#### **Central University of Rajasthan**

Central University of Rajasthan (CURAJ) was established by an Act of Parliament in March 2009, located in the Ajmer district, and operates on its own 518+ acre lush-green campus with all modern amenities. The University is fully funded by the Ministry of Education through the University Grants Commission (UGC), New Delhi. The University received the highest coveted 'A++' grade by NAAC in 2023 in its second cycle of accreditation and has been granted the status of Category-I University by the UGC. Currently, Prof. Anand Bhalerao is the Vice-Chancellor, under whose leadership the University is blossoming as a center for higher education. The University has successfully completed a journey of 15 years since its inception in 2009 and has emerged as one of the fastest-growing, flourishing institutes of higher education in Rajasthan. In this short span of time, the University has become one of the top academic institutions by adopting cutting-edge technology to impart knowledge for global outreach. The wide-open, green, and pollution-free campus provides an aesthetic and salubrious environment to nurture and optimize academics, research, and holistic development through suitable engagements in sports and cultural activities that are crucial for maintaining well-being and accomplishing potential. The University offers 61 innovative UG & PG and 30 Ph.D. programs in its 12 Schools and 35 Departments, all at par with global competence, and is consistently striving to provide quality education and foster an environment that promotes academic excellence and holistic development.

# **Department of Mathematics**

The Department of Mathematics was established in the very first year of the establishment of the university in 2009 under the School of Mathematics, Statistics, and Computational Sci-

ences. At present, the Department offers: M.Sc. Mathematics (2 year), M.Sc. B.Ed. (Innovative) Mathematics, Four-year B.Sc. Mathematics (Hons. / Research), and Ph.D. Mathematics. The Department has been awarded DST-FIST grant in 2015. The Department currently comprises 11 faculty members and approximately 300 students. The faculty members of the Department have educational experience from different IITs, reputed Universities and Educational Institutions in India and abroad e.g., IIT Delhi, IIT Bombay, IIT Mandi, TIFR Bangalore, BHU, HRI. The faculty members of the Department have huge teaching and research experience and working in many thrusts and cutting-edge research areas like Nonlinear Dynamics, Algebra, Operations Research, Disease and Ecological modeling, Analysis, Machine Learning, Fluid Dynamics, Modeling in Astrophysics. Department offers different interdisciplinary and core courses including Software tools, Mathematical Biology, Machine Learning, Operation Research, Fluid Dynamics, Abstract Algebra".

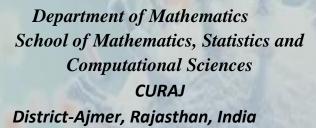
# National Workshop

# Modeling of Infectious Disease Dynamics

(24th February 2025-28th February, 2025)

Organized by





# CHIEF PATRON



Prof. Anand Bhalerao
Hon'ble Vice Chancellor, CURAJ

# **PATRON**

Prof. D.C. Sharma,
Dean Academics, CURAJ

## **CO-PATRON**

Dr. Anand Kumar

Head, Department of Mathematics, CURAJ

# **CONVENER**

Dr. Jai Prakash Tripathi,
Assistant Professor,
Department of Mathematics, CURAJ

# **Organizing Committee**

Prof. D.C. Sharma

Prof. Jugal Kishor Prajapat

Dr. Anand Kumar

Dr. Ram Kishor

Dr. J. P. Tripathi

Dr. Vijay Kumar Yadav

Dr. Vipul Kakkar

Dr. Asha Kumari Meena

Dr. Kamlesh Jangid

Dr. Somnath Ashok Gandal

Dr. Sonali Thakur

Dr. Saurabh Kumar

Dr. Gobind Singh

# Advisory/Scientific Committee

Prof. Peeyush Chandra, IIT Kanpur

Prof. Girija Jayaraman, IIT Delhi

Prof. V.S.H Rao, JNTUH, Hyderabad

Prof. Prawal Sinha, IIT Kanpur

Prof. Sunita Gakkhar, IIT Roorkee

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Prof. Sudeshna Sinha, IISER Mohali

Prof. Narendra M Dixit, IISc Bangalore

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**About the Workshop** 

The National Workshop on "Modelling of Infectious Disease Dynamics (NWMIDD)" is designed to provide an interactive platform for participants from interdisciplinary fields like mathematics, life sciences, and related areas. The workshop aims to equip participants with mathematical and computational tools essential for understanding and addressing public health challenges. It will cover disease modelling at various biological levels, from genome to population, and offer handson experience with software like MATLAB, R and Python. The program includes expert panel discussions, special lectures, and practical lab sessions, fostering collaboration and providing cutting-edge knowledge in infectious disease modelling and control strategies.

# **Objectives**

This workshop provides an interactive platform for participants to gain hands-on experience in infectious disease modeling. It covers key topics such as disease dynamics, statistical analysis, and practical model implementation, with guided sessions using MATLAB and Python. Participants will engage in expert-led panel discussions, special lectures, and showcase their own work through poster presentations. By the end of the workshop, participants will gain practical skills and knowledge to independently apply advanced tools for analyzing infectious disease transmission and control strategies.

## **Topics to be Covered**

The workshop will cover essential topics in infectious disease modelling, starting with foundational concepts and advancing to statistical methods for analysing disease data. Participants will explore epidemiological dynamics and control strategies through hands-on sessions, with a focus on implementing models in MATLAB and Python. Topic will cover disease modelling at various biological levels, from genome to population including real world applications, and case studies on disease spread and intervention strategies.

#### **Resource Persons**

The expert lectures will be delivered by renowned, Scientist and Academicians from India.

- Prof. Peeyush Chandra, IIT Kanpur
- Prof. V. Sree Hari Rao, JNTU Hyderabad
- Prof. Gautam Menon, Ashoka University
- Prof. Mohit Kumar Jolly, IISc Bangalore
- Prof. Sitabhra Sinha, IMSc Chennai
- Prof. Arvind Kumar Mishra, BHU Varanasi
- Prof. Ranjit Kumar Upadhyay, IIT Dhanbad
- Prof. B. V. Rathish Kumar, IIT Kanpur
- Prof. Giridhar R Babu, Public Health Foundation of India
- Prof. Balram Dubey, BITS Pilani
- Prof. D.N. Pandey, IIT Roorkee
- Prof. S.K Tiwari, K.S Saket P.G College, Ayodhya
- Prof. Shyam Sundar, BHU
- Dr. Govind Yadav, CSIR Indian Institute of Integrative Medicine, Jammu
- Prof. Narendra M Dixit, IISc Bangalore
- Prof. Samit Bhattacharya, SNU Noida
- Prof Ram Naresh Tripathi, HBTU Kanpur
- Prof. Sandip Banerjee, IIT Roorkee
- Prof. Prashant Kumar Srivastva, IIT Patna
- Prof. Dharmendra Tripathi, NIT Uttarakhand
- Prof. Anupam Priyadarshi, BHU
- Prof. Krishna Kiran Vamsi Dasu, SSSIHL
- Prof. Partha Sarathi Mandal, NIT Patna

# **Prospective Participants**

This National Workshop on Modelling Infectious Disease is open for participants from industry, faculties, research scholars, postgraduate, and undergraduate students. The number of participants for the National Workshop is limited, and the selection of participants will be on a first-come, first-served basis, along with the research interests and merits of the participants.

### **Poster/Paper Presentation**

There will be a POSTER/PAPER session on the theme of workshop. Interested participations can present their ideas during the Poster/Paper presentation after successful registration for the National Workshop.

### **Registration Fees**

The registration fee is Rs. 2000/- for PhD, postgraduate, and undergraduate students, and Rs. 3000/- for faculty members, Postdoc and Scientist. The last date for registration for the workshop is 02 February 2025. An e-certificate will be issued to participants upon the successful completion of the national workshop. The bank/QR code details for online payment of the fee are as follows:

A/C Name	CENTRAL UNIVERSITY OF
	RAJASTHAN
Bank Name	BANK OF INDIA
A/c No.	666710210000001
IFSC Code	BKID0006667



#### **ACCOMMODATION**

Accommodation will be provided in the guest house and hostels (separate for girls and boys) at the CURAJ, subject to availability. Alternatively, individuals may book their accommodation on a self-payment basis at nearby hotels.

# **Travel Allowance**

TA may be reimbursed only to those participants who do not have any kind of travel support. TA would be reimbursed as per norms of funding agency and Central University of Rajasthan. Reimbursement of TA is subjected to availability of financial grants.

- Undergraduate and Postgraduate are requested to book sleeper class train tickets by the shortest route.
- Postdoc, PhD, Faculty members/ Scientists are requested to book AC tier III class train tickets by the shortest route.

Tickets must be purchased only from the below Government of India authorized travel agents.

- M/S Balmer Lawrie & Company Ltd.
- M/S Ashok Travels & Tours.
- Indian Railways Catering and Tourism Corporation Ltd.

# **How to Register**

The link for the registration of the workshop is:

https://forms.gle/rXWXbdXonGsDAM5A6

# Sponsered by







