRC) in A*STAR in 2012 where he was in charge of implementing specific industry-related funding initiatives and was part of the central planning unit within the research council. In 2014, he was seconded to the Resource and Enterprise Division of the Ministry of Trade and Industry (MTI), Singapore where he was in charge of driving new policies, strategies and plans to continuously enhance research, innovation and enterprise development among the business and research communities. Karthik was also the co-founding Director of Innospin Pte. Ltd. Singapore, a deep tech startup focusing on the manufacture of next generation magnetic resonance imaging systems from 2013 to 2017.

Karthik graduated in 2005 with a Dipl.-Ing (MSc Eng) in Mechanical Engineering from the Technical University of Munich, Germany, on scholarship from the Economic Development Board, Singapore and Glaxo SmithKline. In 2010 he received his Doctor of Sciences in Materials Science from the ETH Zurich, Switzerland, on scholarship from A*STAR. He is married with 2 children, and is variously a polymath, philomath, polyglot, multi-instrumentalist and bookworm.