INDIAN INSTITUTE OF SCIENCE BANGALORE -560012 Cordially invites you to the Institute Colloquium (Division of Physical & Mathematical Sciences) by Professor S Asokan Dept. of Instrumentation and Applied Physics and Robert Bosch Centre for Cyber Physical Systems on

"Fiber bragg gratings: Sensors which can sense most anything"

On

Date: Wednesday, 28th October 2015 Venue: Faculty Hall Time: 4 pm

Prof. Anurag Kumar, Director will preside

Abstract:

The world is getting increasingly smarter, wherein devices connected to communication and computational systems allow doctors to remotely monitor health in real time, manage traffic, control water & power distribution systems, etc. In a smart world, sensors play a very vital role. Over decades, many different technologies have contributed in their own way in fulfilling various sensing requirements. The advent of optical sensing methodologies has revolutionized the sensing field by their inherent advantages such immunity to Electro Magnetic Interference, high band width, multiplexing capability, small foot print, etc. Among the large number of fiber optic sensor technologies, Fiber Bragg Grating (FBG) sensors have become extremely popular in the recent times, as they can be used as physical, chemical and bio sensors. In this lecture, an introduction to basics of Fiber Bragg Grating Sensors, is given. Further, the wide applicability of these sensors is illustrated with examples in Structural Health Monitoring, toxic gas monitoring, seismic sensing, sensing bio markers, etc.

ALL ARE WELCOME

Tea: 5 pm