

June 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.



The 11th Convocation 2024 of IISER Kolkata was held on 20 June 2024. Padma Shri Prof. Rohini Godbole from Centre for High Energy Physics, Indian Institute of Science, Bengaluru graced the occasion as the Chief Guest. The Chairman of Board of Governors Dr. Arvind Kumar Natsu and distinguished guests were present for this memorable occasion. The day marked a great milestone for the graduating students and 165 BS-MS, 8 BS, 14 Master of Science, 6 IPhD (MS), 17 IPhD and 73 PhD degrees were awarded in the 11th Convocation 2024. The degree recipients included one International BS-MS student from Bangladesh through the Study in India programme. The Degree certificates were released via the DigiLocker app synchronously with the convocation event.

## Achievements



**Biotechnology and  
Biological Sciences  
Research Council**

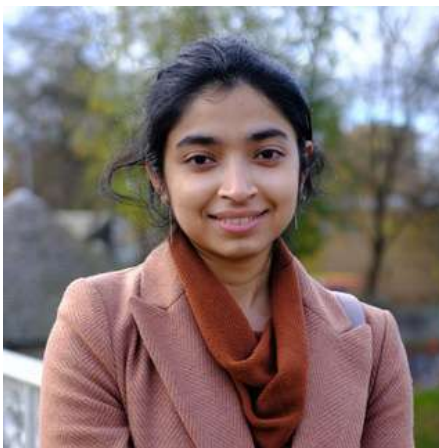


**"Understanding the role of the Type II MLA system in OMV biogenesis: towards developing an effective vaccine against *Campylobacter jejuni* in poultry"**

**Program: India-UK partnership to address Farmed Animal Diseases and Health (FADH), DBT, Govt of India and BBSRC, UK.**

Department of Biological Sciences faculty Dr. Amirul I. Mallick, in collaboration with London School of Hygiene and Tropical Medicine (LSHTM), London, has received £450,000 in funding for his ongoing research on bacterial "Outer Membrane Vesicles (OMVs)". This joint funders are the Department of Biotechnology (DBT), Ministry of Science and Technology, Government of India and Biotechnology and Biological Sciences Research Council (BBSRC), UK Research and Innovation.





Our alumni, Dr. Prantika Bhowmik, PhD student of Prof. Dibyendu Nandi, has joined the Physics Department of the Indian Institute of Science, Bengaluru, as a faculty member. IISERs were originally envisaged along the lines of IISc, and it is wonderful to see the wheel turn a full cycle with IISER Kolkata now contributing one of the first IISER students as a faculty to IISc.

Prantika was a first batch PhD student at the Centre of Excellence in Space Sciences, India (CESSI) joining the program in 2013. Her thesis focused on development of computation models for forecasting the Sun's magnetic cycle. She received the Justice Oak best thesis award from the Astronomical Society of India and the PhD at Large prize of the International Astronomical Union for her thesis work. Subsequently she moved to the Solar Group at the Department of Mathematics at Durham University as a Postdoc. Finally, she joined IISc as an Assistant Professor this month.

## Workshops



### The DHR-ICMR funded "BAW 2024": Workshop on Preclinical Mouse Models, Translating Basic Science to Clinics.

The DHR-ICMR funded "BAW 2024: Workshop on Preclinical Mouse Models, Translating Basic Science to Clinics" was conducted by Prof Jayasri Das Sarma & her team at IISER Kolkata from the 1st of July 2024 to the 6th of July 2024. The six-day workshop dealt with didactic lectures by eminent scientists across India, as well as hands-on training on various bio-analytical and histopathological techniques along with animal handling and dissection—approximately 100 participants registered for the same, from all over India.





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

A three-day Teachers' Training Workshop was organized by IISER Kolkata under the Vigyan Pratibha Project from 26th to 28th June, 2024. 35 teachers from local government and government aided schools participated in this workshop conducted primarily in Bangla. 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.

### **Ministry Mandated Activities**

Celebration of International Day of Yoga, 21st June, 2024



## Seminars and Colloquia:

[DCS Seminar] Amal Narayanan (University of Florida, Gainesville, FL, USA), Date: Monday, Jun 03, 2024.

[DPS Seminar] Prof. Rajarshi Chakrabarti (Indian Institute of Technology Bombay) -- Statistical Mechanics of active polymers: from dilute to dense phase, Date: Friday, Jun 07, 2024.

[Institute Colloquium] Prof. Artem R. Oganov (Skolkovo Institute of Science and Technology, Moscow, Russia) -- How to assemble a snowflake: from atoms to molecule and crystal, Date: Wednesday, Jun 12, 2024.

[DPS Seminar] Dr. Tousif Islam (University of California, Santa Barbara) -- High accuracy waveform models for high precision gravitational wave astronomy, Date: Thursday, Jun 13, 2024.

[DCS Seminar] Dr. Syamal S. Tallury (ExxonMobil USA) -- Robust Stimuli-Responsive Polymer Systems by Physical Design, Date: Friday, Jun 14, 2024.

[DPS Seminar] Prof. Subir Das (JNCASR, Bangalore) -- Metastability while Freezing: Simulations of Mpemba effect in, Water and comparison with certain simpler systems, Date: Tuesday, Jun 18, 2024.

[DPS Seminar] Prof. Rohini Godbole (Indian Institute of Science, Bangalore) -- Status of the Light neutralino DM in the PMSSM, Date: Wednesday, Jun 19, 2024.

[DPS Seminar] Dr. Rakesh Das (Max-Planck-Institute for the Physics of Complex Systems, Germany) -- Physics of Nuclear Organization, Date: Wednesday, Jun 26, 2024.

[DBS Seminar] Dr. Karthik Sankaranarayanan (Assistant Professor, Agricultural & Biological Engineering, Purdue University, USA) -- Computational planning and experimental implementation of enzyme catalyzed routes for sustainable synthesis of small molecules, Date: Wednesday, Jun 26, 2024.

[DPS Seminar] Dr. Mainak Pal (University of Florida) -- Defects and drive in low-dimensional quantum systems with interesting properties, Date: Thursday, Jun 27, 2024.

---