

# 5-Day Workshop on

### **Recent Advances in Differential Equations and Applications**

27th to 31st October 2023

Organised by
Department of Mathematics

School of Advanced Sciences, VIT-AP University, Andhra Pradesh, India



E-Certificate for participation

## Registration Link: https://vtop1.vitap.ac.in/RADEA/Conferenceinitial

Scan to Register

#### **About the University:**

Founded under the esteemed guidance of its founder and Chancellor, Dr. G. Viswanathan, VIT-AP University is a world-leading centre of learning, teaching, and research. It is a globally recognized university known for its contributions and positions among emerging state private universities in India by the Outlook University Ranking 2022. It has seven schools, viz., the School of Computer Science and Engineering (SCOPE), the School of Electronics Engineering (SENSE), the School of Mechanical Engineering (SMEC), the School of Advanced Sciences (SAS), the School of Social Sciences and Humanities (VISH), the School of Business (VSB), and the School of Law (VSL). With faculty members selected from some of the best institutions in the nation and the world, we are continuing to pave the way with novel forms of curriculum, and their in-depth attention to students leads to high levels of student success.

#### **About the School:**

The School of Advanced Sciences (SAS) has three departments: mathematics, physics, and chemistry. The objective of the school is to provide facilities with innovative, engaging teaching methods and critical research participants and to push graduates to the heights of their profession at both national and international levels. Each department of the school is customised in consultation with industry and academia to provide a balanced mix of theoretical and practical knowledge.

The Department of Mathematics has 65 faculty members and promotes novel dimensions to our research focus that transcend the undergraduate and postgraduate levels in Data Science. The department strives to explore new and emerging transdisciplinary knowledge domains such as Fluid Dynamics, Computational Fluid Dynamics, Solid Mechanics, Functional Theory, Network and Graph Theory, Fractal Theory, Lie Algebras, Stochastic Processes, Coding Theory, Theory of Computation, Fuzzy Logics, Optimal Control Problems, Numerical Methods, and Cosmology.

#### About the workshop:

arcsina+2 17k, k E

This workshop aims to provide a platform for exchanging of ideas on different aspects of Applied Mathematics in Science and Engineering. It draws particular emphasis to the understanding of the modelling aspects of real-world problems. Furthermore, this workshop bestows necessary hands-on sessions using modern software tools like MATLAB, MATHEMATICA, R and CFD. Expert lectures will be delivered by eminent experts from various reputed organizations (India and abroad). The scope of RADEA 2023-24 covers Financial Mathematics, Machine Learning, Random Walks in Probability, Computational Gas Dynamics, Shallow Water Waves, Aerodynamics of Airfoils and Wings, Population Dynamics, Fluid Dynamics, and Heat & Mass Transfer to name a few. This workshop seeks to introduce new perspectives on solving potential problems using various software and help participants sharpen their skills, refine their ideas, and keep up with developments in the subject domain.



Chairperson:

Prof S Srinivas, Dean SAS

**Conveners:** 

Dr P Karunakar & Dr N Rajashekar

**Organizing Secretaries:** 

Dr B Satyanarayana, Dr V Ramakrishna Reddy & Dr K Mahipal Reddy

Joint Organizing Secretaries: Y Nandukumar, Dr Sukanta Nayak & Dr M Varunkumar

#### **Resource Persons:**

**Dr. Snehashish Chakraverty**, Professor HAG, Dean Academics, NIT Rourkela.

Dr. Tuhina Mukherjee, Assistant Professor, IIT Jodhpur.

Dr. Ramesh Katta, Senior Lecturer, Sunway University, Malaysia.

**Dr. Deeptiranjan Behara**, Senior Lecturer, The University of the West Indies, Mona Campus, Jamaica.

**Dr. Samala Rathan**, Assistant Professor, Indian Institute of Petroleum & Energy, Visakhapatnam.

Dr. Abhay Kumar Chaturvedi, Assistant Professor, NIT Calicut.

Dr. Surender Ontela, Assistant Professor, NIT Kurukshetra.

**Dr. Jaganmohan Jonnalagadda**, Associate Professor, BITS Hyderabad.

Dr. K. Bhargav Kumar, Assistant Professor, BITS Hyderabad.

**Dr. M. Subbaih**, Professor, Pondicherry University, Pondicherry.

#### Major topics to be covered in the broad sense:

- 1. Ordinary Differential Equations.
- 2. Partial Differential Equations.
- 3. Fractional Differential Equations.
- 4. Fuzzy Differential Equations.
- 5. Neural Network Techniques in Differential Equations.

Target Audience: Faculty, Research Scholars and Students.

#### **Registration Fee:**

For Indian Participants:

Rs. 300/-

For Foreign Participants:

8\$

**Schedule:** 27-31, October 2023.

### Registration link:

https://vtop1.vitap.ac.in/RADEA/Conferenceinitial

Workshop website link: http://radea2023.in

Contact details:  $=2\cos(2x-\pi/3)=$ 

**Dr. P Karunakar** 9866152515 **Dr. N Rajashekar** 9346198245