



Centre for Biosystems Science and Engineering Seminar

Medical Device Innovation: From Research to Reality

4:00 PM, 25th July 2016,
Seminar Hall, MRDG, Biological Sciences Building.

Dr. B.Ravi

Institute Chair Professor of Mechanical Engineering
Indian Institute of Technology, Bombay.



India requires a large number of medical devices that are currently imported; usually unaffordable and often unsuitable for the local population. Their indigenous development requires synergistic collaboration between doctors, researchers and entrepreneurs to cross the 'valleys of death' from 'bed to bench to bed'. Translational research centres like BETiC at IIT Bombay are laying the path by training multi-disciplinary teams in medical device innovation.

The speaker will describe the define-develop-deliver-deploy process that resulted in a number of products including a variable length biopsy gun, flexible laparoscopic instrument, endo-retractor for anchoring internal organs, template for aortic valve repair using pericardium tissue, and others.

About the speaker

Dr. B. Ravi is Institute Chair Professor of Mechanical Engineering, and heads E-Foundry and BETiC - Biomedical Engineering & Technology (incubation) Centre at IIT Bombay. He obtained his Masters and PhD from Indian Institute of Science, Bangalore in 1992. During the last 25 years, he introduced several novel technologies in India, related to CAD, Simulation and 3D Printing for metal casting and medical domains, recognised by awards like DST-Lockheed Martin India Innovation Gold Medals. Prof. Ravi also serves as Vice President of CMTI Bangalore, member of several expert committees of the Government, and councils of a few institutes. His 'Golden Spiral' philosophy to connect education, innovation and application has inspired many other researchers and teachers.