

Republic Day Celebration at the Institute on 26th January, 2023



The Republic Day 2023 was celebrated at IISER Kolakta. The Director, Prof. P K Panigrahi emphasized on the importance of the Republic Day of India, which marks the day when the Constitution of India came into effect in 1950, replacing the Government of India Act (1935) as the governing document of India. The day is celebrated with great pride and enthusiasm across the country, with parades featuring India's cultural and military heritage. The Republic Day celebration highlights the rich cultural diversity of India and symbolizes the unity in diversity of the nation. It is a time for the people of India to reflect on the freedoms and rights guaranteed to them by the Constitution and to reaffirm their commitment to preserving these values for future generations.

A study visit of Jammu & Kashmir Institute of Mathematical Sciences students to IISER Kolkata



A team led by Dr. Nisar Lone along with 32 students from Jammu & Kashmir Institute of Mathematical Sciences (JKIMS) visited the Department of Mathematics and Statistics at IISER Kolkata from 21st Jan to 3rd Feb, 2023.

Besides the exchange of several Mathematical courses, the students had the privilege to attend various lectures delivered by faculty members - Dr. Swarnendu Datta and Dr. Somnath Basu and of BS-MS & Ph.D students and also a seminar delivered by Dr. Nisar Lone. It was an excellent opportunity for the Identity Math Club of the institute to organize many events during the period, such as a Mathematical Treasure Hunt, an Integration Bee, and a Mathematical Quiz which was an enriching experience for both institutes.



INSA Teacher Award 2022



Dr. Ananda Dasgupta *Department of Physical Sciences*

Dr. Dasgupta, recipient of the prestigious INSA Teacher Award for his outstanding contribution and guidance in inspiring students to take up careers in science that has helped to shape the future of science education in India. His work in the field of quantum optics has gone a long way in promoting science education in India and in furthering the cause of scientific research in the country.

This prestigious award is a testament to Dr. Dasgupta's dedication and commitment to the field of science and technology, and to the advancement of science education in India. He is an inspiration to many young students, and his achievements are a source of immense pride for IISER Kolkata and the Indian scientific community.

Faculty Achievements

Prof. D. Nasipuri Memorial Lecture Award 2022



Prof. Alakesh BisaiDepartment of Chemical Sciences

The Prof. D. Nasipuri Memorial Lecture Award is an esteemed award given to distinguished researchers and scientists with exceptional contributions to the field of chemical sciences. By this year, the award was presented to Prof. Alakesh Bisai of the Department of Chemical Sciences.

Prof. Bisai is an eminent scientist who has made significant contributions to the field of chemical sciences. He has published numerous papers on topics related to methodologies and strategies for target oriented total syntheses of architecturally intriguing alkaloids of biological relevance.

Nobel Facts

Marie Curie is the only woman who has been honoured twice, with the 1903 Nobel Prize in Physics and the 1911 Nobel Prize in Chemistry.

INSA Medal for Young Scientists 2022



Dr. Subhronil Mondal *Department of Earth Sciences*

Dr. Subhronil Mondal has been awarded the Indian National Science Academy (INSA) Medal for Young Scientists 2022, a prestigious award that recognizes and honors young scientists who have made significant contributions to their fields of research.

Dr. Mondal's research focuses on analysing different macroecological and macroevolutionary patterns in marine invertebrates and their causal relationship with different biotic and abioti drivers, across different spatio-temporal scale

Humboldt Research Fellowship for Experienced Researchers



Dr. Radhika Venkatesan Department of Biological Sciences

Dr. Radhika Venkatesan has been awarded the Humboldt Research Fellowship for Experienced Researchers. This fellowship is awarded by the Alexander von Humboldt Foundation in Germany and is one of the most prestigious awards for international researchers.

The Humboldt Research Fellowship is awarded to outstanding researchers from all over the world who have made significant contributions to their field.



Prof. Somdatta Sinha
INSA Honorary Scientist

Professor Somdatta Sinha (INSA Honorary Scientist at IISER Kolkata) has contributed significantly to the interdisciplinary branch of Biological Science in India. A Special Issue is published by the Journal of Biosciences (co-published by Indian Academy of Sciences & Springer Nature) in recognition of her contributions.

Nobel Facts

John B. Goodenough is the eldest recipient of this prize in Chemistry 2019 at the age of 97 years.



Institute Colloquium



Ms. Deepanwita Chattopadhyay *Chairman & CEO, IKP Knowledge Park*

Ms. Deepanwita Chattopadhyay delivered a talk in an institute colloquium at IISER Kolkata on 10th January 2023. The title of the talk was "Creating an Innovation Ecosystem."

Prof. Yuval Gefen, Theoretical Physics, the Weizmann Institute of Science, Israel delivered a talk on the occasion of the institute colloquium on 27th January 2023. "Weak measurement (WM) is an alternative to von Neumann's dogma of the "collapse" of a wave function: it avoids the necessity of the latter's complete destruction, while capable of extracting partial information from the system measured", he said.



Prof. Yuval GefenThe Weizmann Institute of Science



Dr. Sanchita Pal *Alumnus of IISER Kolkata*

Dr. Sanchita Pal, alumnus of IISER Kolkata had delivered a colloquium at the Institute on 31st January, 2023. The title of the talk was "The evolution of solar magnetic storms through interplanetary space". Dr. Pal is currently a post-doctoral fellow in the Heliophysics Science Division of the Goddard Space Flight Center (GSFC), NASA.

Nobel Facts

The Curie family has won four Nobel Prizes: Marie Curie (2), Pierre Curie (1) and their daughter Irène Joliot-Curie (1)



Seminars

- Dr. Ashish Arora [Asst. Professor, IISER Pune] delivered a talk on 04.01.2023 : "Giant Faraday rotation of excitons in 2D semiconductor monolayers."
- Dr. Sukanya Sinha [University of Witwatersrand, South Africa] delivered a talk on 05.01.2023: "Not a jet all the way an exploration of strongly interacting dark sector in ATLAS and beyond."
- Mr. Ramyak Bilas [Ph.D. student, Indiana University USA and IISER Kolkata alumni] delivered a talk on 05.01.2023: "Do Cohomology and limit commute?"
- Mr. Ujan Chakraborty [PhD student, School of Math & Dynamical and IISER Kolkata alumni] delivered a talk on 05.01.2023 : "A Dynamical Covering/Embedding Problem."
- Dr. Dhrubaditya Mitra [Assistant Professor, NORDITA, Stockholm] delivered a talk on 06.01.2023: "Machine learning in solar physics."
- Dr. Praphulla Koushik [Post-doctoral fellow, IISER Pune] delivered a talk on 10.01.2023 : "An introduction to Lie groupoids and differentiable stacks."
- Dr. Soumavo Ghosh [Postdocs, Department of Galaxies and Cosmology of Max Planck Institute for Astronomy] delivered a talk on 11.01.2023: "Can spirals help the Milky Way 'breathe'? a quest with simulations & Gaia mission."
- Dr. Praphulla Koushik [Post-doctoral fellow, IISER Pune] delivered a talk on 13.01.2023 : "Some structures on principal Lie 2-group bundles over Lie groupoids"
- Dr. Sukannya Bhattacharya [University of Padova] has given a talk on 17.01.2023: "New probes of the early universe: Gravitational Waves and Primordial Black Holes".
- Dr. Arka Chatterjee [University of Manitoba, Winnipeg, Canada] delivered a talk on 18.01.2023: "Who Paints X-ray Lightcurves and Spectra From Black Holes?".
- Mr. Niladri Modak [Research Scholar, IISER Kolkata] delivered a talk of on 23rd January 2023: "Partial reflection of a light beam and its implications."
- Dr. Chandan Datta [Postdoc at University of Warsaw] delivered a talk on 24.01.2023: "Entanglement catalysis for quantum states and noisy channels".
- Dr. Apratim Chakraborty [Faculty member, TCG CREST, West Bengal] delivered a talk on 24.01.2023 : "Annular Knots and their invariants"
- Dr. Tanmoy Banerjee [Professor, Department of Physics, University of Burdwan] delivered a talk on 25.01.2023: "Nonlinear Dynamics in Dissipative Quantum Systems". 25th
- Dr. Indranil Chattopadhyay, Scientist-E, ARIES, Nainital delivered a talk on 31.01.2023: "Computing the spectra from accretion flows onto black holes and neutron stars".

Nobel Facts

Although Alfred Nobel owned more than 355 patents, he made most of his fortune from the sale of weapons.



Symposium & Workshop



Frontiers in Modern Biology (FIMB) is the flagship symposium organized by the Department of Biological Sciences, IISER Kolkata since 2011. FIMB 2023 conducted their 7th ediction symposium in our campus from 20th to 22nd January 2023. The symposium aimed to provide a broad platform for insightful discussions on diverse topics in modern bilogy, "from Molecules to Systems".



The Royal Belgian Insitute for Space Aeronomy (BIRA-IASB) and IISER Kolkata jointly conducted a one-day workshop focusing on "Column observations of atmospheric constituents" on 20th January, 2023. The Director of BIRA-IASB also delivered a talk during the workshop.

The Research Innovation and Scientific Entrepreneurship (RISE) Foundation IISER organised a workshop on Technolgoy Transfer: Basics and Beyond, for the IISER Kolakata community on 10th January, 2023.



Nobel Facts

International organizations ICRC and UNHCR have won three and two Nobel Peace Prizes respectively.



Students' Achievements

Rudolf Kaiser Prize 2022



Dr. Manish Garg *Alumnus of IISER Kolkata*

Our Alumnus Dr. Manish Garg from Max Palnk Institute for Solid State Research (MPI-FKF), has been awarded with the Rudolf Kaiser Prize 2022 – one of the most prestigious German prizes for young scientists in the field of physics.

Dr. Manish Garg studied Chemistry (major) and Physics (minor) at the Indian Institute of Science Education and Research (IISER Kolkata) and thereafter his doctoral and first post-doctoral work at the Attosecond Physics division at Max Planck Institute for Quantum Optics (MPQ). He has also received the Max-Auwärter Award of the Austrian Physical Society in 2022.

Seventh Alumni Meet

On 14th January 2023, the 7th Alumni meeting was held at the Institute, wherein all the students of the yesteryear participated and exchanged views and experiences on their career progress. The Director was overwhelmed by interacting with the alumni and by recalling on the memories of the older times.



Nobel Facts

Jean-Paul Sartre and Le Duc Tho are the only two people to have declined the Nobel Prize.



Students' Corner

NAVEEN PRABHA 2023

A fantastic evening of NAVEEN PRABHA 2023 was held at the institute campus for the freshers' batch of 22MS on 21st January 2023, a tradition adopted by the senior students in welcoming the freshers'. The event includes Classical Arts of India in unleashing the creativity hidden within the students.



Makar Sankranti

The students at the institute celebrated Makar Sankranti, a traditional and customary festival celebrated every year with lots of fun as the festival is a gamut of multiple cultural representations that forms a perfect opportunity for the students to promote the initiative "Ek Bharat Shreshtha Bharat" whose main motive is to bring the different vivid cultures of our nation together and help people understand the knowledge of the culture, traditions and practices of different states in the country.



Nobel Facts

Rabindranath Tagore was the first non-European or non-white recipient of the Nobel Prize (in any category). Tagore was awarded the 1913 Nobel Prize in literature.



Outreach Activities

"Vigyan Pratibha Workshop" at IISER Kolkata

The Homi Bhaba Centre for Basic Sciences (HBCSE) has recognised IISER Kolkata as a regional centre for Vigyan Pratibha programme HBCSE's flagship promoting out-of-curriculum and hands-on science education for school children studying between standards eight and ten in the Jawahar Navodaya Vidyalayas' (JNV) across the country. As a beginning, IISER Kolkata organised a three day teachers' training workshop between January 17-20. A total of 37 JNV school teachers from West Bengal, Orissa, and Jharkhand attended the workshop.

and Environmental Science).



The instructors, comprising of faculty proceedings. The school teachers expressed considerable members from both HBCSE and IISER positivity about the IISER Kolkata campus, and the Kolkata, engaged with the school teachers programme itself, and seemed ready to implement their in building the latter's understanding of the learnings in their own classroom teaching. Hopefully, this is teaching modules developed in HBCSE, just the start of many such Vigyan Pratibha workshops that covering diverse topics in Mathematics and IISER Kolkata will organise - an effort which would help the the Sciences (Physics, Chemistry, Biology, institute fulfill its mission of serving as a game-changer in the

Rastraguru Barrackpore College Surendranath students' visit

As an outreach initiative of the Institute, more than thirty-five students of the BRS College visited the laboratories of the Department of Physical Sciences at the campus and had the privilege for a hands-on training of various methodologies of



Feedback / suggestions could be informed to: director.office@iiserkol.ac.in