

INDIAN ACADEMY OF SCIENCES

## **ACADEMY PUBLIC LECTURE**

## Cancer suppressor mechanisms that guard the human genome

## PROF. ASHOK VENKITARAMAN

Jubilee Professor, Indian Academy of Sciences,
University of Cambridge,
Medical Research Council Cancer Cell Unit, Cambridge, UK

## 2nd August (Thursday) 2012, 4 pm

Faculty Hall, Indian Institute of Science, Bangalore

Chromosomes serve as the functional and physical containers for the information encoded in the human genome. Instability in chromosome structure and number is a hallmark of human epithelial cancers, which is triggered early in cancer development. What provokes chromosomal instability, and how it fosters cancer pathogenesis, remain major unresolved questions central to understanding carcinogenesis. Moreover, the near-universal occurrence of chromosomal instability in common epithelial malignancies offers important opportunities for devising new approaches to cancer therapy. Insights into these issues that come from our studies on the macromolecular interactions that control DNA replication, repair and mitotic progression, the key cancer suppressor mechanisms that maintain chromosome stability in normal cells will be discussed. To understand these processes at resolutions ranging from molecules to organisms, an integrative and interdisciplinary approach was used, combining somatic cell genetics, single-molecule biophysics, chemical biology and transgenic models.

Prof. Ajay Sood, President of the Academy will preside. Tea/Coffee will be served after the lecture. For details contact: Executive Secretary, Indian Academy of Sciences Ph: 080-22661203 Email: execsec@ias.ernet.in

**ALL ARE WELCOME**