



# 9<sup>th</sup> INTERNATIONAL CONFERENCE ON DISCRETE MATHEMATICS AND MATHEMATICAL MODELLING IN DIGITAL ERA (ICDM<sup>3</sup>DE-2023) MARCH 23<sup>rd</sup> – 25<sup>th</sup> 2023



## THE GANDHIGRAM RURAL INSTITUTE-DEEMED TO BE UNIVERSITY

(MINISTRY OF EDUCATION, GOVT. OF INDIA)  
GANDHIGRAM – 624 302, DINDIGUL, TAMIL NADU, INDIA.

Chief Patron

**Dr. Gurmeet Singh**

Vice-Chancellor (Additional Charge)  
The Gandhigram Rural Institute-DTBU.

Patron

**Dr. V.P.R. Sivakumar**

Registrar  
The Gandhigram Rural Institute- DTBU.

Convener

**Dr. G. Mahadevan**

Associate Professor  
Dept. of Mathematics, GRI-DTBU.

Co-Conveners

**Dr. P. Balasubramaniam**

Professor  
Director-International Programme  
**Dr. R. Uthayakumar**  
Professor & Head  
Dept. of Mathematics, GRI-DTBU.

Organizing Committee Members

**Dr. P. Muthukumar**

**Dr. R. Rajkumar**

**Dr. G. Nagamani**

**Dr. M. Suresh Kumar**

Probable Invited Speakers

**Dr. Kurunathan Ratnavelu**

UCSI University, KL, Malaysia.

**Dr. Wan Ainun Mior Othman**

University of Malaya, Malaysia.

**Dr. Meng Joo Er**

Dalian Maritime University, China.

**Dr. C. P. Lim**, Deakin University, Australia.

**Dr. S. Sanjeeva Nishantha Perera**

University of Colombo, Sri Lanka.

**Dr. P. Raveendran**, Monash University, Malaysia.

**Dr. Griengrai Rajchakit**

Maejo University, Thailand.

**Dr. Fathalla A. Rihan**

United Arab Emirates University and Helwan University, UAE.

**Dr. C. Sivagnanam**

University of Technology and Applied Sciences- Sur Oman.

**Dr. S. Ponnusamy**, IITM, Chennai.

**Dr. K. Balachandran**

Bharathiar University, Coimbatore.

**Dr. B. V. Appa Rao**, KL University, India

**Dr. R Sakthivel**

Bharathiar University, Coimbatore.

**Dr. Raju K. George**, IIST-Trivandrum, India.

**Dr. S. Marshal Anthoni**, Anna University, Coimbatore.

**Dr. Rajeswari Seshadri**, Pondicherry University, India.

**Dr. Suresh Singh**, University of Kerala.

**Dr. K. B. Rajesh**

Chikanna Government Arts College, India.

**Dr. A. Selvam**, V.H.N.S.N College, India.

**Dr. N. Sukavanam**, IIT Roorkee.

**Dr. T. Asir**, Pondicherry University, India

**Dr. M. Seenivasan**, Annamalai University, Chidambaram.

Advisory Committee Members

**Dr. Jinrong Wang**, China.

**Dr. Xiaodi Li**, China.

**Dr. V. Ravichandran**, India.

**Dr. S. Muralisankar**, India.

**Dr. P. Prakash**, India.

**Dr. T. Amranath**, India.

**Dr. N. Anbazhagan**, India.

**Dr. K. Murugesan**, India.

**Dr. Lellis Thivagar**, India

**Dr. Pankaj Srivatsava**, India

**Dr. A. Amutha**, India

**Dr. R. Sivaraj**, Dubai

### About the University

The Gandhigram Rural Institute (GRI), founded by two dedicated disciples and contemporaries of Mahatma Gandhi, Dr. G. Ramachandran and Dr. T. S. Soundaram Ramachandran, has as its foundation Mahatma Gandhi's revolutionary philosophy of Nai Talim, which effectively bridges the cognitive and practical dimensions and focuses on the holistic development of learners, with an emphasis on skill development through value-based education, rooted in indigenous cultures and traditions. Since its establishment in 1956, GRI has been unstintingly contributing to higher education and has successfully pioneered rural higher education. The circular model developed at GRI originally integrating teaching, research and extension have earned the Institute, the status of Deemed University in 1976 by UGC, the five-star status by NAAC in 2002, 'A' Grade during the re-accreditation in 2010 by NAAC and 'A' Grade in its third cycle of reaccreditation in the year 2016.

### About the Department

The Department of Mathematics was established in the year 1965 at the Gandhigram Rural Institute-Deemed to be University, Tamil Nadu. To compete with International Standards, Research on Stability Problems of Dynamical Systems including Neural Networks and Intelligent Systems, Fractal Theory and its applications, Fuzzy Clustering in Medical Images, Optimization in Marketing related problems, Control theory, Graph theory, Algebraic graph theory being carried out and the results are published as articles in Internationally refereed journals. The Department has published more than 984 research articles in the SCI journals with SCOPUS citations of more than 14939. Funding for research and development is provided by UGC, NBHM, CSIR and DST – SERB continuously for the past 17 years to the faculty members. As a result of consistent performance in research, the Department is recently upgraded with UGC - SAP (DSA-I). International-level research collaborations are being undertaken with Deakin University, Australia, Institute of Mathematical Sciences, University of Malaya, Malaysia, Nanyang Technological University, Singapore, Yonsei University, South Korea, United Arab Emirates University, UAE, University of Texas at Arlington, Texas, USA, Pusan/Kunsan National Universities, South Korea. The Department has successfully conducted eight International Conferences up to 2022.

### About the Conference

Discrete Mathematics and Mathematical Modelling play a vital role as far as the application part is concerned. Many real-life problems can be solved with proper investigations of appropriate Mathematical Modelling of a real-life situation. The main objective of **ICDM<sup>3</sup>DE-2023** is to bring all the Modernistic Researchers from various fields under one umbrella to discuss the latest developments in the field of Mathematics. Depending on the nature of the situation, many real-life problems can be modelled mathematically thereafter by applying the existing or new algorithms to them to find the solution that can be interpreted in light of the situation. Nowadays, Discrete Mathematics ranks among the most prominent areas of research due to its rich application. It will be very much useful to our student community to interact with speakers from all over the world.

### Call for papers

The authors are requested to submit their original research papers in pdf file format, relevant to the topics included but are not limited by e-mail to : [icdmmde@gmail.com](mailto:icdmmde@gmail.com). Paper will be accepted only after scrutiny and peer review process.

### Papers are invited on the following topics

Graph Theory, Algebraic Graph Theory, Neural Network, Soft Computing, Cryptography, Coding Theory, Control Theory, Stability Analysis, Stochastic Modelling, Dynamical Systems, Image Processing-Pattern Recognition, Fractal Theory, Operations Research, Topology, Algebra, Numerical Analysis, Complex Analysis, Differential Equations, Functional Equations, Fixed Point Theory, Number Theory, Artificial Intelligence, Operator Theory, Fuzzy Set Theory, Optimization Techniques and not limited.

### Publication

Selected papers from the conference will be published in SCOPUS/Web of Sciences/UGC CARE listed Journal after the peer review process with the applicable fee.

### Registration Fee

The registration fee for participants to present a paper is Rs.1500/- for Research scholars, Rs.2000/- for Faculty Members/Academicians, Rs. 2500/- for participants from industry and Rs.1000/- for participation only. For outside India, the fee for presentation is 150 USD and 100 USD for participation only.

### Account Details

Account Name : THECONVENER ICDMMMDE 2023

Account Number : 110094722983

IFSC CODE : CNRB0008500

SWIFT CODE : CNRBINBBFD

Branch Address : CANARA BANK, Gandhigram Rural University, Gandhigram-624 302, Dindigul(District), Tamil Nadu

### Accommodation

Limited number of accommodations for the participants will be arranged in the University Faculty Guest House on request made well in advance of payment.

### Important Dates

Abstract : 01.02.2023

Acceptance : 05.02.2023

Full paper : 15.02.2023

Registration on or before : 01.03.2023

### Address for Communication

**Dr. G. Mahadevan**

**Convener – ICDM<sup>3</sup>DE-2023**

Associate Professor, Department of Mathematics,

The Gandhigram Rural Institute-DTBU

Gandhigram-624302, Dindigul District, Tamil Nadu, India.

Mobile : 9443851756, 7530043745