OBJECTIVE

Mathematical models are recognized as effective tools that could help examine economic, environmental, and ecological impacts of alternative pollution-control and resources conservation actions, and thus aid planners or decision makers in formulating cost-effective management policies. In particular, mathematical models play a vital role in prediction of environmental impact of various industrial operations prior to the commencement of the project in order to devise appropriate environmental management plan.

This Two-Day workshop will bring together researchers working on the field of mathematical modelling with expertise in mathematical ecology, remote sensing, mathematical modelling in land, air, water and bio-systems, etc. The aims of the workshop are:

- o to expose students, researchers and faculties to the different facets of mathematical modelling in general, so that they may gain a wider understanding of the important applications of mathematics,
- o to encourage and motivate the students to explore and carry out their research in various aspects of mathematical modelling,
- o to encourage interdisciplinary collaborations between the participants and the experts,
- o to facilitate the exchange of novel ideas and results in mathematical modelling to showcase the importance of the field in the face of many challenges from mathematical ecology to bio-systems.

Target/Eligibility

M.Sc. / M. Tech / Ph.D. Student / Post-Doctoral Fellow (PDF) / Faculty member

CHIEF PATRON

Prof. Pravakar RathVice Chancellor,
Mizoram University

PATRON

Prof. Diwakar Tiwari

Dean, School of Physical Sciences, Mizoram University

CHAIRMAN

Prof. M. Sundararajan

Head, Dept. of Mathematics & Comp. Sc., Mizoram University

COORDINATORS

Dr. Tanay SahaMizoram University

Dr. M. Saroja DeviMizoram University

JOINT COORDINATORS

Prof. M. SundararajanMizoram University

Prof. Jamal HussainMizoram University

Prof. S. Sarat SinghMizoram University

Mr. LaltanpuiaMizoram University

Mr. Sajal Kanti DasMizoram University

Address for Correspondence:

Dr. Tanay Saha

Assistant Professor
Department of Mathematics & Comp. Sc.
Mizoram University, Tanhril, Aizawl - 796004
tanay@mzu.edu.in, sahatanay50@gmail.com

Mob: 9679417861.

ON ROLE OF MATHEMATICAL MODELLING IN ENVIRONMENT

18th - 19th May, 2023

Organized By



Department of Mathematics and Computer Science

Mizoram University

Aizawl - 796004,

India

www.mzu.edu.in

About Mizoram University

Mizoram University was created by an Act of Parliament (No. 8 of 2000) and it became functional from 2nd July, 2001. The University is located at Aizawl, the capital city of Mizoram and is spread over 978.1988 acres. Prior to the existence of the Mizoram University, the North-Eastern Hill University (NEHU) with headquarters at Shillong was operating a campus in Mizoram. Headed by a Pro-Vice Chancellor, the then Mizoram Campus of NEHU consisted of seven Post-Graduate Departments, namely, Economics, Education, English, Forestry, Mizo, Psychology and Public Administration. During the last 21 years of its existence, Mizoram University has made considerable progress in terms of infrastructure, academic programmes, manpower and support services.

Mizoram University was accredited 'A' grade by NAAC in 2014 and 2019. The University was ranked as one of the top 100 Universities in India, assessed by the NIRF rankings in 2016, 2017 and 2018 under the Ministry of Education, Government of India. The University has 33 functioning academic departments offering UG, PG, M.Phil. and Ph.D. programmes under 8 Schools of Study. The University has 35 affiliated colleges and one constituent college.

The University Life is lively and diverse, with students coming from different parts of the world. The University is committed to extending its rich academic resources to the public, locally, nationally and internationally.

SPEAKERS

Prof. Priti Kumar Roy

Professor, Jadavpur University.

Prof. Manish Kumar Jain

Associate Professor, IIT (ISM) Dhanbad.

Prof. M. Sundararajan

Professor, Mizoram University.

Prof. Jamal Hussain

Professor, Mizoram University.

Contents:

- The Role of Mathematical Models in Resolving Various Environmental Problems.
- Renewable Energy Biodiesel: A
 Mathematical Approach from Ecology to
 Production.
- Evolution of Mathematical Epidemiology
 A walk at the crossroad.
- Air Pollution Dispersion Modelling.
- Application of Remote Sensing Data in Environmental Management.
- Mathematical Modelling of Bio-Systems.

About the Department of Mathematics and Computer Science

The Department of Mathematics and Computer Science came into existence in the year 2006 with an intake of first batch of Post Graduate students in July, 2007. The faculty members of the Department are specialized in disciplines of Pure & Applied Mathematics and Computer Science. The syllabus has been framed at par with other Universities of the Country and as per UGC model syllabus. Choice Based Credit System (CBCS) is implemented from the year 2012. The Department is currently supported by DST- FIST. The Department also received grants from UGC, DIT, SERB, CSIR and NBHM.

Vision of the Department:

- To build the Department as a Centre of Excellence
- To open job oriented short term courses that will benefit local youths to get employment.

The Department offers degrees in MSc & PhD in Mathematics & Computer Science & CCC.

REGISTRATION

Click the link for online Application form:

https://forms.gle/PLarMr764CsrTUCj9

Fill up & submit the online Application form on or before 25th April, 2023.

Selected Participants will be provided Free Boarding/lodging. No TA will be provided to the selected participants.