

IISER KOLKATA

Newsletter



January, 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.

- Dr. Neelanjana Sengupta, Department of Biological Sciences (DBS): Dr. Sengupta has been invited to join the Editorial Advisory Board of the Biophysical Chemistry, an Elsevier Journal.
- Prof. Priyadarsi De, Department of Chemical Sciences (DCS): Prof. De has been elected as a Fellow of Indian National Academy of Sciences.
- Prof. Sayan Bhattacharyya, Department of Chemical Sciences (DCS): Prof. Bhattacharyya has been invited in the Editorial Advisory Board of Journal of Materials Chemistry-A, a prominent peer-reviewed journal published by RSC.
- Dr. Biplab Maji, Department of Chemical Sciences (DCS): Dr. Maji has been elected as an Associate of the West Bengal Academy of Science and Technology (WAST) for five years.
- Dr. Dibyendu Das, Department of Chemical Sciences (DCS): Dr. Das has been invited to join the Advisory Board of RSC Organic Chemistry Frontiers.
- Dr. Tarun Kumar Dalai, Department of Earth Sciences (DES): Dr. Dalai has been selected by INSA to serve as a member of the National Committee for Scientific Committee on Oceanic Research (SCOR) for the period from 04.01.24-31.12.26.
- Dr. Tapabrato Sarkar, Department of Earth Sciences (DES): Dr. Sarkar has been elected as an Associate of the West Bengal Academy of Science and Technology (WAST) for five years.
- Mr. Bidhan Chandra Malakar, a Senior Research Fellow (SRF) from Dr. Sreeramaiah Gangappa's lab, got the best poster award at the prestigious EMBO-International Symposium on Plant Photobiology (EMBO-ISPP) held at NISER Bhubaneswar (from 8th to 13th January 2024), Orissa.



Dr. Rituparna Sinha Roy, with Dr. Dharmendra Pradhan, Minister of Education .



Dharmendra Pradhan ✓
@dpradhanbjp

Dr. Rituparna Sinha Roy, an associate professor at IISER Kolkata and her team have designed clinically-safe sealant to treat bleeding disorder and facilitate better wound care.

Her innovation has a broad spectrum of use-cases, including life-saving care for injured soldiers, wound care for accident victims and skin grafts. Glad to know more about her innovative streak at @iinventivIT.

- Mr. Debajyoti Guha, a PhD student working under supervision of Prof. Soumitro Banerjee, has received the Best Poster award titled "Spectral Signatures of Bifurcations" at the 7th International Conference on Complex Dynamical Systems and Applications (CDSA 2024). Furthermore, the conference partner journal "JPhys Complexity" has promised a complete publication fee waiver for publication within this year.
- Ms. Annayasa Modak (19RS082) working under supervision of Dr. Sreeramaiah Gangappa got the best poster award at the recent EMBO-International Symposium on Plant Photobiology (EMBO-ISPP) Satellite meeting held at IISER Bhopal, Madhya Pradesh, India.



IISER KOLKATA was represented by Swarnendu Saha, Arindam Kumar Pal, Sayan Saha and Subrata Das in the 25th Acharya Satyendra Nath Bose Bijnan o Projukti Mela Hedua 2024 at Hedua Park, organised by Paschimbanga Bijnan Mancha under the chairmanship of Dr. Debiprasad Duari from the 19th to 25th January, 2024.



The M. Sc. 3rd Semester students of the Dept. of Biotechnology, St. Anthony's College Shillong had an Institutional tour on 18th of January 2024. These students visited the laboratories and instrumental facilities of the Dept. of Biological & Chemical Sciences of IISER Kolkata.



IISER Kolkata celebrated the 75th Republic Day on January 26, 2024.



Prof. Samir Kumar Brahmachari, Former DG-CSIR, Former IGIB Director delivered the Institute Colloquium on 12th January, 2024 and interacted with the Faculty and students of IISER Kolkata.



Talk on Millets

With the aim to create awareness and increase the production & and consumption of millets, the United Nations, at the behest of the Government of India, declared 2023 the International Year Millets. To commemorate this, Dr. Sibaji Banerjee, from the BCKV delivered a talk on 16th January 2024, from 03:00 - 04:00 PM at the Meghnad Saha LHT (Ground Floor of TRC).

Seminar's and Colloquia

[Industry-Academia Interaction] Dr. Shubham Sharma (Pfizer (USA)) -
- Unraveling Polymorphism – Computational Strategies in
Pharmaceutical Research, Date: Tuesday, Jan 02, 2024.

[Institute Colloquium] Dr. Sharani Roy (University of Tennessee,
Knoxville) -- Bridging the pressure gap in theoretical models of gas-
solid adsorption, Date: Wednesday, Jan 03, 2024.

[DMS seminar] Priyam Das (Virginia Commonwealth University) --
Clustering Sequence Data with Mixture Markov Chains with Covariates
Using Multiple Simplex Constrained Optimization Routine (MSiCOR),
Date: Wednesday, Jan 03, 2024.

[DPS Colloquium] Professor Subir Sarkar (University of Oxford, UK) --
A Challenge to the Standard Cosmological Model, Date: Wednesday,
Jan 03, 2024.

[DMS Seminar] Subhajit Ghosh (Department of Mathematics, Bar-Ilan
University, Israel) -- An extension of the Captuo-Liggett-Richthammer
theorem to the complete monomial group, Date: Wednesday, Jan 03,
2024.

[DBS Seminar] Dr. Anuradha Bhat (Associate Professor, DBS, IISER
Kolkata) -- Surviving in challenging surroundings: studies on the
individual, population and community level interactions in a group
living fish species, Date: Wednesday, Jan 03, 2024.

[DES and NCHPS Seminar] Dr. Pinku Saha (ETH Zurich) -- Lower
mantle mineralogy through high-pressure spectroscopic technique,
Date: Thursday, Jan 04, 2024.

[DPS Seminar] Prof. Samir Mandal (Indian Institute of Space Science
and Technology (IIST), Trivandrum) -- Spectral, Timing and
Polarization properties of black hole X-ray binaries, Date: Thursday, Jan
04, 2024.

[DBS Seminar] Ms. Samarpita Sen (Gurdon Institute, University of
Cambridge) -- Seeing is not "always" believing: Exploring epithelial cell
polarity through proximity labelling, Date: Thursday, Jan 04, 2024.

[Institute Colloquium] Prof. Biman Bagchi (IISc Bangalore), Date:
Thursday, Jan 04, 2024.

Invited Talk by Dr. A K Bukhsh, Date: Tuesday, Jan 09, 2024.

[DCS Visitor Seminar] Dr. Avijit Shee (Department of Chemistry,
University of California, Berkeley) -- Time-dependent Adaptive
Sampling Configuration Interaction, Date: Tuesday, Jan 09, 2024.

[DPS Seminar] Dr. Manaswita Kar (Sorbonne Université, Paris, France)
-- High-throughput computational screening of hybrid halide based
perovskites towards tuning energy band gaps from first principles,
Date: Wednesday, Jan 10, 2024.

[Seminar and interaction session] Dr. Pratap Reddy (Mac Leods
Pharma), Date: Wednesday, Jan 10, 2024.

[DMS Seminar] Satwata Hans (Penn State University) -- A Modern
Look into Pseudodifferential Calculus, Date: Wednesday, Jan 10, 2024.

[Institute Colloquium] Prof. Samir Kumar Brahmachari (Former DG
CSIR) -- Will be announced soon. Date: Friday, Jan 12, 2024.

DBS Seminar] Dr. Swarnendu Banerjee (Postdoctoral Fellow,
University of Amsterdam, Netherlands) -- Rethinking tipping points in
spatial ecosystems, Date: Friday, Jan 12, 2024.

[DPS Seminar] Dr. Pranay Mandal (Max Planck Institute of Molecular
Cell Biology and Genetics, Dresden, Germany) -- Dynamics of Helix at
Nanoscale: From Active Matter to DNA Protection, Date: Tuesday, Jan
16, 2024.

[Talk on Millet based Production] Dr. Sibaji Banerjee (B.C.K.V.V) --
Talk on Millet based Production Systems, Date: Tuesday, Jan 16, 2024.

[DCS Visitor Seminar] Dr. Bijit Mukherjee (Durham University) --
Shielding collisions of ultracold polar molecules with static electric
fields, Date: Wednesday, Jan 17, 2024.

[DPS Seminar] Dr. Mrinal Sarkar (University of Heidelberg, Germany) -
- Emergent phenomena in dynamics on graphs: From transport to
synchronization, Date: Wednesday, Jan 17, 2024.

[DCS Seminar] Prof Pradyut Ghosh (IACS Kolkata) -- Supramolecular
Chemistry of Selective Anion Extraction, Date: Thursday, Jan 18, 2024.

[DPS Seminar] Dr. Soureek Mitra (Karlsruhe University) -- Single ready
to mingle - Adventures of a solo top quark at LHC, Date: Tuesday, Jan
23, 2024.

[Learning Seminar on Modular Forms] Dr. Soumya Bhattacharya
(IISER Kolkata), Date: Tuesday, Jan 23, 2024.

[Institute Colloquium] Prof. Pratyush Tiwary (University of Maryland) -
- Artificial Chemical Intelligence: AI for Chemistry and Chemistry for
AI, Date: Tuesday, Jan 23, 2024.

[DMS seminar] Vaibhav Kumar Jena (TIFR, CAM) -- Control of wave
equations via Carleman estimates, Date: Wednesday, Jan 24, 2024.

[DPS Seminar] Dr. Anirban Basak (Dept of Electrical Engineering, IIT
Bombay) -- Buckled 2D hexagonal Xenes, Topological Insulator
Transistors and their performance under Momentum Relaxation
Dephasing, Date: Wednesday, Jan 24, 2024.

[DMS seminar] Biltu Dan (Indian Institute of Science) -- Scaling limit
and maximum of the membrane model, Date: Wednesday, Jan 24, 2024.

[DBS Seminar] Dr. Srijit Das (Assistant Research Scientist, University
of Iowa, USA) -- Linking stress-induced neuromodulation to
organismal physiology: what can we learn from worms? Date:
Wednesday, Jan 24, 2024.

[DPS Seminar] Dr. Jayita Lahiri (DESY, Germany) -- Optimal
Observable Technique in New Physics Estimation
Date: Thursday, Jan 25, 2024.

[A talk on Career Choices] Dr. Aditya Parekh (former Associate Director
of IndiaBioscience and Co-Founder of FaFaFo company) -- Looking
Beyond the Conventional: Merging Passion and Profession, Date:
Thursday, Jan 25, 2024.

[General talk - touching upon history] Prof. L S SHASHIDHARA --
"Science of Life to Science for Life" Date: Tuesday, Jan 30, 2024.

[DPS Seminar] Dr. Tamal Basak (Indian Center for Space Physics,
Kolkata) -- Manifold aspects of D-region modelling during solar flares
with emphasizing sub-ionospheric VLF propagation science
Date: Wednesday, Jan 31, 2024.

[DBS Seminar] Mr. Paresh Rana (IISER-K Alumni) (PhD student,
Allshire Lab, Institute of Cell Biology, University of Edinburgh
Edinburgh, UK) -- Uncovering the mechanisms of epimutation stability
in *Schizosaccharomyces pombe* Date: Wednesday, Jan 31, 2024