FOR NOTICE BOARD



INDIAN INSTITUTE OF SCIENCE BANGALORE

PROFESSOR AVADHESHA SUROLIA

MOLECULAR BIOPHYSICS UNIT

Will deliver a lecture

on

BEANS, GENES AND LECTINS

on Tuesday, the 25TH March, 1997

at 4.00 PM in the Faculty Hall

PROFESSOR G PADMANABAN

Director, will preside

All are cordially invited.

Coffee: 1700 hrs. Reception Hall

Prof. M A L Thathachar Convener

ABSTRACT

Beans, a common source of food and energy, harbour several functionally important proteins including lectins, amylase and protease inhibitors. Among them lectins identified at the turn of the century by their red blood cell agglutinating activity are attracting much attention because of their involvement in cellular recognition in a variety of situations and systems. They are encoded by multiple and often linked genes. Their duplication and divergence has led to acquisition of different biological functions. Lectins also display a characteristic three dimensional fold which has been conserved during evolution. Despite these conservations they display a wide repertoire of carbohydrate specificities, inexplicable patterns of oligomerization and a plethora of biological activities in which the unfolding structural variety appears to be the key to their functions as well as their biomedical applications such as blood typing, identification of chromosomal aberrations and in bone marrow transplantation.