



Institute Colloquium

INDIAN INSTITUTE OF SCIENCE
BANGALORE

PROFESSOR K P RAO

(Prof. Satish Dhawan Chair)
DEPARTMENT OF AEROSPACE ENGINEERING
INDIAN INSTITUTE OF SCIENCE

will deliver a lecture

on

COMPOSITES - A CHALLENGE TO ANALYSTS AND DESIGNERS

on Friday, the 13TH February, 1998
at 4.00 PM in the Faculty Hall

PROFESSOR G PADMANABAN

Director, will preside

All are cordially invited.

Coffee : 5.00 P.M.
Reception Hall

Prof. S S KRISHNAMURTHY
Convener

ABSTRACT

Composites are extensively used in Aerospace, Marine, Sporting and Automotive industries as they offer the advantages of light weight, high strength/stiffness and ease of manufacture. Unlike metallic materials, composites can be tailor-made to achieve maximum efficiency in any given application. As composites consist of reinforcing small diameter fibres/particles supported by a binder, the prediction of their response to any loading is complex. Analysts have to predict the macro-behavior starting from micro-behaviour. Designing composite structures using metal design principles does not exploit the full potential offered by composites. Thus new principles of design are to be enunciated for composites. The lecture will address the general issues of difficulties in analysis of the performance of composites and highlight the specific contributions of the Speaker.