

YEAR 2024-25

SGSITS, INDORE



NEWS LETTER

DEPARTMENT OF APPLIED MATHEMATICS AND COMPUTATIONAL SCIENCE



One Day Workshop on Intellectual Property Rights (IPR): Issues and Challenges

A workshop on Intellectual Property Rights (IPR) was organized at Shri Govindram Seksaria Institute of Technology and Science by the Department of Applied Mathematics and Computational Science in collaboration with MPCST. The inauguration was graced by Director Prof. Vijay Rode and Chief Guest Prof. C.P. Paul (R.R. CAT). Experts Prof. Paul, Prof. Nisha Siddiqui (DAVV), and Prof. Suresh Paswan (SGSITS) lectured on IPR, copyright, and patents. The workshop, coordinated by Dr. Sarla Chauhan, saw active participation from faculty and students of SGSITS and other colleges.



National Mathematics Day

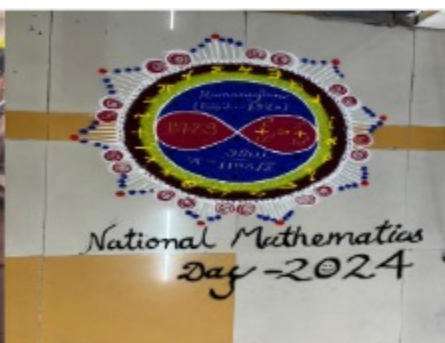
The Department of Applied Mathematics and Computational Science at SGSITS buzzed with mathematical fervor during the two-day celebration of National Mathematics Day (January 2-3, 2025). Funded by MPCST Bhopal and NCSTC, DST New Delhi, the event saw enthusiastic participation from faculty and around 80 students.



The celebration kicked off with an inaugural ceremony followed by the prestigious Best Teacher award conferred upon Dr. Ranu Sharma for her teaching excellence and research contributions. Inspiring expert lectures aimed at fostering innovative research then took center stage.

The excitement continued with engaging activities like a Mathematical Quiz Competition and a movie screening on the life of Srinivasan Ramanujan.

The **second** day witnessed vibrant Poster Presentation and Rangoli competitions, judged by Nitish Gupta, Dr. Urmila Raguwanshi, and Mr. Suresh Paswan. Winners were felicitated with prizes, and the successful event concluded with a valedictory program and a vote of thanks by Dr. Preeti Sengar. The entire celebration was skillfully coordinated by Dr. Rachna Navalakhe, leaving a lasting impression of the beauty and power of mathematics.



National Science Week



February 28, 2025 – The Department of Applied Mathematics and Computational Science at SGSITS, Indore, celebrated National Science Day 2025 with a two-day event held on 27th and 28th February, aimed at fostering scientific thinking and innovation among students.

Funded by the Madhya Pradesh Council of Science and Technology (MPCST), Bhopal, and the National Council for Science & Technology Communication (NCSTC), DST, New Delhi, the event was themed "Empowerment of Indian Youth for Global Leadership in Science and Innovation for Developed India."

The program was inaugurated by Prof. Nitesh Purohit, Director of SGSITS, who highlighted the importance of science and mathematics in shaping the nation's future. Following the inauguration, visitors, including faculty and students, explored an impressive exhibition of mathematical models created by school and college students.

Organized under the leadership of Dr. Rachna Navalakhe, Head of the Department, the celebration featured a range of activities, including quiz competitions, mathematical puzzles, fun games, and a mathematical model competition on the second day.



In the model competition, the school-level first prize was awarded to Defense Kushwaha, Tanishq Birla, and Aryan Sangla from Oxford Academy for their project on the use of mathematics in park design. At the college level, Ambika Pal, Parth Adhikari, and Lokesh Chauhan from Government Holkar Science College won first place for their innovative model titled Hydro Organic Synonyms.

Commending the efforts, Director Prof. Purohit stated, "Such events not only ignite interest in science and mathematics but also guide students toward research and innovation. It is our responsibility to inspire the next generation toward scientific thinking."

The event successfully encouraged student participation and showcased the role of mathematics in real-world applications, making it a memorable and impactful celebration of National Science Day.

AAYAAM- 2025



The Mathmagica Mathematics Club of the Department of Mathematics actively participated in AAYAAM-2025, held on 28th February and 1st March at SGSITS. The club hosted a range of Mathematical Games, including brain teasers, logic puzzles, and number challenges, encouraging analytical thinking and creative problem-solving.

Adding a fun twist, the Fun Games segment featured activities like Cup Pyramid, Coin Drop, Guess the Cold Drink, Map Mystery, Candle Game, and Memory Game. These games promoted teamwork, quick thinking, and a lively atmosphere.

Through its events, Mathmagica offered a unique blend of learning and fun, contributing to the vibrant spirit of the festival.

REPUBLIC DAY 2025

The Department of Applied Mathematics and Computational Science celebrated the 76th Republic Day on 26th January 2025 with great enthusiasm and patriotic fervor. The event was organized at the departmental premises and was attended by faculty members, staff, and students.

The celebration commenced with the hoisting of the national flag by the Head of the Department, followed by the singing of the National Anthem. A brief speech highlighting the significance of Republic Day



FACULTY ACHIEVEMENTS

The Head of the department, Dr. Rachna Navalakhe received the Prestigious **DasGupta Award** for **The Best Teacher** in the category of Associate Professor, Shri Govindram Seksaria Institute of Technology and Science, Indore. The ceremony was held on 22 December 2024,



Dr. Rachna Navalakhe, Associate Professor and Head, Department of Applied Mathematics and Computational Science at Shri Govindram Seksaria Institute of Technology and Science (SGSITS), Indore, has been awarded a research grant of **₹5,70,000** by the **Madhya Pradesh Council of Science & Technology (MPCST)**. The **two-year** project, sanctioned in 2025, aims to develop a **Fuzzy Logic-Based Medical Expert System** to **predict various health diseases** prevalent in the rural areas of Madhya Pradesh.



Dr. Purva Rajwade was awarded the Ph.D. degree by Devi Ahilya Vishwavidyalaya, Indore, on 29 October 2024 for her thesis titled **"A Mathematical Study of Nano Fuzzy Topological Spaces and their Applications."**

She completed her research under the guidance of Dr. Rachna Navalakhe (SGSITS, Indore) with Dr. Vaibhav Jain (IET, DAVV) as Co-guide.



Prasandeep Singh Muchhal has completed five NPTEL course with at least 60 % in each course and has been recognized as **"NPTEL Discipline star"** for the semester July October 2024 by the NPTEL.

He attended NPTEL star felicitation workshop for the semester July October 2024 held at IIT Kanpur on 2 March 2025.