

# IISER KOLKATA

# Newsletter



December, 2023

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.

## Institute Outreach



Participation of IISER Kolkata at the 27th Sundarban Krishti Mela o Loksanskriti Utsav

IISER Kolkata participated in the 27th Sundarban Krishti Mela o Loksanskriti Utsav, a 10 day long socio-cultural fest held at Kultali, Basanti, South Pargana from 20-29 December, 2023. The event was a great success in disseminating the wonders of science education and research to a diverse audience group in a playful manner. Volunteers from various departments of the Institute participated in this science exhibition. The Institute has won the first prize among various other central government organizations who participated in this Utsav.



A team of 31 students accompanied by 2 Faculty Members from the North Bengal University Zoology Department visited IISER Kolkata on 6th December, 2023 as part of their course curriculum in Zoology Department, where the students have to undertake Institutional/Field training.



Approximately 200 students from the B.D.M. International School, Senior Secondary Science Stream students visited the IISER campus on 22.12.2023 for an educational tour





A meeting on the Implementation of the Academic Bank of Credits was held on 6th December 2023 with the former Director, IISER Kolkata, and officials from Digital India Corporation (DIC) Ministry of Electronics and Information Technology (MeitY), Government of India.

IISER Kolkata hosted the meeting /interactions with the Academia/Research institutions working in the areas of Quantum Technology from December 4-5, 2023 at IISER Kolkata Salt Lake Guest House. This meeting was attended by Dr. Venkata Rama Raju Chelle, Director (Quantum Technology) and the representatives from IISER Kolkata, University of Calcutta, Central University Hyderabad, ISI Kolkata, CDAC Kolkata, Guwahati University, SNBNCBS, Bose Institute, University of Petroleum and Energy Studies, Dehradun, IIT Patna and Batoi.



Course Coordinator Prof. Prasanta K. Panigrahi conducted the Global Initiative of Academic Network (GIAN) course on "Quantum Measurement Theory and the Uncertainty Principle" from 11-15 December, 2023 with Prof. Masanao Ozawa from Chubu University, Japan as the foreign expert for the course.



A Language Festival in the name of 'Bharatiya Bhasha Utsav' was celebrated in IISER Kolkata on 11 December 2023. A panel discussion was organized on that day with three external delegates, followed by voluntary recitation of poems by the IISER Kolkata fraternity in their mother tongue.

IISER Kolkata is involved in a new project sanctioned by the National Remote Sensing Centre, Hyderabad, on "Study of Coastal Carbon Dynamics of Sundarbans Estuary" from Nov 2023. The investigators are Dr. Gopala K. Darbha (IISERK) and Dr. P.V. Nagamani & Mr. Abhinav G. (NRSC).



# INTER-IISER CULTURAL MEET (IICM) & INTER-IISER SPORTS MEET (IISM)



CONGRATULATIONS TO THE IISM CHAMPIONS!

IISER KOLKATA BAGGED 4TH POSITION. 🏆



1	2	3
MARCH PAST	KABADDI	MENS BADMINTON
MENS TRIPLE JUMP	MENS LAWN TENNIS	BADMINTON (MIXED DOUBLES)
CHESS	WOMEN LAWN TENNIS (MIXED DOUBLES)	WOMEN TABLE TENNIS (DOUBLES)
CRICKET		TABLE TENNIS (MIXED DOUBLES)
WOMEN LAWN TENNIS		
WOMEN TABLE TENNIS		

The Inter IISER Cultural Meet 2023, held at IISER Mohali, was a lively convergence of talent, culture, and camaraderie, fostering an electric atmosphere among the participating IISERs, NISER, CEBS and IISc. This event served as a platform for the diverse student bodies to showcase their unique cultural facets through music, dance, theater, and various competitions, creating an enthralling spectacle of creativity and unity. Amidst this vibrant tapestry, the victory of IISER Kolkata stood as a testament not only to their exceptional talent but also to the spirit of collaboration and appreciation that permeated the event. Our relentless efforts and unwavering commitment to excellence not only embodied the spirit of the event but also epitomized the true essence of cultural representation. The college beams with pride at IISER Kolkata's triumph and eagerly anticipates further such remarkable achievements, fostering a culture of excellence and celebration of diverse talents within the IISER community.



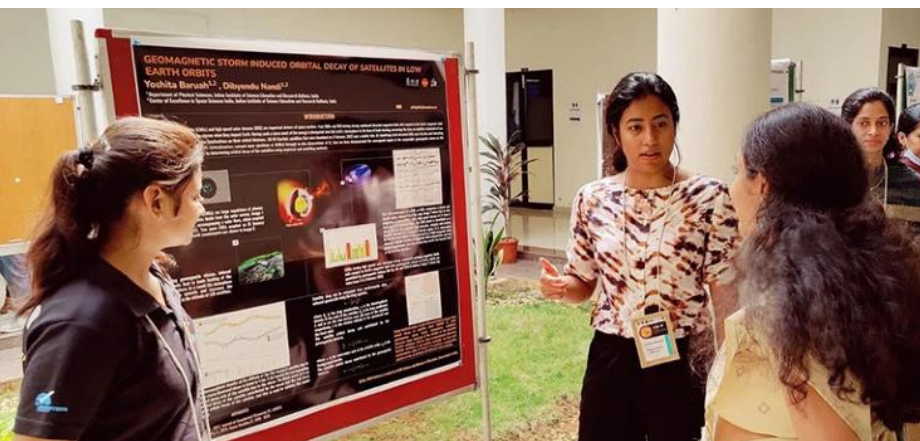
The Photography Club of IISER Kolkata won the "Stories in Clicks" event at IICM 2023. For the event, they explored the city of Chandigarh and created a photostory with 6 photos. The theme of their story was to depict the perspective of a person climbing the corporate ladder.

The team consisted of:

- Tejendra Singh (21MS108)
- Abir Mondal (20MS044)
- Tijare Mandar Rajesh (21MS016)



# ACHIEVEMENTS



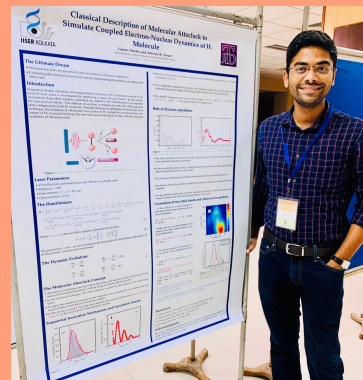
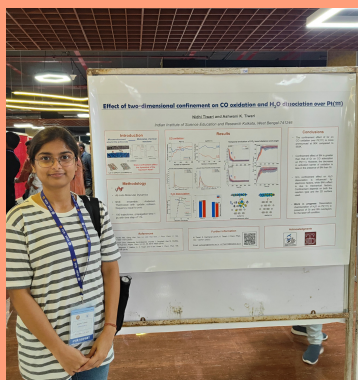
IISER Kolkata Integrated PhD student Yoshita Baruah of Physics and CESSI Space Weather activities are spotlighted in [@Nature](#).

Yoshita Baruah was awarded a SCOSTEP Visiting Scholarship at NASA Goddard Space Flight Center and has completed her 3 month research visit (August-October 2023). She was also selected for the NASA Heliophysics Summer School at Boulder USA.



**Souvik Roy**

CESSI PhD student Souvik Roy was selected for the NASA Eddy Cross Disciplinary Symposium in Colorado, USA, which he attended in November, 2023.



Students from IISER Kolkata, namely Nidhi Tiwari (17IP015), Yenugu Nikhil (21RS078), and Gaurav Pandey (alumni 17RS036), have been among the best poster award winners at Theoretical Chemistry Symposium 2023 organized by the Department of Chemistry, IIT Madras.



**Sakshi Gupta**

DPS PhD student Sakshi Gupta was offered a Scientist position at the Defence Research and Development Organization, Ministry of Defense. She joined in November 2023.

- Prof. Swadhin Kumar Mandal has been offered a Visiting Faculty position in the Department of Chemistry and Chemical Biology at Rutgers University, New Brunswick, USA for one year starting from March 2024.
- Dr. Radhika Venkatesan has been nominated to be featured in the "She is- 75 Women in Chemistry" Project that will highlight the contribution of 75 Women in the field of Chemistry. This book project is in collaboration with the Royal Society of Chemistry and The office of the Principal Scientific Adviser to the Government of India.
- Prof. Ashwani Kumar Tiwari, Dean of International Relations & Outreach inaugurated the Science Festival of Satish Chandra Memorial School, Chakdah. He was very happy to see the scientific models of the social relevance presented by these school students.



**Aparna Varma**

Ms. Aparna Varma, Research Scholar from DBS, has received the "Best Oral presentation Award-VIROCON 2023" for her work titled "Neutralisation of SARS-CoV-2 Spike-pseudotyped lentivirus by polyclonal antibody raised against RBD variants" in VIROCON-2023 held during 1-3 Dec 2023.





## Seminar's and Colloquia

[DCS Seminar] Rahul Dev Mukhopadhyay (Ramananda College, Bankura University) -- Audible Sonochemistry with Supramolecular Systems, Date: Wednesday, Dec 06, 2023.

[DBS Seminar] Dr. Jayajit Das (Associate Professor, Institute for Genomics Medicine, The Ohio State University, USA) -- Developing Predictive Models for Immune Responses Against Infections and Tumors, Date: Wednesday, Dec 06, 2023.

[DPS Seminar] Dr. Bipul Biswas (UMass Amherst) -- Physics of semiflexible colloidal filaments, Date: Thursday, Dec 07, 2023.

[DES open seminar] Gopala Krishna Darbha, Date: Friday, Dec 08, 2023.

[Seminar] Dr. Vivek Vyas (IIIT Vadodara) -- Is geometric phase unique ?, Date: Saturday, Dec 09, 2023.

[CESSI Seminar] Biswajit Banerjee (Gran Sasso Science Institute, Italy) -- Detecting electromagnetic counterparts of GW events- the importance of pre-merger alerts, Date: Tuesday, Dec 12, 2023.

[CAFM Seminar] Pravas Deria Date: Tuesday, Dec 12, 2023.

[DPS Seminar] Dr. Susmita Roy (Max-Planck Institute for the Structure and Dynamics of matter Hamburg, Germany) -- Conventional and Time-resolved Raman scattering of strongly correlated materials, Date: Wednesday, Dec 13, 2023,

[DBS Seminar] Prof. Ratna Ray (Professor, Department of Pathology, Saint Louis University, USA) -- Long non-coding RNA FIRRE fires up the hepatocyte growth, Date: Wednesday, Dec 13, 2023.

[DPS Seminar] Dr. Himadri Chakraborti (CEA Saclay, France) -- Electron quantum optics in graphene, Date: Thursday, Dec 14, 2023.

[DCS Visitor Seminar] Dr. Sajal K. Giri (Northwestern University Evanston, Illinois 60208, USA) -- From Plasmon to Entanglement Enhanced Light-Matter Interactions, Date: Friday, Dec 15, 2023.

[DPS Seminar] Dr. Ram Krishna Sharma (IHEP Beijing) -- Understanding the Universe: Insights from CERN's Physics Analysis  
Date: Monday, Dec 18, 2023.

[DCS Visitor Seminar] Dr. Partha Pratim Roy (UC Berkeley) -- Ultrafast Energy and Electron Transfer in Natural and Synthetic Light Harvesting Investigated by Coherent Multidimensional Spectroscopy, Date: Tuesday, Dec 19, 2023.

[DPS Seminar] Dr. Suddhasattwa Brahma (University of Edinburgh) -- Quantum origins of the universe: Emergent Spacetime & Cosmic Entanglement, Date: Wednesday, Dec 20, 2023.

[DMS seminar] Mainak Mandal (Institute for Scientific Computing Technical University of Dresden) -- Structure preserving finite volume schemes for aggregation-diffusion equations.  
Date: Wednesday, Dec 20, 2023.

[Inst Colloquium] Prof. Maksym Kovalenko (ETH, Zurich, Switzerland) -- Engineering Single-Particle and Collective Light Emission from Lead Halide Perovskite Nanocrystals, Date: Thursday, Dec 21, 2023.