

K. Ramesh is currently a Senior Professor at the Department of Applied Mechanics, IIT Madras; as its Chairman during (2005-2009) and formerly a Professor at the Department of Mechanical Engineering, IIT Kanpur. He received his undergraduate degree in Mechanical Engineering from the Regional Engineering College, Trichy (now NIT, Trichy), Post graduate degree from the Indian Institute of Science, Bangalore and the Doctoral Degree from the Indian Institute of Technology Madras.

He has made significant contributions to the advancement of Digital Photoelasticity. This has resulted in a Monograph on Digital

Photoelasticity - Advanced Techniques and Applications (2000), Springer, a chapter on Photoelasticity in the Springer Handbook of Experimental Solid Mechanics (2009) and a chapter on Digital Photoelasticity in the book on Digital Optical Measurement Techniques and Applications (2015), Artech House London. He has over 175 publications to date of which two have been reproduced in the Milestone Series of SPIE. His research has been funded by organizations such as ARDB, ISRO, DST, and NSF. He received the Zandman award for the year 2012, the only Indian to receive it since its inception in 1989, instituted by the Society for Experimental Mechanics, USA for his outstanding research contributions in applications utilizing photoelastic coatings.

He has pioneered a new paradigm in Engineering Education by writing innovative e-Books on *Engineering Fracture Mechanics* and *Experimental Stress Analysis* published by IIT Madras. These books are first of their kind in the world and can be truly called as e-Teachers. He has co-authored a book on *Mechanical Sciences*, Narosa Publishing House, India and has contributed a chapter on *Experimental Stress Analysis – An Overview*, in the book on *Optical Methods for Solid Mechanics*, Wiley-VCH Verlag. He has also given Video lectures of 40 hrs. each on *Experimental Stress Analysis* and *Engineering Fracture Mechanics* as part of the National Program for Technology Enhanced Learning (NPTEL), India.

Prof. Ramesh has also developed several educational software such as PHOTOSOFT_H, MOIRESOFT and CAUSTICSOFT to teach various experimental methods interestingly (in dos platform) and has recently developed PSCOPETM - A comprehensive software for understanding whole field stress analysis. In addition an analysis package *Digi*TFPTM has also been developed to evaluate photoelastic parameters that use *Twelve Fringe Photoelasticity* for isochromatic evaluation and polarisation stepping for isoclinic evaluation.

He is a Fellow of the Indian National Academy of Engineering since 2006. Other recognitions and awards include: Certificate of Excellence in Reviewing from Elsevier for the journal OLEN (2013), Distinguished Alumnus Award of NIT, Trichy (2008), Outstanding Young Individual of Kanpur award instituted by the Kanpur Industrial Junior Chamber (1993), President of India Cash Prize (1984). Member of the Editorial Boards of the International Journals: Strain (since 2001), Journal of Strain Analysis for Engineering Design (2009-10), Optics and Lasers in Engineering, and Steering committee member of Asian Society for Experimental Mechanics since its inception in 2000.

For details see: https://home.iitm.ac.in/kramesh/index.html