One Day National Seminar on Recent Advances in Mathematical and Computational Sciences (NSRAMCS-2025)



Date: 29/04/2025

Organized by Department of Mathematics, Faculty of Basics Sciences Rajiv Gandhi University

About the Seminar

The fields of mathematical and computational sciences are at the forefront of modern scientific and technological progress, driving advancements in diverse disciplines, including artificial intelligence, engineering, bioinformatics, and data-driven decision-making. The increasing complexity of scientific and industrial challenges necessitates the continuous evolution of mathematical theories, computational algorithms, and simulation methodologies. This seminar seeks to provide a dynamic forum for researchers, academicians, and industry experts to deliberate on cutting-edge developments, share insights, and explore emerging trends in mathematical and computational sciences. The objectives of the seminar are as follows:

- To facilitate knowledge exchange on contemporary research trends in mathematical and computational sciences.
- To explore novel applications of mathematical models and computational techniques in diverse scientific and industrial domains.
- To address fundamental challenges and opportunities in computational algorithms, mathematical modeling, and large-scale simulations.
- To encourage early-career researchers and graduate students to engage in high-impact research.
- To promote the integration of computational intelligence and mathematical innovations for solving complex real-world problems.

Themes of the Seminar

The seminar will cover a broad range of topics, including but not limited to:

- Algebra, Analysis, Number Theory, Mathematical Biology, Atmospheric vortices
- Computational Mathematics

- Computational Algebra
- Computational Geometry
- Computational methods of weather forecasting
- Numerical Methods and Simulations in Science and Engineering
- Machine Learning and Artificial Intelligence in Computational Work
- High-Performance Computing and Big Data Analytics
- Scientific Computing and Simulations
- Data mining
- Statistics and data Sciences
- Statistical modelling
- Applications in Environmental Science, Biomedical Engineering, agriculture, etc.
- Interdisciplinary Applications

About the Rajiv Gandhi University

The Rajiv Gandhi University (formerly Arunachal University) is the premier Institution for higher education in the state of Arunachal Pradesh located at the picturesque tabloid of Rono Hills approximately 25 km away from the state capital Itanagar. Late Smt. Indira Gandhi, the then Prime Minister of India, laid the foundation stone of the University on 4th February 1984 at Rono Hills. The university has been a center for academic excellence, fostering education, research, and community engagement. RGU offers a wide range of undergraduate, postgraduate, and doctoral programs in various disciplines, catering to the educational needs of students from diverse backgrounds. The university is committed to promoting interdisciplinary research, innovation, and the overall development of the academic community. Ever since its inception, the University has been trying to achieve excellence and fulfill the objectives as envisaged in the University Act. The University was recognized as a Central University in the year 2007 established under the Act of Parliament. Being the lone Central University of the State at present there are Thirty-Six (44) Departments and Three (03) Institutes functioning under Twelve (12) Academic Faculties. The faculty members have been actively engaged in research activities. The University has been maintaining its academic credibility and has been recognized by UGC as a center with potential for excellence. Rajiv Gandhi University (RGU), the lone central varsity in Arunachal Pradesh, has secured the second position among all central universities in the country. Rajiv Gandhi University, Arunachal Pradesh has also been awarded the title of Best Central University of the Year 2020 during the 3rd Himalayan Educators Summit-2020 and 3rd Divya Himgiri Himalayan State Education Excellence Award-2020 to recognize the efforts of leading educational institutes of the Himalayan States that are substantially contributing to the Education sector. Since its inception, the University has made significant progress in teaching, research, innovations in curriculum development and developing infrastructure.

About the Department of Mathematics

The Department of Mathematics at Rajiv Gandhi University has been an important constituent of the faculty of Basic Sciences since 2005, the year when it was established. The Department of Mathematics is dedicated to excellence in teaching and research in mathematical sciences. The department offers undergraduate, postgraduate, and doctoral programs, providing students with a strong foundation in theoretical and applied mathematics. Faculty members actively engage in interdisciplinary research, contributing to fields such as Algebra, Analysis, Atmospheric Vortex Dynamics, Fluid Dynamics, Number Theory and Applied Mathematics and mathematical modeling. The objectives of the department are to impart quality education to those seeking admission to M. Sc., M. Phil. and Ph. D. programmes, promote theoretical and applied research, publish original works and develop interaction with other departments of the university, R&D establishments, industries and other organizations. Through seminars, workshops, and collaborations, the department continues to be a hub for mathematical innovation and learning.

Chief Patron

Prof. S. K. Nayak, Honorable Vice Chancellor, RGU

Patrons

Dr. N. T. Rikam, Registrar, RGU Prof. Sanjeev Kumar, Dean of Basic Sciences, RGU Dr. Nani Tamang Jose, Joint Registrar (Acad./Conf.), RGU

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Dr. Jagdish Prasad Maurya, Dept. of Mathematics, RGU (Convenor) Dr. Dakjum Eshi, Dept. of Mathematics, RGU (Co-Convenor) Dr. Dipak Barman, Dept. of Mathematics, RGU (Co-Convenor) Dr. Bishnupada Debnath, Dept. of Mathematics, RGU (Co-Convenor)

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Prof. Nipen Saikia, HOD, Dept. of Mathematics, RGU
Prof. Sahin Ahmed, Dept. of Mathematics, RGU
Dr. Dakjum Eshi, Dept. of Mathematics, RGU
Dr. Jagdish Prasad Maurya, Dept. of Mathematics, RGU
Dr. Dipak Barman, Dept. of Mathematics, RGU
Dr. Bishnupada Debnath, Dept. of Mathematics, RGU
Dr. Bikas Das, Dept. of Mathematics, RGU
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Dr. Champak Kr. Neog, Dept. of Mathematics, RGU
Research Scholars, Dept. of Mathematics, RGU

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Venue

Department of Mathematics, Rajiv Gandhi University, Rono Hills, Doimukh-791112, Arunachal Pradesh

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Abstract Submission and Registration

For abstract submission and registration click on the link below:

Participants	Fees	Bank Details:Account Name:Jagdish Prasad MauryaName of the bank:State Bank of India,Bank A/C Number:20155884674Type of Account:Saving AccountIFSC code:SBIN0011445Name of Branch:IT (BHU), VARANASI
PG/UG Students	Rs. 500/-	
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Registration Link: <u>https://forms.gle/o2rrzi7raxnxuvxt7</u>

Note: 1. Participants must arrange their own stay. No TA/DA will be provided.
2. ILP is mandatory to visit Arunachal Pradesh. Click on the link: https://eilp.arunachal.gov.in/ for eILP.