



INDIAN INSTITUTE OF SCIENCE  
BANGALORE -12

Cordially invites you to the  
INSTITUTE COLLOQUIUM  
(Earth & Environmental Sciences)

By

**Professor C. S. Manohar**  
Department of Civil Engineering

On

## **On Engineering safe structure**

Date : Friday, 18<sup>th</sup> January 2013

Venue : Faculty Hall, Main Building

Time : 4-00 p.m

Professor P. Balaram, Director  
will preside

Tea: 5-00 p.m

ALL ARE WELCOME

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## **Abstract**

Structural engineering design is an activity that has interfaces with nature and society. While the threats to the integrity of structures come mainly from natural hazards (like earthquakes and cyclones), it is the society that provides the oversight on acceptable levels of risk to be guaranteed by design. In this colloquium, we first trace the evolution of the philosophy of structural engineering design beginning with the traditional methods based on prescriptive codes leading to the more recently developed performance and consequence based engineering frameworks. Subsequently, the colloquium provides a resume of recent research activities pursued by the speaker in the areas of safety of vibrating systems and problems of structural system identification. The focus of these contributions is on the treatment of uncertainties and nonlinearities in forward and inverse problems arising in structural dynamics.



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