INSTITUTE COLLOQUIUM

INDIAN INSTITUTE OF SCIENCE
BANGALORE

PROFESSOR K R K EASWARAN
MOLECULAR BIOPHYSICS UNIT

will deliver a lecture

on

IONOPHORES, POLYENE ANTIFUNGALS
AND LIPID TUBULES

on Wednesday, the 22nd April, 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

The first part of the talk will focus on the conformation, aggregation and
membrane interaction of a few important carrier ionophores and polyene antifungal
drugs as probed by a variety of biophysical techniques and the molecular basis for their
action. The second part of the talk will discuss the recent results on the chiral molecular
architecture of self-assembled phospholipid tubules, an unusual lipid microstructure,
using spectroscopic techniques and electron microscopy. A brief overview of the current
status on the biophysical approaches to the understanding of the structures of cationic
lipid-DNA complexes used as transfection agents for DNA delivery in cells and future
prospects will also be presented.