

July 2024

IISER KOLKATA

MONTHLY NEWSLETTER



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.



Institute Open Day

IISER Kolkata celebrated the Institute Foundation Day (11 July) as IISER Kolkata Open Day. On this day school and college students from the nearby areas of the Institute were invited for a visit and interaction with the researchers and scientists of the Institute. All departments of the Institute showcased their major ongoing research through various displays and models. Popular talks by the faculty members of each department were also organized. The day had a footfall of approximately 800 students from 30 schools and colleges. The Executive Director of AIIMS Kalyani Dr. Ramji Singh was the chief guest for the day.



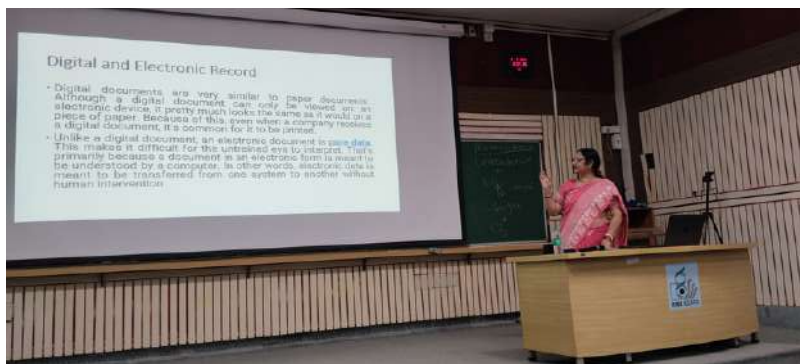
Visit of school students from Manipur

IISER Kolkata partnered with Assam Rifles and hosted a group of 25 students and Teachers from Bal Vidya Mandir Imphal, Manipur for an educational tour from 30th June -7th July, 2024. The group of 20 Students was selected from all 16 districts of Manipur and was accompanied by their principal, teachers, Assam Rifles personnel and a career counsellor under the mentorship of Dr. Siddharth Raina, Assistant Commandant, Assam Rifles. As an outreach initiative, IISER Kolkata provided accommodation and arranged for their educational activities so that their innate potential could be tapped to the fullest. Such a visit to one of the premier institutions of the country, like IISER Kolkata, would not only inspire the students from strife-torn areas to build a scientific career but also send a very good message to society as a whole for striving towards peace and harmony.

AICTE-JK Internship program

Twelve students from Jammu and Kashmir visited IISER Kolkata under AICTE-JK Internship program from 24 June to 25 July 2024. The students as per the agreement with AICTE were provided free accommodation and food and a stipend of Rs. 10,000 per student for their one month stay. The students carried out their one month internship under various faculty members of IISER Kolkata.





Commemoration of the enforcement of three New Criminal Laws

IISER Kolkata, to commemorate the enforcement of three new criminal laws (Bharatiya Nyaya Sanhita, Bharatiya Nagarik Suraksha Sanhita, and Bharatiya Sakshya Adhiniya) had invited three faculty members, Prof. Kavita Singh, Dr. Faisal Fasih, and Dr. Sarfaraz Ahmed Khan from West Bengal National University of Juridical Sciences on 2nd July 2024 to deliver the lectures on these three laws. In addition to these lectures, Dr. Kripabandhu Ghosh of IISER Kolkata delivered a lecture on “Artificial Intelligence and the Legal Domain: A Partnership to Treasure,” and Dr. Pinaki Ghosh from the West Bengal National University of Juridical Sciences delivered a lecture on the “Intellectual Property Rights (IPR)” on 1st July 2024.



Nano Jatha event

The Department of Information Technology, Biotechnology and Science & Technology, Govt. of Karnataka has been organizing since 2007 an annual international nano event, well known as Bengaluru India Nano, under the guidance of Vision Group on Nanotechnology headed by Prof. C N R Rao, FRS, Linus Pauling Research Professor and Honorary President, JNCASR. As a curtain raiser towards the main event “The 13th Edition of the Bengaluru India Nano” scheduled during 1-3 August 2024 in Bengaluru” our esteemed organization was identified as one of the host institutes to organize the Nano Jathas. The Institute organized the Nano Jatha event under the guidance of Prof. Sayam Sengupta of the Department of Chemical Sciences. Approximately 200 students from various colleges participated in the event. The technical program of the Nano Jatha started with a video show highlighting nanoscience and technology, followed by two technical talks of ~45 min each, quiz and demonstration of the nanoscience related experiments.

IISER Kolkata has won the 1st prize for the “Excellence in providing Scientific Education

IISER Kolkata has recently participated in 10th 'Government Achievements & Schemes Expo-2024', one of the 'Biggest Shows on Govt. Achievements organized by NNS Media group in Pragati Maidan, New Delhi, from 20-22 July 2024.

Several central universities, IITs, IIMs, NITs and CSIR institutes attended this event. A team of researchers and staff from IISER Kolkata has showcased different aspects of IISER Kolkata's initiatives to promote higher education and shared its achievements in the current science. This event was especially focused on recent achievements in different government sectors, particularly Environment and Energy, the Indian dairy industry, Agriculture and Horticulture, Food Technology and Animal husbandry across the country. Researchers from the Dept. Biological Sciences, IISER K highlighted their ongoing research on “Animal health and food safety” as a part of the UN's “One Health” mission. Several experts, Govt officials, and Lawmakers visited our stall and appreciated the progress, achievement and contribution toward societal development made by IISER Kolkata. We are glad to share that IISER Kolkata has won the 1st prize for the “Excellence in providing Scientific Education.”



Faculty and Students Achievements

- Ms. Gunjan Agrawal, (Roll No. 20RS074) who is carrying out PhD in Prof. Prasanta Sanyal's Lab, from the Department of Earth Sciences has been selected to participate in two significant short courses, namely, (a) IsoCamp, hosted by the University of New Mexico, Albuquerque, NM from 24 June to 5 July 2024, and (b) SPATIAL, hosted by the University of Utah, Salt Lake City, Utah from 7 to 19 July 2024. She has been awarded scholarships of \$2100 for IsoCamp and \$2500 for SPATIAL by the respective organizers. These courses follow a lecture and lab module format, covering topics from isotope fundamentals and laboratory procedures to data analysis and isotopes modelling via AI/ML. Approximately 40 students are selected each year for each program globally.
- Ms. Saindhabi Ghosh, (Roll No. 20MS083) a BSMS student of the Department of Biological Sciences, got the 2nd position in the poster presentation for the 31st Foundation Day National Symposium entitled "Cancer: Biology and Management" on July 23rd, 2024, at Sister Nivedita University, NewTown, Kolkata, organized by 'Central University for Advancement of Human Development and Research' in collaboration with 'National Academy of Sciences of India'. She presented her internship project this summer, which she performed under the supervision

of Dr. Ranjana Pal, Presidency University, Kolkata.

- Prof. Punyasloke Bhadury has been invited by the Division for Ocean Affairs and Law of the Sea to lead a chapter on Mangroves for the Third World Ocean Assessment of the United Nations.
- The proposal of Dr. Anindita Bhadra to the Association for the Study of Animal Behaviour, Europe, has been selected for funding.
- The application of Dr. Amirul Islam Mallick for the Scientific High Level Visiting Fellowship Programme to French University has been accepted.
- Prof. Priyadarsi De has been elected as a Fellow of the West Bengal Academy of Science and Technology (WAST).
- The paper (Nature Synthesis 2024, doi: 10.1038/s44160-024-00590-w) from the group of Prof. Rahul Banerjee and his student has been published in Nature Synthesis.
- Prof. Alakesh Bisai has been elected as the Vice President of the Chirantan Rasayan Society for the year 2024-2025.

- Dr. Suman De Sarkar has been invited to join the Editorial Board of Tetrahedron and Tetrahedron Letters and Early Career Advisory Board of Asian Journal of Organic Chemistry.
- Dr. Biplab Maji has been invited to join the Editorial Board of Tetrahedron and Tetrahedron Letters and Early Career Advisory Board of Asian Journal of Organic Chemistry.
- Dr. Dibyendu Das has been elected to chair for the Gordon Research Conference on Systems Chemistry in the USA in 2028. He will also be the vice chair for the same conference in 2026, alongside Prof. Elsie Franco from UCLA.
- Prof. Prasanta Sanyal has been invited to be an Associate Editor for Organic Geochemistry, The official Journal of the European Association of Organic Geochemists.

Institute Colloquia and Seminars:

- Lectures on Indian Patent Laws, Date: Monday, Jul 01, 2024, Prof. Pinaki Ghosh, WBNUJS.
- Lectures on three new Criminal Laws, Date: Jul 02, 2024, Prof. Kavita Singh - Bharatiya Nyaya Sanhita (IPC), Dr. Faisal Fashi - Bharatiya Shakshiya Adhiniyam (Evidence), Dr. Sarfaraz Ahmed Khan - Bharatiya Nagarik Suraksha Sanhita (CrPC).
- [DPS Seminar] Dr. Gaurav Goswami (Ahmedabad University) -- Self-interactions of ultralight spinless dark matter to the rescue? Date: Wednesday, Jul 03, 2024.
- [DBS Seminar] Prof Sudin Bhattacharya (University of Michigan) -- Single-cell analysis reveals chemically-induced perturbation of spatiotemporal gene expression in the mammalian liver, Date: Tuesday, Jul 09, 2024.
- [DPS Seminar] Dr. Madhurima Choudhury (Brown University, Providence, Rhode Island, USA) -- Deciphering the Epoch of Reionization with the HI 21-cm Signal and Neural Networks, Date: Wednesday, Jul 10, 2024.
- [DBS Seminar] Prof. Jayanta Chatterjee (Professor, Molecular Biophysics Unit, IISc Bangalore) -- From supersecondary structures to antibody engineering: Our journey with reverse turns, Date: Wednesday, Jul 10, 2024.
- [IISER Kolkata Open Day] Prof. Ramji Singh (Executive Director, AIIMS Kalyani), Date: Thursday, Jul 11, 2024, Power of Education.
- [Institute Colloquium] Prof. David Milstein (Weizmann Institute of Science) -- Development of Catalytic Reactions for Green Synthesis and Energy, Date: Thursday, Jul 11, 2024.
- [DBS Seminar] Dr. Srinu Subramaniam (The Scripps Research Institute, Florida, USA) -- Mechanisms of cell-to-cell protein transmission in the brain: Implications for Huntington disease spread, Date: Monday, Jul 15, 2024.
- [DPS Seminar] Dr. Arunima Banerjee (IISER Tirupati) - - How does a low surface brightness galaxy form spiral arms? Date: Tuesday, Jul 16, 2024.
- [DPS Seminar] Prof. Bivas Saha (Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore) -- Magnetic Stress-driven Metal-Insulator Transition in Strongly Correlated Quantum Materials, Date: Wednesday, Jul 24, 2024.
- [DPS Seminar] Dr. Souvik Ghosh (University of Colorado at Boulder, USA) -- Assembly and manipulation of colloids for smart optical devices and optofluidic applications, Date: Thursday, Jul 25, 2024.
- [Institute Colloquium] 'Padma Shri' Prof. G. D. Yadav (ICT Mumbai) -- Institute Colloquium by 'Padma Shri' Prof. G. D. Yadav, Date: Monday, Jul 29, 2024, Citius, Altius, Fortius: Achieving Excellence in Higher Education, Research & Innovation for Vikasit Bharat @2047.
- [Institute Colloquium] 'Padma Shri' Prof. J. P. Mittal (BARC Mumbai) -- Institute Colloquium by 'Padma Shri' Prof. J. P. Mittal, Date: Monday, Jul 29, 2024, Breaking Bonds to Order: A Dream Still Alive?
- [DPS Seminar] Prof. Bijoy Krishna Das (IIT Madras) -- Silicon Photonics Enabled Quantum Circuits and Systems, Date: Tuesday, Jul 30, 2024.
- [DPS Seminar] Dr. Rhitaja Sengupta (Universität Bonn) -- Exploring the Lifetime Frontier of physics beyond the Standard Model, Date: Wednesday, Jul 31, 2024.