IISER KOLKATA

Newsletter



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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.

Celebration of Institute Foundation Day





















The Indian Institute of Science Education and Research Kolkata celebrated it's 20th Foundation day on 11th July, 2025. Dr. G. Sateesh Reddy, Former Chief DRDO and Secretary Defence R&D, Adviser to Honble Raksha Mantri, Member National Security Council and President Aeronautical Society of India, graced the event as the Chief Guest. In his inspirational address, Dr Reddy highlighted the significant contributions of the institute in Science Education and Research and further highlighted the need for translational research to achieve Vikasit Bharat 2047.

The open house event with science exhibition organized on this occasion was attended by approximately 1000 students from neighbouring schools with lots of excitement. This impacted to foster curiosity and sparked interest in STEM careers.

The Chief guest Dr. Reddy also launched the new BS-MS programme in Computational and Data Science to commence from ensuing academic session.

The 20th Foundation Day event of IISER Kolkata was a great success.



20th Foundation Day at IISER

Te started with the Foundation Day lecture, where we learned about the defence mechanism. Now, as we explore the labs, the students of the inclinus. the labs, the students of the linsitute are explaining complex scientific concepts in such a simple way. I'm really enjoying the experience, said Tanubha Majumder, a class 11 student from Garden High School in conversation with The Statesman, Like Tanubha, many school students immersed them-selves in the world of science and technology, saving mercifical emo-

selves in the world of science and technology, gaining practical eaps, sure through experiments, as IISER Kolkata celebrated its 20th Foundation Day as Institute Open Day on 11 fuly.

Gracing the occasion as the chief guest was G. Satheesh Reddy, former Chairman of the Defence Research and Development Organisation (DRDD), former scientific adviser to the Raksha Mantri, and the President of the Aeronautical Society of India.

The day-long celebration started with a Foundation started with a Foundation by Iccure.

the day-song celeoration started with a Foundation Day lecture, given by G. Satheesh Reddy. Tilled Fevloving science and technology ecosphere', the lecture emphasised India's scientific advancements, technology self-reliance and the pivotal role of interdisciplinary

research. This was followed by a formal launch of a new programme on BS-MS in Computational and Data Sciences. Today, without computational

on BS-MS in Computational and Data Sciences.

Today, without computational and data sciences, nothing is possible, in every department, data and data-driven technologies play a crucial role, So, institutes like ISER, which focus on multidisciplinary learning, are now emphasising data-related sciences, and this emphasis is truly important. Moreover, continuous scientific research and evolution are essential. and supporting all departments with these sciences is vital for progress, G. Satheesh Reddy told The Statesman. ne Statesman. his five-year dual degree course

This five-year dual degree course blends cone computer science with basic sciences. Reflecting on the newly launched course, Prof. Kripabandhu Ghosh, HOD of the department, claimed. This course is supposed to provide a right sink between computer science and basic sciences. It will be different from a conventional computer science course. Through this course, will be able to apply AI to solve complex problems in their field. This course will make students aware of the translational possibilities in their domain and improve in their domain and improve in their domain through artificial in their domain through artificial intelligence." The second half of the day trans-formed the campus into a scientific worderland. Students from all the departments of the campus pre-sented experiments and posters, engaging visitors with hands-on learning.

sented experiments and posters, engaging visitors with hands-on learning. More than 1,000 students from over 40 schools, including those from Kolkara and neighbouring districts, participated in the exhibition.

The event offered access to cutring-edge research facilities, interactions with young researchers, students and professors, as well as a wide range of experiments, exhibitions, models, displays, popular talks and poster presentations. The exhibition featured demonstrations of electrocardiograms. The exhibition featured demonstrations of electrocardiograms (EGGs), human anatomy models, skeletal structures, differences between plant and animal cells, chemistry experiments, mathematical models and more.

For Tanubha, whose favourite subject is biology, the displays were exciting. I want to be a forensic scientist,* he stated, adding, 'I loved exploring the exhibition that helped me learn more about my favourite subject.' Dr Reddy himself oured the displays and presentations and interacted with the students. He further appreciated the effort that connects today's students to the core of science in a very

interesting manner. Speaking to The Statesman, Prof. Sunii Khare, Director of the institute. Smill Ghare. Director of the institute outlined the broader vision behind this initiative, "This Open Day is more than a celebration. It's a way to ignite scientific curiosity among young learners and encourage them to see science not just as a subject, but as a way of thinking. This is how we build a strong science base for technological advancement.

This is how we build a strong science base for technological advancement.

The initiative also drew praise from school teachers. "This is a commendable initiative. Students from various schools have been invited to this premier institute of science. They are getting to see how IISER functions- from its scientific activities and research work to its campus and faculty. It will surely inspire them to dream of using science to contribute to the nation. Our students thoroughly enjoyed this unique experience. The academic concepts theylearn in school came alive through real, practical exposure. This is inspiring.* said Sangeeta Biswas, biological sciences teacher at Rajlakshmi Kanya Vidyapith.

The event came to an end with a reflection on the words of Dr Reddy. "Institutes like IISER are vital to building the country's foundation in science and technology."



The Statesman Tue, 15 July 2025 https://epaper.thestatesman.com/c/77755788



নতুন পাঠক্রম চালু হল আইআইএসইআর-এ



আইআইএসইআর-এর প্রতিষ্ঠা দিবসে ডিআরডিও-র প্রাক্তন চেয়ারম্যান

প্রান্তন বনুরাদের প্রধান আওবা ভিনারাওত র প্রাক্তন চেয়ারম্যান ড. সজীপ রেছি। তিনি প্রতিষ্ঠা নিবস উপলকে ইতলভিং সারেল আভ টেকনোলন্ধি ইকোতিয়ার' শীর্ষক অলোচনা करतन। এই अनक्षीरन तारकात विकिन्न रक्षमा

থেকে ৮০০ জন জুগ কলেজের গভূচারা অংপ নেয়। তাদের সামনে ভূলে বরা হয় আদের সামনে ভূলে বরা হয় হল কলাতার ইভিয়াম ইন্টিউনিট অফ সামেল মডেল প্রস্কর্পনী ছিল। ডকণ গবেলক এবং প্রতিকাশ আই প্রতিকাশ করাল সকলাত বই প্রতিকাশের ২০৩২ প্রতিকাশ করাল বরা না হারীদের গবেলক বরা করিছা এক করালে এক করালে এক করালে আই অংকিনাল আড় করালেজক করালেজক করাল অনুষ্ঠানের প্রথম আলাতার ভিয়াসনাক করালেজক আড় বালু হল। উদ্বোধন করালেজক করালেজন অনুষ্ঠানের প্রথম আভিটি ভিয়াসনিক

ক্ষান্ত কাৰ্য্য করি তেনা করা বিশ্বন কর্মান প্রিক্রেন ইনীরেরাপনাল রিপেশন আশু আউটিজৈ-এর ডিন অধ্যাপক দেবাপিস কোলে, সহকারী ডিন অধ্যাপক অনির্বাধ ব্যানার্জি-সহ বিশিক্ষ্যা।

কৃত্রিম মেধায় রোগ নির্ণয় সহজ? গবেষণা আইসারে

মোহনপুর



চিকিৎসা পরিষেবায় এআই প্রযুক্তি, উদ্যোগ আইসারের

সংবাদনতা, কল্যাণী: এবার চিকিৎসা ক্ষেত্রে কৃত্রিম বৃদ্ধিমন্তাকে (এআই) বাবহারের উদ্যোগ নিয়েছেন ইন্ডিয়ান ইনস্টিটিউট অফ সায়েন্স এডুকেশন অ্যান্ড বিসার্চ (আইসার), কলকাতার বিজ্ঞানীরা। শুক্রবার এই কেন্দ্রীয় শিক্ষা প্রতিষ্ঠানের প্রতিষ্ঠা দিবসের অনুষ্ঠানে একথা জানানো হয়। এই বিষয়ে কিছুদিন আগেই একটি মউ সাক্ষর হয় এইমস-এর সঙ্গে। এই গবেষণায় সাফল্য পেলে পেটেন্ট নিয়ে আগামী দিনে দেশের অন্যান্য স্বাস্থ্য প্রতিষ্ঠানওলিতেও এআই-এর ব্যবহার করা হবে বলে বিজ্ঞানীরা জানান।

ওই শিক্ষা প্রতিষ্ঠানের এক বিজ্ঞানী বলেন, 'এআই-এর ক্ষমতা প্রচুর। অনেক ভেটা একসঙ্গে ব্যবহার করতে পারে। যেটা মানুষের পক্ষে কঠিন। এআই-এর প্রয়োগে চিকিৎসা ক্ষেত্রে রোগ সংক্রান্ত অনেক ব্যাপারে উপদেশ পাওয়া, বিশ্লেষণ করা বা একই বিষয়ে পুরনো কোনও কেসকে ঘোঁটে দেখার কাজও নিমিষে হয়ে যাবে। স্বাভাবিকভাবেই এতে চিকিৎসা বাবস্থায় উন্নতি ঘটবে।

এদিন আইসারের প্রতিষ্ঠা দিবসে হরিণঘাটার মোহনপুরে নিজস্ব ক্যাম্পাসে বিজ্ঞান প্রদর্শনীর আয়োজন করা হয়। সেখানে রাজ্যের বিভিন্ন জেলার ৩০টি স্থল ও কলেজ থেকে প্রায় এক হাজার পড়ুয়া অংশ নেন। প্রধান অতিথি ছিলেন কেন্দ্রীয় প্রতিরক্ষামন্ত্রীর বৈজ্ঞানিক উপদেষ্টা অধ্যাপক জি সতীশ রেডিঃ প্রমুখ।

Bengal

IISER Kolkata Celebrates 20th Foundation Day as Open Day

MI News Service, Kalyani: The Indian Institute of Science Education and Research (IISER) Kolkata celebrated its 20th Foundation Day as Open Day on July 11, 2025, inviting around 800 students from nearby schools and colleges across Nadia and adjoining districts. The event, held from 10:30 AM to 4:30 PM, provided a platform for young minds to engage in scientific discovery, interact with researchers, and explore advanced research facilities.

Dr. G. Satheesh Reddy, former Chairman of the Defence Research and Development Organisation (DRDO) and former Scientific Adviser to the Raksha Mantri, graced the oc-casion as the Chief Guest. He delivered the Foundation Day lecture on "Evolving Science

Prof. Sunil Kumar Khare, Director of IISER Kolkata, highlighted the importance of popularizing science and announced a strategic vision to make Foundation Day celebrations a grand annual outreach event.

The day featured engaging experiments, exhibitions, science models, public talks, posters, and demonstrations. coordinated by Prof. Debasis Koley (Dean, International Relations & Outreach) and Prof. Anirban Banerjee (Associate Dean, IR & Outreach).

Dr. Reddy praised the event's organization and the institute's commitment to inspiring future scientists, calling it a "well-planned movement" to connect students with the essence of scientific exploration.



and Technology Ecosphere", and officially launched the new BS-MS programme in Computational and Data Sciences (CDS) under the newly developed Department of CDS, drawing wide appreciation from the audience.

Established in 2006 under the Ministry of Education, IISER Kolkata continues to drive excellence in research and education, contributing significantly to the advancement of science among India's

Ex-DRDO chief calls for defence tech boost

TIMES NEWS NETWORK

Kolkata: G Satheesh Reddy, the former chairman of the Defence Research and Deve-lopment Organisation (DRDO), called upon the scientific community to develop advanced defence systems and technologies that adversaries do not possess.

20 YEARS OF IISER

Reddy, also a former scien-tific adviser to the defence minister, made the remarks while delivering the 20th Foundation Day lecture, "Evolving Science and Technology Science and Technology Ecosphere," at the Indian In-stitute of Science Education and Research (IISER) Kolkata on Friday.

Reddy is also the president of the Aeronautical Society of India

"Institutes like IISER ne-

ed to work with organisations like DRDO or the armed forces and provide scientific support for the development advanced defence systems," he said.

Reddy also launched the new programme on BS-MS in computational and data sciences for the newly develo-ping department of computational and data sciences (CDS).

IISER Kolkata director Sunil Kumar Khare emphasised the need to popularise science among young minds.
Nearly 800 students from

nearby schools participated in the outreach programme, comprising experiments, exhibitions, models, displays, popular talks, and poster presentations. An institute of national importance established in 2006, HSER Kolkata is presently under the aegis of the education ministry.

Vigyan Pratibha Teachers' Training Workshop











The Vigyan Pratibha Regional Centre of IISER Kolkata organised the Vigyan Pratibha Teachers' Training workshop; the first phase of Professional Development Workshops for the Science and Mathematics teachers from AECS, KV and JNV Schools of the region of Bihar, Jharkhand and West Bengal, along with teachers from the State Schools of West Bengal. The workshop was from 7th of July to 11th of July, 2025.

The Teacher's training workshops of the Vigyan Pratibha Project (from the Homi Bhabha Centre for Science Education, Tata Institute of Fundamental Research, funded by the Department of Atomic Energy) is aimed at Mathematics and Science teachers of Class 8 to Class 10, who are interested in creating a comprehensive learning environment for the students beyond just textbooks.

IISER Kolkata Secures 7th Rank in Nature Index 2025 (Jan 2024- Dec 2024) Among Indian Academic Institutions



The Indian Institute of Science Education and Research (IISER) Kolkata has been ranked 7th among Indian Academic Institutions in the Nature Index 2025. The Nature Index, which tracks high-quality research publications in leading peer reviewed science journals, reflects IISER Kolkata's growing prominence in cutting-edge scientific research.

This accomplishment underscores the institute's commitment to excellence in fundamental science, collaborative and transformative research with impactful publications. The ranking highlights IISER Kolkata's steady rise as a national leader in scientific innovation and academic rigor.

PMRF Scholars with the Director of the Institute



IISER Kolkata & CSIR-IICB Signed MOU for Collaborative Research

CSIR-IICB and IISER Kolkata wish to come together to foster research collaboration, and provide opportunity for professional, scholarly and academic interaction in matters relating to Scientific research, Science education and related areas, and to facilitate advancement of knowledge in these areas, based on reciprocity and mutual benefit. CSIR-IICB and IISER Kolkata agree to explore the possibility of engaging in the collaborative research work in a mutually agreeable manner.

Vigilance Awareness Workshop





IISER Kolkata organized Vigilance Awareness Workshop on 23rd July 2025. Chief Guest & Speaker: Shri Sauranshu Sinha, Deputy Secretary (Vigilance), Ministry of Education, Govt. of India.

Hands-on workshop on Sanger Sequencing and FragmentAnalysis





A two-day on-site workshop titled "Hands-on workshop on Sanger Sequencing and Fragment Analysis" was successfully completed at the Dept of Biological Sciences, IISER Kolkata, in collaboration with Thermo Fisher Scientific and BioApps during 14th-15th July, 2025. The primary focus of the workshop was to provide comprehensive training to the participants on the Sanger sequencing workflow and data analysis, bridging the gap between theoretical knowledge and practical application.

Twenty-six Ph.D students and postdoctoral fellows from the departments of Biological Sciences and Chemical Sciences (IISER Kolkata) attended the workshop, along with medical professionals from AIIMS Kalyani. All participants expressed strong appreciation for the quality and content of the training. The two-day event featured extensive hands-on training and interactive sessions, detailed demonstrations by Dr. Sanjib Dey, Dr. Disha Banerjee, and Mr. Biswajoy Pal from Thermo Fisher Scientific covering the complete sequencing workflow, from sample preparation to data analysis.

These sessions allowed participants to engage directly with advanced sequencing equipment and software tools. Alongside, lectures on Sanger Sequencing, Next Generation Sequencing, and updates on the latest advancements in sequencing technology and bioinformatics were included.

The workshop was an enriching experience for all attendees, equipping them with both technical skills and conceptual understanding necessary for modern molecular biology and genomic research. The workshop concluded with appreciation notes from Prof. Supratim Datta, Head (DBS), and Prof. Amirul I. Mallick (Faculty-in-Charge, Sequencing Facility). The Sequencing Facility gratefully acknowledges the contributions and support of staff members Dr. G. Lekha, Mr. Debabrata Sutradhar, Dr. Soumik Sao, Mr. Sudhangsu Maity and Mr. Somnath Halder.

BS-MS @ IISER Kolkata



Know @ IISER Kolkata was a virtual meeting hosted by the Office of International Relations and Outreach (IRO) to address the Frequently asked questions of the prospective students. The aim of the meeting was to enlighten the prospective students about the Campus life, placements at IISER Kolkata, Fees Structure, Facilities, etc. The meeting was attended by DoIRO, ADoIRO, DoSA, DoAA, ADoAA and Assistant Registrar International Relations and Outreach.

Faculty Member's Achievements

We are delighted to share that Prof. Alakesh Bisai, Dept. of Chemical Sciences, has been honored with the 'C.N.R. Rao National Prize' by the Chemical Research Society of India (CRSI). Let's join in congratulating Prof. Bisai on this well-deserved recognition.

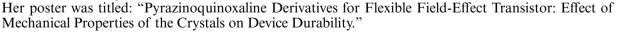


Students Achievements



Mr. Abhishek Mandal, a PhD student of the Department of Earth Sciences under the supervision of Dr. Gopala Krishna Darbha, embarked on a remarkable journey to the Arctic in March 2024, marking a historic milestone as the first winter expedition sanctioned by NCPOR for environmental pollutant monitoring. Despite facing numerous challenges posed by harsh Arctic conditions (temperature of minus 45 °C), limited access to resources, and fierce competition for selection, Abhishek was one of only 19 individuals chosen from India for this prestigious expedition. With the IISER Kolkata proposal accepted for the second time, Abhishek ventured once again to the Arctic for the summer expedition in July 2024-2025, affirming the enduring impact of their research in this critical area.

Ms. Jasmine Bezboruah (Roll No.21RS030), from the Department of Chemical Sciences under the supervision of Prof. Sanjio S Zade, has been awarded the Poster Prize by RSC Applied Interfaces at the 16th International Symposium on Functional π -Electron Systems (F π 16), held in Jeju, South Korea, from June 29 to July 3.





Alumni Accolade



Dr. Sachchidanand Prasad has recently joined as Assistant Professor in the Department of Mathematics, Indraprastha Institute of Information Technology, Delhi

Dr. Sachchidanand Prasad earned his PhD under the supervision of Prof. Somnath Basu in the year 2022.

Seminars, Lectures and Colloquia

[DMS Seminar] Rohan Sarkar (Assistant Research Prof. University of Connecticut) -- Spectrum of Lévy-Ornstein-Uhlenbeck semigroups on R^d, Date:Tuesday, Jul 01, 2025.

[Machine Learning Public Lecture] Dr. Saptarshi Pyne (CDS, IISER Kolkata) -- Causal Discovery with Artificial Intelligence Date: Wednesday, Jul 02, 2025.

[Machine Learning Public Lecture] Dr. Kripabandhu Ghosh (CDS, IISER Kolkata) -- The Curious Case of Artificial Intelligence and the Legal Domain, Date: Thursday, Jul 03, 2025.

[DMS Seminar] Shouryya 'Sony' Mitra (Xavier University, Cincinnati, Ohio, USA) -- Projection-based Multivariate Tests for High Dimensional Data, Date: Thursday, Jul 03, 2025.

[Machine Learning Public Lecture] Prof. Siddhartha Lal (DPS, IISER Kolkata) -- Alphazero: Chess, Complexity and Creativity Date: Friday, Jul 04, 2025.

[DCS visitor's Ujjal Sarkar (QTAS) seminar] Biopharmaceutical Drug Discovery Research & Development Experience, Date: Wednesday, Jul 09, 2025.

[Foundation Day Lecture] Dr. G. Satheesh Reddy (President, The Aeronautical Society of India) -- Evolving Science and Technology Ecosphere, Date: Friday, Jul 11, 2025.

[DBS Seminar] DBS Seminar -- Reconstruction of Pathological Amyloid Polymorphs in vitro for Drug Design and Biomarker Discovery in Alzheimer's and Parkinson's Disease, Date: Wednesday, Jul 16, 2025.

[DPS Seminar] Prof. Rajesh Kumble Nayak -- Meet GW231123 Date: Wednesday, Jul 23, 2025.

[DMS seminar] Prof. Meera Mainkar (Central Michigan University) -- Preserve one, preserve all, Date: Wednesday, Jul 23, 2025.

[(DBS Seminar)] Dr. Dhiman Ghosh (Post Doctoral Fellow at ETH Zurich) -- Reconstruction of Pathological Amyloid Polymorphs in vitro for Drug Design and Biomarker Discovery in Alzheimer's and Parkinson's Disease, Date: Wednesday, Jul 23, 2025.

[DMS Lecture Series] Prof. Debraj Chakrabarti (Central Michigan University) -- The Linear Differential Operators of Complex Analysis, Date: Thursday, Jul 24, 2025.

[DPS Seminar] Dr. Biswajit Sahoo (King's College, London) -- Trace Anomalies along RG Flows and S-Matrix Bootstrap Bounds, Date: Friday, Jul 25, 2025.

[DMS Lecture Series] Prof. Debraj Chakrabarti (Central Michigan University) -- The Linear Differential Operators of Complex Analysis, Date: Monday, Jul 28, 2025.

[DMS Lecture Series] Prof. Debraj Chakrabarti (Central Michigan University) -- The Linear Differential Operators of Complex Analysis, Date: Tuesday, Jul 29, 2025.

[DPS Seminar] Dr. Swagato Banerjee (University of Louisville, Kentucky, USA) -- Lepton flavor violation in the tau sector, Date: Tuesday, Jul 29, 2025.

[DPS Seminar] Prof. Bobby Ezhuthachan (Ramakrishna Mission Vivekananda Educational and Research Institute) -- Sl(2,R) driven 2d CFTs and their holographic duals, Date: Wednesday, Jul 30, 2025.













