



INFECTIOUS DISEASE MODELLING WORKSHOP

A REPORT

3rd - 4th January, 2024

Organized By

**Centre for Excellence in
Mathematical Biology (CEMB)**

CENTRE FOR EXCELLENCE



**Sri Sathya Sai Institute of Higher
Learning (SSSIHL)**

In Collaboration with



**Department of Mathematics
School of Chemical Sciences &
Engineering
Lovely Professional University (LPU)**

WORKSHOP FLYER



SCHOOL OF
CHEMICAL ENGINEERING
AND PHYSICAL SCIENCES

NAAC
GRADE **A++**

INFECTIOUS DISEASE MODELING WORKSHOP

3rd - 4th January, 2024



FACULTY INSTRUCTOR

DR. D. K. K. VAMSI

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Module 1

Introduction to Infectious
Disease Modeling

Module 2

Deatils about Disease
Models

Module 3

Applications of Infectious
Disease Modeling with
reference to Hansen's
Disease Modeling

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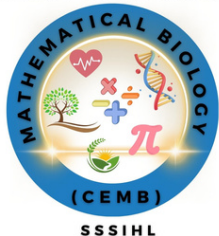
CENTRE FOR EXCELLENCE IN
MATHEMATICAL BIOLOGY
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The Center for Excellence in Mathematical Biology (CEMB) at Sri Sathya Sai Institute of Higher Learning (SSSIHL) is dedicated to leveraging mathematical innovation for the betterment of society, with a focus on providing pioneering solutions for public well-being. The center envisions harnessing the power of mathematical modeling and analysis to generate actionable solutions that have a meaningful impact on society. CEMB is committed to translating scientific knowledge into practical applications, striving to benefit humanity.

As an initial initiative, CEMB has undertaken the responsibility of conducting workshops to enhance the country's capacity in Infectious Disease Modeling. In line with this commitment, the first formal activity after the centre's establishment was the organization of an Infectious Disease Modeling Workshop. This workshop, led by Dr. D.K. K. Vamsi, Coordinator for CEMB, was specifically tailored for the faculty of the Department of Mathematics at the School of Chemical Engineering and Physical Sciences, Lovely Professional University (LPU).



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The workshop, spanning two days, covered three key modules:

Module 1: Introduction to Infectious Disease Modeling

Module 2: Details about Disease Models

Module 3: Applications of Infectious Disease Modeling with reference to Hansen's and Tuberculosis Disease Models

A key reference for the workshop was the textbook "Modeling Infectious Diseases in Humans and Animals" by Keeling & Rohani, published by Princeton University Press in 2007.

Attended by over 50 faculty members from the Department of Mathematics at the School of Chemical Engineering and Physical Sciences, LPU, the workshop garnered significant interest from participants. Currently, both the CEMB – SSSIHL and Department of Mathematics at the School of Chemical Engineering and Physical Sciences, LPU are actively exploring and anticipating research collaborations in the near future. This workshop marks a crucial step towards fostering interdisciplinary collaboration and advancing research in the field of Mathematical Biology.



PHOTO GALLERY





PHOTO GALLERY

