

Prof. R. Krishna Kumar is an Institute Professor and Perry L. Blackshear Institute Chair at the Indian Institute of Technology Madras. He is the recipient of the Life Time Research Achievement award from the Indian Institute of Technology Madras.

After a stint of six years in the industry, Prof. Krishna Kumar joined the Institute in 1989 as Asst. Professor, in the department of Mechanical Engineering. He founded the Department of Engineering Design in 2005 and was the Head of the Department for six years

Prof. Krishna Kumar is a well-known expert in the areas of Nonlinear Finite Element, Vehicle Dynamics and Cardiac Mechanics. The Ragupathi Singhanian Center of Excellence for Tire Mechanics and Vehicle Dynamics established by him over a decade ago, with sponsorship from *JK Tyre and Industries*, is the longest and one of the largest private funded initiatives in the IIT system. Prof. Krishna Kumar is the country's foremost expert in tire design. His pioneering work on "virtual testing of tires" is being used by many of the leading commercial vehicle manufacturers. The mathematical models for predicting durability, rolling resistance and safety of vehicles, developed by his group at IIT Madras are extensively used by Tire Companies in their designs.

His original, collaborative work with India's leading Cardiac surgeon, Dr. K.R. Balakrishnan, has resulted in ground-breaking theories in cardiac surgery, and is cited in many major cardiac surgery textbooks that are followed internationally.

Prof. Krishna Kumar has a blend of unique qualities that makes him a good teacher, an outstanding researcher and one of the most sought after applications-oriented academic. He has been instrumental for establishing two startups, one in the field of automotive engineering, Ather Energy, and the other in biomedical, Cartosense which made Neuro-navigation systems.