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