SATYENDRA NATH BOSE NATIONAL CENTRE FOR BASIC SCIENCES

Newsletter

Volume 15, Issue 2 (2025)

Editorial

We are very pleased to publish the second issue of Newsletter 2025. We appreciate the work of the Newsletter support staff and members. We thank all contributors for their timely and informative articles, which greatly enriched the Newsletter. This issue covers academic and non-academic events in the first half of 2025, from January to June. We hope readers will enjoy it.

Professor Satyendra Nath Bose

News and Events (Academic)

Inauguration of Astronomical Observatory

Inaugural ceremony of Centre's Astronomical Observatory site at Sidho-Kanho-Birsa University (SKBU) campus, Purulia was held on 08.01.2025, where Director, SNBNCBS, dignitaries from Department of Science and Technology, Govt. of India, Chairman and Members of Governing Body of the Centre, members of Finance Committee and ARPAC members participated along with Registrar, SNBNCBS, faculty members of the Centre and scholars of SKBU, Purulia.

Centre celebrated its 39th Foundation Day

The S.N. Bose National Centre for Basic Sciences celebrated its 39th Foundation Day on 13.06.2025. On this occasion Prof. B.N. Jagatap, Chairman, Governing Body of the Centre delivered his welcome address. Prof. Tanusri Saha-Dasgupta, Director of the Centre addressed the staff and students on this occasion. The invited scientific talk was delivered by Prof. Umesh V. Waghmare, President, JNCASR, Bengaluru on the topic "Quantum Geometry of Electrons in 2D Materials: Proposals of GQuES Spectroscopies and Anomalous scientific Hall Transistor". The talks were also delivered by research scholars of Centre viz., Ms. Avanti Chakraborty, JRF, Ms. Saheli Mukherjee, SRF and Mr. Soumyadipta Chakraborty, SRF. A prize distribution ceremony to the academicians and administrative staffs were also organized on this occasion. The Foundation Day ceremony concluded with a cultural programme by Shri Indrayuddh Majumder, renowned Sarode Player.

Colloquium / Named Lectures

17th CKM Memorial lecture

Rupak Majumdar, Scientific Director, Max Planck Inst. For Software Systems, delivered the 17th CKM Memorial lecture on the topic "How to keep the Cloud Running: Systematic Concurrency Exploration for Distributed Services" on 17th January, 2025 at the Centre.

6th S Chandrasekhar Memorial Lecture

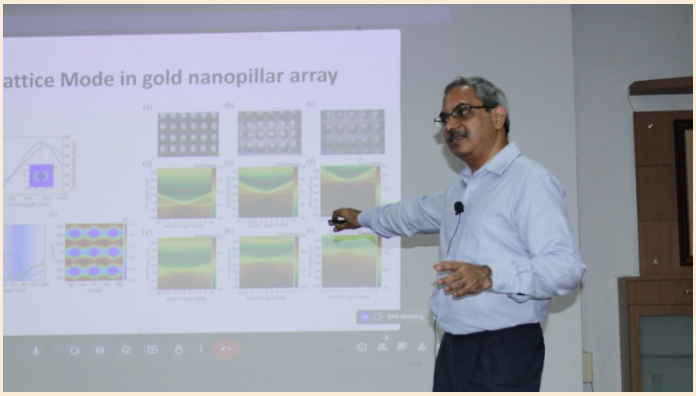
Viatcheslav Mukhanov, Chair of Cosmology at the Ludwig-Maximilians-Universität in Munich delivered the lecture on the topic "The Quantum Universe" on 6th February, 2025 at the Centre.

Bose Colloquium

Puru Jena, Distinguished Professor, Director, Institute for Sustainable Energy and Environment, Department of Physics, Virginia Commonwealth University, delivered the lecture on the topic "Science at the Nanoscale" on 24th January, 2025 at the Centre.

Bikramjit Basu, Director, CSIR-Central Glass and Ceramic Research Institute (CGCRI), delivered the lecture on the topic " Innovations at the challenging interface of Engineering, Biology and Medicine" on 21st February, 2025 at the Centre.

Venu Gopal Achanta, Director of CSIR-National Physical Laboratory (CSIR-NPL), delivered the lecture on the topic "Light-matter interaction in the non-perturbative regimes" on 28th March, 2025 at the Centre



Institute Colloquium

Benjamin Jungfleisch, Associate Professor of Physics and Astronomy at the University of Delaware, delivered the lecture on the topic "Terahertz pulse shaping and chirality control using magnetic heterostructures" on 18th February, 2025 at the Centre.

Special Lectures / Conferences / Seminars

Two-days Conference on Physics of Non-equilibrium Systems

A two-days conference titled "Physics of Non-equilibrium Systems" was held at Centre during 22nd to 23rd May, 2025. The Convener of the conference was Dr. Arijit Haldar, Assistant Professor and the Co-Conveners were Dr. Sanku Pal, DST INSPIRE Faculty and Dr. Bhaskar Mukherjee, DST INSPIRE Faculty. The purpose of this conference was to unite researchers working on non-equilibrium systems, facilitating discussions on current research topics and potential collaborations. The conference focused both on classical and quantum non-equilibrium systems covering the topics like, quantum scars, Hilbert space fragmentation, time crystals, non-equilibrium dynamics (ramp, quench etc) and transport phenomena, Floquet systems, stochastic processes, quantum chaos, role of quantum information in non-equilibrium physics, non-Hermitial systems, open quantum systems, hydrodynamics and non-equilibrium universality.

Other Seminars

A Departmental Seminar (AHEP) held on 03.02.2025. Srubabati Goswami , Senior Professor, Physical Research Laboratory, delivered the lecture on the topic "The Fable of the Unstable Neutrinos".

A Departmental Seminar (CBS) held on 04.02.2025. Shilpi Kushwaha, Senior Scientist in CSIR-CSMCRI, Bhavnagar (Gujarat), delivered the lecture on the topic "Harnessing Advanced Self-Assembled Porous Materials in Sustainable Applications".

A Departmental Seminar (AHEP) held on 07.02.2025. ViatcheslavMukhanov, Chair of Cosmology at the Ludwig-Maximilians-Universität in Munich, delivered the lecture on the topic "Gravitationally Dominated Intentions".

A Departmental Seminar (AHEP) held on 12.02.2025. Sibasish Ghosh, Professor, Institute of Mathematical Sciences, Chennai, delivered the lecture on the topic "Quantum homogenization in Markovian and non-Markovian collisional models".

A Departmental Seminar (CBS) held on 18.02.2025. Debashis Adhikari, Associate Professor, IISER - Mohali, delivered the lecture on the topic "Mechanistically guided catalyst development for organic transformations".

A Departmental Seminar (AHEP) held on 01.05.2025. Andrew Miller, Postdoctoral Researcher at NIKHEF, Amsterdam and Utrecht University & a member of the International LIGO Scientific Collaboration, delivered the lecture on the topic "Multi-messenger astronomy with continuous gravitational waves".

A Departmental Seminar (PCS) held on 21.05.2025. Samriddhi Sankar Ray, Associate Professor, International Center for Theoretical Sciences (ICTS-TIFR), Tata Institute of Fundamental Research, Bangalore, delivered the lecture on the topic "A high Reynolds number perspective on what makes dense, bacterial suspensions truly turbulent".

A Departmental Seminar (CMMP & CBS joint) held on 25.06.2025. Prakash Chandra Mondal Associate Professor, Department of Chemistry, Indian Institute of Technology, Kanpur, delivered the lecture on the topic "Charge Transport in Large-Scale Molecular Junctions".

Early Career Talk

An Early Career Talk (CBS) held on 07.01.2025. Sudip Das, Post-doctoral fellow, Prof. Michele Parrinello's group, IIT Genova, Italy, delivered the lecture on the topic "Machine Learning Meets Enzyme Catalysis.

An Early Career Talk (CBS) held on 13.01.2025. Sanjoy Paul , Postdoctoral Researcher at the Max Planck Institute of Biophysics in Germany, delivered the lecture on the topic "Decoding Shape Regulation in COPII-Induced Membrane Budding: A Multi-Scale Simulation Approach".

An Early Career Talk (PCS) held on 16.01.2025. Debraj Das, Post-doctoral fellow, ICTP, Italy, delivered the lecture on the topic "First-Passage Processes: Martingales and the Defect Technique."

An Early Career Talk (AHEP) held on 22.01.2025. Sumit Goswam, Post-Doctoral Research Associate, Institute of Atomic and Molecular Sciences, Academia Sinica, Taiwan delivered the lecture on the topic "Global Quantum Communication without Quantum Memory".

An Early Career Talk (CMMP) held on22.01.2025. Subrata Chakraborty, Visiting Postdoc Scientist at the Centre for Nanoscience and Engineering (CeNSE), IISc, Bengaluru, delivered the lecture on the topic "Gate-Controlled Superconductivity, Cryogenic Thermoelectric Radiation Detector and Reservoir-Controlled Orbital Magnetism".

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An Early Career Talk (PCS) held on 23.01.2025. Himansu Bhaumik, Visiting Scientist Fellow, Theoretical Science Unit, JNCASR, Bengaluru, delivered the lecture on the topic "Fatigue failure in computer glass".

An Early Career Talk (CBS) held on 30.01.2025. Ketan Patel, Principal Scientist in CSIR-CSMCRI, Bhavnagar (Gujarat), delivered the lecture on the topic "Functional microporous membranes for molecular separation".

An Early Career Talk (CMMP) held on 31.01.2025. Dhiman Bhowmick, Research Fellow in the Department of Physics at the National University of Singapore (Principal Investigator: Wen Wei Ho), delivered the lecture on the topic "Topology in Quantum Magnets".

An Early Career Talk (CMMP) held on 03.02.202. Pranab Kumar Nag, Postdoctoral Associate, Associate Research Scientist, Physics Department | Yale University, delivered the lecture on the topic "Visualizing Superconductivity Mediated by Nematic Fluctuations in the Fe-Based Superconductor FeSe1-xSx".

An Early Career Talk (CBS) held on 25.02.2025. Sirshendu Dinda, Ph.D in Solid-State Chemistry, Helmholtz Institute Ulm, KIT, Germany, delivered the lecture on the topic "Tip-Enhanced Raman Spectroscopy (TERS): elucidate nano-scale chemical heterogeneity in thin layer".

An Early Career Talk (CBS) held on 03.03.2025. Samik Bose, Assistant Professor, Department of Computational Mathematics Science and Engineering, Michigan State University, USA,

delivered the lecture on the topic “Integrating Markov Models with Weighted Ensemble MD Simulation : A Physics-Based Kinetic Modeling Approach Towards Accuracy and Robustness”.

An Early Career Talk (CMMP) held on 05.03.2025. Debdatta Panigrahi, Ph.D., Humboldt Postdoctoral Fellow, Max Planck Institute for Polymer Research, Mainz, Germany, delivered the lecture on the topic “Development of Organic Antiambipolar Transistors for Multivalued Logic Circuits and Logic-in-Memory Devices”.

An Early Career Talk (CMMP) held on 18.03.2025. Vivek Kumar, Research Fellow, Quantum Engineering Laboratory, Department of Electronic and Electrical Engineering, University College London, delivered the lecture on the topic “Electron Transport in Condensed Matter: From Bulk Materials to Low-Dimensional Systems”.

An Early Career Talk (CMMP) held on 01.04.2025. Bidisha Roy, Faculty of Physics, School of Sciences, Woxsen University, delivered the lecture on the topic “Some interesting optical manifestations in quantum confined excitonic systems”.

An Early Career Talk (AHEP) held on 08.04.2025. Rahul Bandyopadhyay, Postdoctoral Researcher, Universidad de Chile, delivered the lecture on the topic “Polycyclic aromatic hydrocarbon abundances in protoplanetary disks - a study with the JWST spectrum of the T Tauri disk T Chamaeleontis (T Cha)”.

An Early Career Talk (PCS) held on 17.04.2025. Ajoy Maji, Postdoctoral Fellow at Weizmann Institute of Science, Rehovot, Israel, delivered the lecture on the topic “Shape Transition in Network Models of Active Elastic Shells”.

An Early Career Talk (CMMP) held on 24.04.2025 . Ritwik Mondal, Assistant Professor. Department of Physics, Indian Institute of Technology (ISM) Dhanbad, delivered the lecture on the topic “Inertial Magnons: A New Frontier in Terahertz Spin Dynamics”

An Early Career Talk (CMMP) held on 25.04.2025 . Alexander Mook, Research Group Leader, Johannes Gutenberg University Mainz, delivered the lecture on the topic “A tale of demons and decay in altermagnets”.

An Early Career Talk (PCS) held on 05.05.2025. Vishwajeet Kumar, PhD student, Institute of Mathematical Sciences, Chennai , delivered the lecture on the topic “Exploring Metastabilities : Decoding unknown energy landscapes by leveraging Generalized Arrhenius Law”.

An Early Career Talk (AHEP) held on 20.06.2025. Jyotirmay Paul, Post-Doctoral Fellow, University of Exeter, UK, delivered the lecture on the topic “Pushing the Frontiers of High Angular Resolution Astronomy: Insights from iRobo-AO, SALTO, SCExAO VAMPIRE, and the BIFROST/Asgard Suite”.

An Early Career Talk (CBS) held on 26.06.2025. Arijit Kumar De, Associate Professor, Department of Chemical Sciences, Indian Institute of Science Education and Research Mohali (IISER Mohali), delivered the lecture on the topic “New Insights into Ultrafast Excited-State Dynamics of Fluorescent Proteins”.

Scientific Story

A 2D Material to Cleanse our Rivers

Avijit Chowdhury

Each day, more than 500 million liters of wastewater from industrial sources are dumped directly into the Ganga. In many places, this water is completely raw and untreated.

More than 800 million litres of largely untreated sewage and 44 million litres of industrial effluents are discharged daily into the Yamuna.

Industrial effluents are one of the major causes of irreversible damage to the ecosystem. Improper treatment and direct release of these hazardous effluents in the sewerage drains eventually pollute the groundwater as well as other major water bodies, causing adverse effects on the health of living beingsand aquatic life. These toxic wastes may even get into the food chain.

A priority area of research is to find a cost-effective and efficient method to treat industrial waste before or after it is discharged into the river. A new 2D material, graphitic carbon nitride (g-C_3N_4), is showing promise as a photocatalyst for cleansing wastewater in the presence of sunlight.

A group of researchers focused on the tuning of g-C_3N_4’s catalytic properties for solar light-driven photocatalytic applications. In bulk g-C_3N_4, the layers are held together by weak Van der Waal’s

forces of attraction. These layers can be separated into 2D nanosheets by the thermal exfoliation technique.

To fabricate the required nanosheets, 500 mg samples of pristine g-C_3N_4 were calcinated (heated in a controlled environment) for two hours at 500, 550 and 600 deg C respectively. Heating caused a gradual increase in the volume of the above mentioned samples as shown in Fig 1. This implies that the exfoliated samples possess a looser framework than their stacked structure. They have a high surface to volume ratio, inducing many active sites as compared to pristine g-C_3N_4.

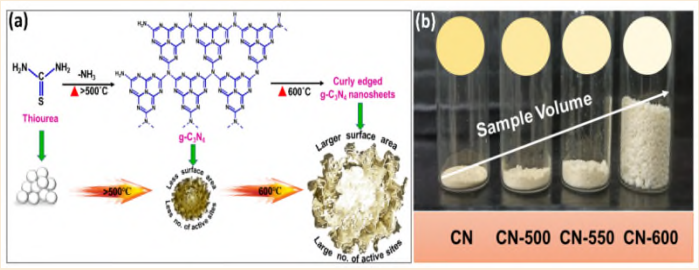

Fig 1 (a) Synthesis of g-C3N4 nanosheets (b) Increase in volume with heating

When light shines on the material, the photons having sufficient energy create electron - hole pairs, which take part in the redox reaction. While the electron triggers a reduction reaction, the hole triggers an oxidation reaction. For g-C_3N_4, the band gap between the valence band and conduction band is 2.7 electron volts. This makes the generation of electron-hole pair possible in visible light too, making it a more efficient photocatalyst. However, the high rate of recombination of the generated electron-hole pairs limits their practical applicability. Thus, exfoliating g-C_3N_4 into nanosheets would suppress the rate of recombination and further increase its efficiency as a photocatalyst.

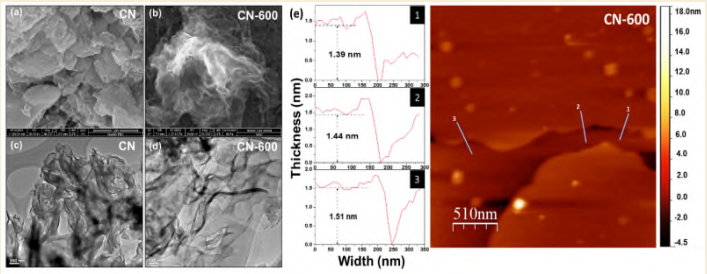

Fig 2: SEM & TEM images of g-C_3N_4 (a,c) bulk (CN) and (b,d) nanosheets of CN-600; (e) AFN image of CN-600 and its height profile

Having prepared the nanosheets, their morphology, structure and optical properties were studied in detail using various analytical techniques. It was found that the exfoliated nanosheets have an average thickness of 1.44 nanometres (about 3 to 4 atomic layers), with curly edges and fluffy structures. They were found to have a mesoporous structure with a pore diameter in the range of 2 to 50 nanometers. It was anticipated that a larger specific surface area of the nanosheets, an abundance of active sites, a higher number of functional groups (–NH2 and oxygen) and a reduced distance of charge transfer between the layers would make the exfoliated sheets more efficient catalysts.

The photocatalytic performance of the samples in triggering the degradation of organic dyes and antibiotics was evaluated under solar irradiation at room temperature. These results were compared with the photocatalytic performance of pristine g-C3N4 to show to what extent the exfoliation process has improved the performance of the sample. The pollutants that were tested for degradation were methylene blue (MB) and Rhodamine B (RhB) dye and complex antibiotics like and Ciprofloxasin (CIP). Water samples in which the catalytic action was tested were:

- Deionized water (Distilled water)
- River water collected from the Barak river of Assam
- Lake water from a lake at NIT Silchar, Assam
- Tap water from the local tap in Silchar, Assam

The prepared suspension was left in the dark for 60 minutes to establish an adsorption– desorption equilibrium between the compound and the catalyst. After an hour, the solution was exposed to light for a measured amount of time. At fixed intervals of time, 2 ml of the suspension was extracted from the reaction chamber and centrifugated at 10,000 rpm for 10 minutes. To monitor the degradation rate, the samples' UV–visible absorption spectra were recorded using a spectrophotometer.

Fig 3 shows the results of the photocatalytic degradation of methylene blue in aqueous solution, under the influence of the four samples of catalyst. With CN-600 as the catalyst, there was complete degradation of methylene blue within an hour. Similar results were obtained for the other pollutants too, establishing beyond any doubt that CN-600, or the sample exfoliated at 600 deg C, possesses the best photocatalytic properties.

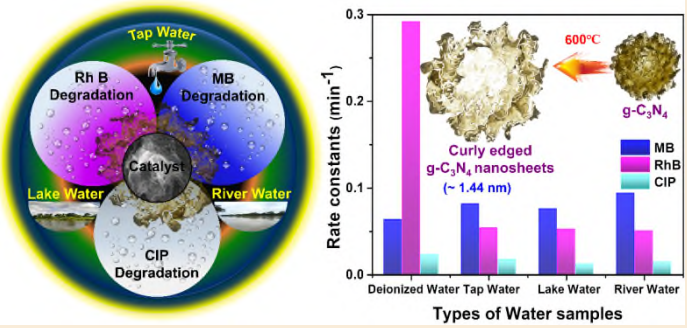

Fig 3: Photocatalytic performance of CN-600 towards the degradation of pollutants in different samples of water

The next step was to determine the optimum amount of catalyst needed for the degradation. It was found that the degradation rate experiences a rise from 0.029 per minute to 0.148 per minute as the amount of catalyst increases from 0.1 to 0.8 g per litre. The number of active sites on the catalyst's surface increases as more catalysts are added, leading to the generation of more hydroxyl and superoxide radicals that are essential for the degradation process.

The pH level of the water sample is another concern. Water from different sources has different pH levels. So the degradation of the MB dye was studied in aqueous solutions with gradually increasing pH levels from pH3 to pH11. It was found that the efficiency of the dye degradation rises with increasing pH levels. This is because, in a solution of lower pH value the surfaces of the CN-600 nanosheets acquire a positive charge and the cationic dyes get repelled from the surface. So, the catalysts lose their efficiency in highly acidic solutions with pH values of 3 or less. It has also been shown that after three successive runs there is negligible loss in the photocatalytic activity of CN-600.

Thus, the non-metallic nanosheets CN-600 have proved to be an efficient, reusable cost-effective material for cleansing several toxic chemicals of industrial effluents through the process of photocatalysis. Further research is being carried out in Dr. Avijit Chowdhury's lab at S.N. Bose National Centre for Basic Sciences, in collaboration with NIT Silchar, to design ways of extracting the catalyst from water after the cleansing process is over. Prof. Chowdhury says that if another co-catalyst with with ferromagnetic properties are integrated into the structure of the material during the process of fabrication, then the catalyst can easily be sucked back magnetically from the cleansed water and reused in the next cycle of cleansing.

It is hoped that shortly, CN-600 will be the wonder material for bringing back the health of our rivers.

This write-up is based on the paper Unlocking the potential of thermally exfoliated ultrathin g-C_3N_4 nanosheets: abundant active sites for enhanced solar photocatalysis published in the New Journal of Chemistry in May 2023

Additional reference:

- *https://earth5r.org/yamuna-river-pollution-sustainable-solutions-future/*
- *https://books.rsc.org/books/edited-volume/937/chapter/741366/Industrial-Wastewater-and-Its-Toxic-Effects*

Ph.D. Awarded/Submitted

Ph.D. Awarded

Atul Rathor. Duality In Lattice Gauge Theory. Supervisor: Manu Mathur.

Debayan Mondal. Investigating Electronic and Structural Properties of Hybrid Materials. Supervisor: Priya Mahadevan.

Arundhati Adhikari. Quasistatic and Ultrafast Magnetization Dynamics in Ferromagnetic Nanostructures. Supervisor: Anjan Barman.

Achintya Low. Structural, Physical, Electronic Properties Studies on Kagome Lattice Systems. Supervisor: Thirupathaiah Setti.

Shubhadip Moulick. Study Of Low Frequency Noise And Electronic Transport in 2D Van-der Waals Material And Their Functional Devices. Supervisor: Atindra Nath Pal.

Jyotirmoy Sau. Magnetic and Transport Properties in Correlated Topological Materials: A first-principles study. Supervisor: Manoranjan Kumar.

Sayan Routh. Synthesis, Transport, Structural, and Electronic Properties Studies of Topological

Systems. Prosenjit Singha Deo & Thirupathaiah Setti.

Dhrubajyoti Maji. Investigation of Interaction and Dynamics in Complex Liquids: Theory and Computer Simulations. Supervisor: Ranjit Biswas.

Jayanta Mondal. Experimental Dielectric Spectroscopic Investigation of Room Temperature Biodegradable Eutectic Solvents and Related Chemical Systems. Supervisor: Ranjit Biswas.

Tanmoy Chakraborty. Studies Of Fluctuations And Transport In Active Matter Systems. Supervisor: Punyabrata Pradhan.

Kanchan Meena. Scattering phase-shift of electrons & its applications in mesoscopic systems. Supervisor: Prosenjit Singha Deo.

Nivedita Pan. Photophysical Studies On Hybrid Nanomaterials For Manifold Applications. Supervisor: Samir Kumar Pal.

Rafiqul Alam. Investigation Of Electronic Transport In Topological And Correlated Materials. Supervisor: Atindra Nath Pal.

Krishnendu Sinha. Computational Investigation of the Mechanism of Molecular Recognition and Signaling Processes in Biomolecules: A Thermodynamic Study. Supervisor: Suman Chakrabarty.

Sudip Majumder. Spin Wave Dynamics In Ferromagnetic Nanostructures. Anjan Barman & Rajib Kumar Mitra.

Gesesew Reta Habtie. Study of Novae. Supervisor: Ramkrishna Das.

Soma Dutta. Ultrafast Spin Dynamics in Advanced Magnetic Structures for Applications in Spintronics. Supervisor: Anjan Barman.

Samir Rom. First-Principles Study of Emergent and Technologically Important Materials. Supervisor: Tanusri Saha Dasgupta.

Ph.D. Thesis Submitted

Subhajit Kar. Multi-wavelength Study of Wolf Rayet Stars. Supervisor: Ramkrishna Das.

Shubham Purwar. Synthesis, Structural, Electronic, And Magnetic Properties Studies of Two-Dimensional Magnetic Materials. Supervisor: Thirupathaiah Setti.

Anirban Paul. Microscopic Studies On The Response Of Bio-Molecular Systems To Perturbations. Supervisor: Jaydeb Chakrabarti.

Riju Pal. Transport and Spectroscopic Studies of Layered Magnetic and Low-Dimensional Superconducting Materials. Supervisor: Atindra Nath Pal.

Manodip Routh. Thermal and Quantum Fluctuations in Low Dimensional Frustrated Spin Systems. Supervisor: Manoranjan Kumar.

Anirban Roy Chowdhury. Computation of information theoretic quantities using gauge/gravity correspondence. Supervisor: Sunandan Gango-padhyay.

Arun Kumar Das. Various aspects of quantum measurements and their role in quantum information processing tasks. Supervisor: Archan S. Majumdar.

Subhankar Bera. Study of Various Aspects of Quantum Communications. Supervisor: Archan S. Majumdar.

Krishnendu Patra. Examining Unusual Ground States In Transition Metal Compounds. Supervisor: Priya Mahadevan.

Amrita Mondal. Spectroscopic Investigations of Interactions and Dynamical Complexities in Electrolytes and Multicomponent Chemical Systems. Supervisor: Ranjit Biswas.

Susanta Ghosh. Electronic and Magnetic Properties of Topological Quantum Materials. Supervisors: Prosenjit Singha Seo & Thirupathaiah Setti.

Kanika Kole. Functions of bio-molecules deviating from canonical structures. Supervisor: Jaydeb Chakrabarti.

NEWS AND EVENTS (Administrative)

Celebration of 131st Birthday of Satyendra Nath Bose

The Celebration of 131st Birthday of Satyendra Nath Bose was observed at Centre on 02.01.2025. On this occasion, Prof. Tanusri Saha-Dasgupta, the Director, SNBNCBS addressed the staff and students from Open Air Discussion Room of the Centre. On this occasion BoseStat@100 Coffee Table Book was released by the Director.

Republic Day was celebrated

The 76th Republic Day was celebrated at Centre on 26.01.2025. Prof. Tanusri Saha Dasgupta, Director of the Centre hoisted the National Flag. Employees and students of the Centre participated in this programme.

International Women's Day was celebrated

On 08.03.2025, International Women's Day was celebrated at Centre. The programme was comprising of panel discussion on the topics, (i) Women in Science – Celebrating the trailblazers shaping the future of research and innovation (ii) Women in Administration – Recognizing the leaders driving excellence in governance and management. Women Post Doctoral Fellows, Research Scholars, Administrative Staff members were the main participants in this panel discussion.

Swachchata Pakhwada observed

As per directives received from AI Division, Department of Science & Technology, New Delhi, the Centre observed "Swachchata Pakhwada" during 1st to 15th May, 2025 in its premises. On 1st May, 2025, mass pledge was taken by the employees and students of the Centre, mass cleaning of pavement areas (adjacent to surrounding walls) was taken place. From 2nd to 15th May, 2025 different activities viz., cleanliness of Main Building, awareness programme and distribution of safety jackets and safety gloves to cleaning staff, essay writing competition, invited lecture, health check-up camp for community helpers were organized at Centre. On the last day of Swachchata Pakhwada (i.e.,

15.05.2025) prizes were distributed to the staff of cleaning agencies / horticulture etc., who contributed maximum to the cause of maintaining health and hygiene at Centre. A short drama on the theme "Swachchata – Everyone's Business" was organized on this occasion.

World Environment Day

On 05.06.2025, World Environment Day was organized at Centre. The employees and students participated in a mass pledge taking ceremony. On this occasion, a tree plantation programme was organized at Centre premises.

Hindi Workshop organized

A Hindi Workshop was organized at Silver Jubilee Hall of the Centre on 24.06.2025 on the topic "Application of Transcription Tools in Hindi for Official Works at Government Offices". Mr. Pramod Rajak, Assistant Director (Language) conducted this programme.

International Day of Yoga

International Day of Yoga observed on June 21, 2025 at the Centre. The theme of the year was '*Yoga for One Earth, One Health*'. Members of the Centre, including faculty, staff and students, spontaneously took part in the yoga session.

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