



Birla Institute of Technology & Science, Pilani

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PROF. S VENKATESWARAN FACULTY EXCELLENCE AWARD: INSTITUTED BY KARTHIK KRISHNA (1993) – 2012



DR. DHANANJAY MADHUKAR KULKARNI

Dr. Dhananjay Madhukar Kulkarni received his Bachelor's degree in mechanical engineering from Pune University in 1993. He obtained his Master's degree from IIT Kharagpur in 1998 and PhD from BITS Pilani in 2005.

He is currently Associate professor at BITS Pilani, K.K Birla Goa campus where he is engaged in research projects with industrial collaborators. He had been working at the same campus as Assistant Professor and lecturer for nearly six years. He worked as a design executive, designed and developed a "single bearing alternator" for Crompton Greaves Ltd, Ahemadnagar. He worked as a lecturer for four years in Pune University. He worked as trainee Engineer in MICO Bosch for a year. His areas of interest are Fracture mechanics, Biomechanics and Biomaterial and advanced Finite element analysis.

He has received certificate of Instructorship for Training Industry Professionals in India by ASME, USA 2010, Certificate of Excellence, Kris Ramchandran Faculty Excellence Award by BITS-Pilani in 2010 and Distinguished Faculty Award, BITSAA 2011. He was Invited to present the Key Note Address at the International Conference on Mechanical and Aerospace Engineering August 2011, Bangkok. He was invited to chair the programme committee at the 'International Conference on Manufacturing Sci & Tech' (ICMST), November 2010, Kuala Lumpur, Malaysia. He is a Member of the editorial board for World Journal of Mechanics, International Journal of Vehicle Structure and Systems.

In the last five years, Prof Kulkarni has published six papers in international journals, two papers in national journal and has attended various national and international conferences. He has published two books namely 'Engineering Graphics with AutoCAD' and 'Axisymmetric Contact Stress Analysis for Artificial Hip Joint'. He was offered instructorship for training industrial professionals in India by ASME. He has conducted training programmes for L&T and other companies for Advanced Finite Element Analysis. He was invited by several Universities for training their faculty in Mechanical Engineering for the course 'Engineering Graphics with AutoCAD' on which he has published a book. This course model along with the book is implemented in several deemed universities and autonomous colleges in India. IIT Bombay and IIT Indore will implement the same shortly.

Prof Kulkarni developed a lab set up for Fracture Mechanics at the Pilani and Goa campuses, which is used by ME and PhD students of diverse disciplines to study fracture behavior of various materials. Three research scholars are currently working towards their PhD under his guidance. He has now extended his research on fracture from engineering materials to biomaterials. He and his team members have collaborated with a world known BioTribo Testing industry, DUCOM Instruments, Bangalore as well as medical doctors to work on hip and dental implant testing. The team has helped DUCOM industry with modification of a conventional tribotester which can be utilized for tribotesting of hip implants and customize it as a biotribotester. This project has a sponsorship each from DUCOM Instruments, Aditya Birla Sci & Tech Center and DST. With the industrial and Government funding, he is planning to introduce the BioMedical Engineering programme at UG level.

The Prof S. Venkateswaran Faculty Excellence Award is awarded to Professor Dhananjay Madhurkar Kulkarni in recognition of his outstanding contributions to teaching, research and institute development at BITS Pilani. Through his achievements, Prof Kulkarni has brought glory to the name of the institute.

