

August, 2024

Indian Institute of Science Education and Research Kolkata (IISERK) is an Institute of National Importance established as an autonomous institute for higher education by the then Ministry of Human Resource Development (now Ministry of Education), Government of India, to promote high-quality education and research in basic sciences. It is one of the seven Indian Institutes of Science Education and Research and is one of the first IISERs to be established along with IISER Pune. In terms of research output, it is considered to be one of the leading institutes in India.



## Our Stars of the Month



Mr. Rohan Sarkar (Roll No.18RS059), a PhD scholar from the Department of Biological Sciences Working in Dr. Anindita Bhadra's Lab, had a great experience at the recently concluded European Conference on Behavioural Biology in Zurich from 16th-19th July 2024. While initially, he was selected for a poster, later, his abstract was upgraded to a talk. He was also 1 of 6 people who was awarded the prestigious ASAB Conference Attendance Grant of ₹2500.



Ms. Nidhi Kumari (Roll No.20RS002), a PhD scholar of Prof. Dr. Soumyajit Roy, Materials Science Center, from the Department of Chemical Sciences, was recently selected to give a lecture on their work on CO<sub>2</sub> Reduction at the prestigious international conference ICCC held in Colorado, USA. She was further awarded the award for best poster among 700 international participants at this conference.



Ms. Sharon Mary Jose (Roll No. 20RS044), a PhD scholar of Dr. Arnab Gupta from the Department of Biological Sciences, has been invited to present her work as a poster at the "Polarity in Tissue Biology" conference at the prestigious Howard Hughes Medical Institute (HHMI)-Janelia Research Campus in Virginia, US scheduled for September 8-11, 2024. Her travel, accommodation and all related expenses will be fully covered by the Howard Hughes Medical Institute foundation. This is a highly selective meeting and only a few students are selected to attend and present their work. Moreover, the travel and accommodation sponsorship is even more selective

Dr. Suman De Sarkar (Associate Professor, Department of Chemical Sciences) has been selected to receive the CSRI Bronze Medal for the year 2025 in recognition of his research contributions in Chemistry.



Ms. Afruja Khan (Roll No. 19RS107), a BSMS student of the Department of Biological Sciences, and a PhD scholar of Dr. Amirul Islam Mallick, has received an international travel grant from SERB- DST to present her work at the 18th Vaccine Congress to be held in 8-11th September at Lisbon, Portugal.



Ms. Padmaja J (18RS101), a PhD scholar in the Department of Earth Sciences working in Dr. Tapabrato Sarkar's lab, has received the International Travel Support grant from SERB- DST to present her work at the 4th European Mineralogical Conference to be held on 18-23 August 2024 in Dublin, Ireland.

## National Space Day

The National Space Day celebration at IISER Kolkata on August 20, 2024, featured several engaging activities aimed at promoting space science and education. The highlight of the event was a public lecture delivered by Dr. Shyama Narendranath from ISRO's U R Rao Center, where she discussed the history of Indian satellites, from Aryabhata to the latest missions like Chandrayaan-3. Her talk provided insights into key discoveries, including the mapping of the lunar surface and the detection of water on the moon, which have influenced our understanding of the solar system.

In addition, a space-themed drawing competition was organized by Ek Pehal, IISER Kolkata Outreach, and CESSI for underprivileged children from local communities such as Mohanpur and Ghoragachha. Around 80 children participated in this creative activity, expressing their visions of space exploration. The competition aimed to inspire young minds and foster community engagement. Prizes were awarded to the top participants, and all children received gifts and certificates of participation.

The event also featured a lecture for school children by Mr. Chitradeep Saha, who spoke on ISRO's history and its societal impact. This was followed by a rocket demonstration led by Prof. Rajesh K. Nayak, where students learned about rocket design by constructing paper planes.

The celebration concluded with certificates and gifts for participating students, further inspiring curiosity about space exploration. The event was a great success, fostering interest in space science among both students and the local community.





## Vigyan Pratibha Local Teachers' Training Workshop at IISER Kolkata: Empowering Teachers' to Foster Scientific Temperament in Students.

A five-day Teachers' Training Workshop was organized by IISER Kolkata under the Vigyan Pratibha (VP) Project from 26th to 30th August 2024. 46 Teachers from KV, JNV, AECS and WB Govt. School participated in this workshop. The workshop aimed to enhance Science and Mathematics education and promote critical thinking. Faculty members of IISER Kolkata, assisted by several student volunteers, led interactive sessions, focusing on innovative teaching methods with hands-on experiments and demonstrations, emphasizing Pedagogical Content Knowledge and best practices in Science and Mathematics education. The participation by the teachers was highly enthusiastic, and several of them have already conducted some of the modules of the VP project in their schools.



## Anti-Ragging Awareness at IISER Kolkata

To foster a safe and respectful environment for all students, IISER Kolkata observed Anti-Ragging Week from 12th to 18th August 2024. As part of the initiative, the institute formed an Institute-Level Anti-Ragging Committee and an Anti-Ragging Squad to conduct late-night vigilance and ensure a ragging-free campus.

Awareness campaigns were carried out both on campus and digitally, through posters, banners, and online platforms. A series of workshops and seminars were organized, focusing on the legal consequences of ragging and the mechanisms for reporting such incidents. Additionally, a dedicated online portal and an email ID were created to facilitate easy reporting of ragging cases.

To further strengthen these efforts, surveillance and monitoring were heightened in common areas, hostels, and other sensitive locations across the campus. The initiative underscored IISER Kolkata's commitment to promoting a harassment-free and inclusive academic environment



[Lecture on INSA Programs] Dr. Brajesh Pandey (Executive Director, INSA), Date: Friday, Aug 02, 2024.

[Bibha Chowdhuri Memorial Lecture] Prof. Vandana Nanal (TIFR Mumbai) -- Is neutrino its own antiparticle? Date: Wednesday, Aug 07, 2024.

[DCS Visitor Seminar] Prof. Swapan Chakrabarti (Calcutta University, Date: Wednesday, Aug 07, 2024.

[CCES Seminar] Dr. Abhijit Ghosh (Associate Professor of Geophysics, Department of Earth and Planetary Sciences, University of California, Riverside), Date: Wednesday, Aug 07, 2024.

[DCS Visitor Seminar] Dr. Somnath Mondal (Pennsylvania State University, USA) -- "Probing the functional dynamics of protein-nucleic acid interactions for potential applications in chemical biology", Date: Wednesday, Aug 07, 2024.

["Three Secrets of Success"] Dr. Tanusree Chakraborty (IIT Delhi) -- "Three Secrets of Success in today's world of Research", Date: Wednesday, Aug 07, 2024.

[CESSI Seminar] Sayantani Bera (University of the Balearic Islands, Palma, Spain) -- Probing cosmic expansion with gravitational wave-large scale structure correlations, Date: Thursday, Aug 08, 2024.

[Institute Colloquium] Prof. Bharat Ratra (Kansas State University) -- The Accelerating Expanding Universe: Dark Matter, Dark Energy, and Einstein's Cosmological Constant, Date: Monday, Aug 12, 2024.

[Special Lecture] Prof Dr. J.V. Dixit (B.J. Government Medical College, Pune, Maharastra) -- World free of obesity and diabetes, Date: Monday, Aug 12, 2024.

[Special Lecture] Dr. Akhilesh Jha (Ministry of Rural Development and Panchayati Raj) -- Understanding India's Freedom Struggle through Gramophone recordings, Date: Saturday, Aug 17, 2024.

[DES Seminar] Dr. Anirban Chatterjee (Presidency University) -- The Lost River of the Harappans, Date: Wednesday, Aug 21, 2024.

[Inaugural C. R. Rao Memorial Lecture] Prof. Probal Chaudhuri (Indian Statistical Institute), Date: Wednesday, Aug 21, 2024.

[DES Seminar] Srijita Ray (DES Alumuni) (Australian National University) -- The solubility of monazite in carbonate melts at upper mantle and crustal conditions, Date: Wednesday, Aug 21, 2024.

[DCS Visitor Seminar] Dr. Pradeep R. Varadwaj (Nagoya University) -- Design and Discovery of Promoter-Driven Transition Metal Catalysts for Ammonia Synthesis: A Density Functional Theory Perspective, Date: Thursday, Aug 22, 2024.

[DBS Seminar] Prof. Ravi Mahalingam (Professor, Department of Neurology, University of Colorado School of Medicine, USA) -- Varicella zoster virus is a risk factor for Alzheimer's disease, Date: Friday, Aug 23, 2024.

[DPS Seminar] Dr. Subhaditya Bhattacharya (IIT Guwahati) -- Aspects of multiparticle dark matter, Date: Wednesday, Aug 28, 2024.

[DMS seminar] Arnab Char (Indian Statistical Institute, Chennai) -- Coloring of a self complementary class of graphs and a near optimal colorable class of graphs. Date: Wednesday, Aug 28, 2024.