



SYMPOSIUM ON OPERATIONAL RESEARCH AND PURE MATHEMATICS

organized by
Department of Mathematics, BITS Pilani, Pilani Campus
on
FEBRUARY 26, 2017

About the Department

The department was established in 1944 as a part of the then existing Birla Science College, which was incorporated in the Institute in 1964. The department offers opportunities for the education and research in a wide spectrum of areas in Mathematics such as: Algebra and Analysis, Differential Equations and their applications, Discrete Mathematics and applications, Statistics and Operations Research, Mathematical Modeling etc. The department runs several foundational courses in Mathematics for all students in Pilani campus pursuing Integrated first degree programs (B.E., M.Sc.) of the Institute. Besides, the department also offers specialized courses in Mathematics for students pursuing M.Sc. and Ph.D. degrees in Mathematics. The department also contributes substantially towards the Work Integrated Learning Programs of the Institute specifically designed for the professionals working in various industries. The department has strongly motivated faculty with diverse specialization in Mathematical sciences providing a potential for pursuing research in basic sciences as well as in interdisciplinary areas of science, engineering and technology. The department is committed to train the students to make them motivated and dedicated engineers and scientists.

About the Symposium

The purpose of the symposium is to offer the research scholars in the department the benefit of the presence of experts. This is facilitated through the talk of experts, presentation by research scholars and their interactions.

Globalization of market and operations place tremendous pressure in making timely and accurate decisions using data analysis and more accurate information. Operational research has become an indispensable tool in business, engineering and military applications. Modelling and analysis play major roles in abstract representation of business systems, engineering system and data analysis and the subsequent generation of relevant information for making more accurate decisions. This also signifies the importance of developing suitable operations research (OR) techniques and models. Symposium covers new mathematical theory and applications in OR and management science models and techniques for solving problems in manufacturing and service organizations. Key problem areas include marketing, design, engineering, production, logistics, procurement, finance and accounting, information systems and supply chains. Symposium includes inventory, queueing, transportation, game theory, scheduling, project management, mathematical programming, decision-support systems, multi-criteria decision making, artificial intelligence, neural network, fuzzy logic, expert systems, simulation.

Pure Mathematics may be considered as a hidden hand in scientific discoveries. In fact, it is also their backbone. In spite of this fact, the trigger for the progress in Pure Mathematics is mostly intrinsic. Comprising mostly of the three approaches, viz. Algebra, Analysis and Geometry, to study mathematical objects, there are several finer substrata. These are intricately woven into such a fascinating artwork that understanding this intricacy itself is a major occupation. The investigation of patterns, beauty and structure of ideas is traditionally the driving force of this area. Nevertheless, the fallout can be seen in unexpected areas. The areas closer to Algebra have large repercussions in digital technology and other modern applications, while many traditional scientific and engineering applications find their feet in the solidity of Analysis and allied areas. Symposium deals with basics in Finite fields, Combinatorics, Complex analysis and their applications.

Invited Speakers

Prof. S. Ponnusamy, Indian Statistical Institute, Chennai centre
Prof. Pankaj Gupta, Department of Operational Research, University of Delhi, Delhi
Prof. Madhu Jain, Department of Mathematics, IIT Roorkee
Prof. Sugata Gangopadhyay, Department of Computer Science and Engineering, IIT Roorkee

Date and Venue

Date: February 26, 2017 (Sunday)
Time: 9:30 AM-6:00 PM
Venue: Room Number 6156 (NAB)

Address of correspondence

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