

Prof. Janakarajan Ramkumar

Dean of Infrastructure & Planning (DoIP)

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FNAE, FETE, FIE(I), Chartered Engineer (India),

Chairman, Kanpur Local Centre, Institute of Engineers (India),

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Prof. Ramkumar has an illustrious career spanning more than two decades in the realms of research, academia, and industry. His remarkable contributions to the development of highly accurate micro/nano machining processes have played a pivotal role in shaping the cutting-edge defense systems of our time. From revolutionary metamaterials for defense technology to advanced machining processes for aerospace and missile components, such as those used in the Man Portable Anti-Tank Guided Missile (MPATGM), Prof. Ramkumar's work has left an indelible mark on the field. As a dedicated researcher, he has harnessed his knowledge and expertise to address the needs of the less fortunate, focusing on empathy-driven studies to improve the lives of deserving individuals. Notably, he has spearheaded the implementation of assistive technologies for locomotive and visual disabilities, breaking down architectural barriers and revolutionizing the Agritech sector. Since joining IIT Kanpur in 2003, Prof. Ramkumar's research journey has been characterized by a harmonious fusion of teaching and learning practices, aiming to produce innovative solutions that enhance product efficiency while minimizing environmental impact. His brainchild projects, including the Imagineering Lab, 4-i Lab, Tinkering Lab, Maker's space, MedTech Lab, and RuTAG (Rural Technology Action Group) at IIT Kanpur, have created an ecosystem catering to the needs of students, scholars, faculties, and projects across the nation.

Beyond his pioneering work, Prof. Ramkumar has been an inspiring mentor, nurturing over 15 successful start-ups throughout the country, each of which has introduced groundbreaking products to the market. Moreover, during the challenging times of the Covid pandemic, he exhibited frugal innovation by creating essential solutions like the SWASA masks and Sanjeevani (Oxygen Concentrator), blessing frontline workers and hospitals nationwide. Prof. Ramkumar's dedication to sharing knowledge has been evident through his creation of twelve MOOCs courses with a staggering 5 lakh views, reaching an international audience. He has also conducted and organized more than 110 workshops on Design Thinking, passionately propagating science and research among students, scholars, industrial practitioners, and faculties. With 90+ patents under his name, 300+ publications, 5500+ citations and an h-index of 40, he has collaborated across communities to bring innovations that impact and foster research, innovation across communities. He is a fellow of INAE, IETE, a distinguished alumnus of NIT Trichy, & a recipient of 30+ awards from ISTE, IETE, IIPE, IEI, SRISTI, IIT Kanpur, and other. The impact of Prof. Ramkumar's ingenuity and inquisitive spirit is so profound that his name has become synonymous with Manufacturing Engineering in the research community. His illustrious career stands as a testament to his unwavering commitment to excellence and advancement, bringing honour to the fields of academia and engineering alike.
