



SATYENDRA NATH BOSE NATIONAL CENTRE FOR BASIC SCIENCES



Volume 15, Issue 1 (2025)

Editorial:

We are very pleased to publish the first 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 second half of 2024, from July to December. We hope readers will enjoy it. We wish you a very Happy New Year 2025, with good health and success in your professional endeavours.



Professor Satyendra Nath Bose

News and Events (Academic)

International Conference on Women in Quantum Science and Technologies

International Conference on “Women in Quantum Science and Technologies” held under BoseStat@100 at Centre during 17th to 19th July, 2024. The Convener of the conference was Dr. Saquib Shamim, Assistant Professor of the Centre and the Co-Conveners were Prof. Arti Garg, SINP, Kolkata and Dr. Parijat Dey, Assistant Professor of the Centre. This was the second international conference to celebrate the centenary of the colossal work of Prof. Satyendranath Bose. Besides his scientific attributes, Prof. Bose had a progressive mind compared to his time. Thus, in the centenary year of Bose-Einstein Statistics, it was relevant to celebrate the contribution of women in quantum science. The three day conference “Women in Quantum Science and Technologies” brought under focus the challenges and achievements of the women scientists and their path-breaking work in modern day quantum science.



International Conference on “Bose-Einstein Condensation, Superconductivity, Superfluidity and Quantum Magnetism”

A five-day International Conference on “Bose-Einstein Condensation, Superconductivity, Superfluidity and Quantum Magnetism” was held during 12.11.2024 to 16.11.2024 at Biswa Bangla Convention Centre, Kolkata.



The Convener of the conference was Prof. Amitabha Lahiri, Senior Professor and Dean (Academic Programme) and Co-convener was Dr. Arijit Halder, Assistant Professor of the Centre. The conference was a momentous event organized under BoseStat@100 by S.N. Bose National Centre for Basic Sciences, Kolkata to celebrate the centenary of the colossal work of Prof. Satyendranath Bose. The programme consisted of organizing three International Conferences and several outreach programmes throughout the year 2024. Out of these three conferences the third one was “Bose-Einstein Condensation, Superconductivity, Superfluidity and Quantum Magnetism”. The conference contained plenary and invited talks, as well as contributed talks/posters on Bose-Einstein Condensation, Superconductivity, Superfluidity and Quantum Magnetism. The lectures covered topics such as (but not restricted to) cold atomic physics, frustrated spin systems, phase transitions, critical phenomena, magnetism, superconductivity, applications of Bose statistics, topological phases etc.



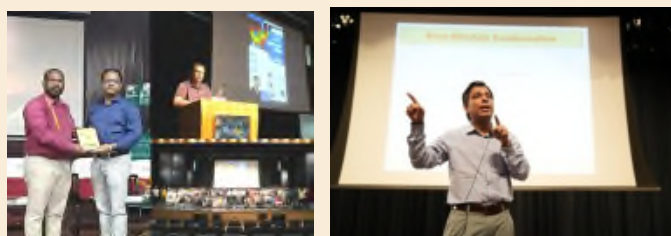
Public Outreach Programme celebrating BoseStat@100

As a part of a year-long celebration of the centenary of Bose-Einstein Statistics, S. N. Bose National Centre for Basic Sciences organized a public lecture jointly with Bangiya Bijan Parishad at Eastern Zonal Cultural Centre, Kolkata on November 17, 2024. There were two distinguished speakers, Professor M. Zahid Hasan, Eugene Higgins Professor of Physics at Princeton University delivered a lecture on ‘A new frontier in quantum science and engineering’, and Professor Atri Mukhopadhyay, former Professor of the Saha Institute of Nuclear Physics, delivered a lecture on ‘A relation that ebbed too soon: The case of S N Bose and Meghnad Saha.



Professor B.N. Jagatap from IIT Bombay inaugurated the event. Professor Tanusri Saha Dasgupta, Director of the S. N. Bose National Centre, underscored the importance of inspiring students through such events. Professor Gautam Gangopadhyay of Bangiya Bijan Parishad advocated for promoting science in the vernacular to foster a robust scientific culture. The event concluded with a vote of thanks from Dr. Manik Banik.

SNBNCBS conducted various outreach programmes. Some of these outreach programs are being conducted in collaboration with various local chapters of Indian Physics Association (IPA). Outreach programme at Gitam University, Visakhapatnam on 27.09.2024 and NISER, Bhubaneswar organized on 18.10.2024. Several faculty members from SNBNCBS have contributed as resource persons in these events attended by many bright students and young researchers.



National Space Day 2024

S N Bose National Centre for Basic Sciences, Kolkata, celebrated the National Space Day on the 23rd August 2024 in collaboration with Regional Remote Sensing Centre East (RRSC), ISRO, Salt Lake, Kolkata. About 100 B.Sc. and M.Sc. students from the surrounding colleges and universities along with the students of SNBNCBS participated in the program. In this day-long program, there were three scientific talks by Dr. Tanumi Kumar of RRSC, and Dr. Soumen Mondal & Dr. Tapas Baug of SNBNCBS. In the post lunch session, participants visited the Exhibition Hall of RRSC East. Different models of rockets and space crafts were displayed in the exhibition. The participants also visited 'Bose Archive' at SNBNCBS. In the evening, a telescope demonstration was arranged by Dr. Ramkrishna Das and his students at SNBNCBS campus. The students were very much enthusiastic and enjoyed the program.



Colloquium / Named Lectures

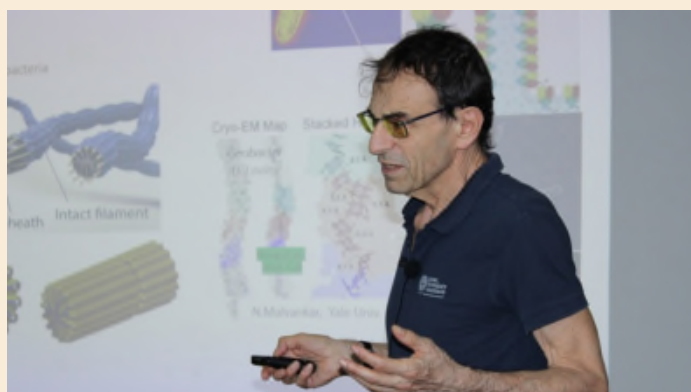
Bose Colloquium



Prof. Satish Ogale, Director at Research Institute for Sustainable Energy, TCG-CREST, Salt Lake, Kolkata and Adjunct Faculty, Dept. of Physics, IISER, Pune, delivered a lecture on the topic 'Powering the New World: The Pursuit of Sustainable and Affordable Solutions' on 26.07.2024.



Prof. Giridhar U Kulkarni, President, JNCASR and Adjunct Professor at CeNS, Bangalore, delivered a lecture on the topic 'Neuromorphic devices based on self-formed Ag nano-labyrinth structure' on 17.09.2024.



Dr. David Cahen, Associate Professor in Radiology, Harvard Medical School, Associate Neuroscientist, Massachusetts General Hospital, delivered a lecture on the topic 'Unintended Consequence of Electronic Conduction via Proteins' on 18.12.2024.

Institute Colloquium



Prof. Birgit Weber, Professor of Inorganic Chemistry, University of Bayreuth, delivered a lecture on the topic 'Multifunctional Switchable Molecules In Polymers' on 28.08.2024.



Prof. Jayasimha Atulasimha, Engineering Foundation Professor, Mechanical and Nuclear Engineering, Electrical and Computer Engineering and Physics (Courtesy/Affiliate Professor), Associate Director, Institute for Sustainable Energy and Environment (ISEE), Virginia Commonwealth Univ. delivered a lecture on the topic 'Nanoscale magnetic devices for: Energy efficient computing and scalable quantum control' on 08.11.2024.



Prof. S. N. Piramanayagam, Associate Professor, Division of Physics & Applied Physics, Nanyang Technological University, Singapore, delivered a lecture on the topic 'Brain-Inspired Computing Using Magnetic Domain Wall Devices' on 17.12.2024.

Special Lectures / Conferences / Seminars

Discussion meeting on Magnetism and Topology: A Materials Physics Perspective

A one-day discussion meeting titled “Magnetism and Topology: A Materials Physics Perspective” was held on 01.08.2024 at Centre. The Convener of the meeting was Prof. Manoranjan Kumar, Professor.

Discussion meeting: Stat. Mech. Meeting Kolkata (SMMK-2024)

A one-day discussion meeting titled “Stat.Mech. Meeting Kolkata (SMMK-2024)” held on 27.09.2024 at S.N. Bose National Centre for Basic Sciences. The Conveners of the meeting were Professors Jaydeb Chakrabarti, Punyabrata Pradhan, Raja Paul, IACS, Kolkata.

Conference on National Conference on Electronic Structure (NCES-2024)

A three-days conference on “National Conference on Electronic Structure (NCES-2024)” was held during 21.11.2024 to 23.11.2024 at SRM University, Amaravati, Andhra Pradesh. One of the National Convener was Dr. Thirupathiah Setti, Associate Professor, S.N. Bose National Centre for Basic Sciences, Kolkata.

Discussion meeting on the topic “First Academic Meeting on the Consortium for Quantum Condensed Matter

A two-days discussion meeting on the topic “First Academic Meeting on the Consortium for Quantum Condensed Matter” was held in the Centre during 18-19 November, 2024 at Centre. The Convener of the meeting was Prof. Manoranjan Kumar, Professor, S.N. Bose National Centre for Basic Sciences and Co-Convener was Dr. Nitesh Kumar, Assistant Professor, S.N. Bose National Centre for Basic Sciences, Kolkata. The aim of this meeting was to unite faculty members engaged in quantum materials and many-body physics, facilitating discussions on current research topics and potential collaborations.

Conference on 7th Annual Conference on Quantum Condensed Matter (QMAT-2024)

A four-days conference on “7th Annual Conference on Quantum Condensed Matter (QMAT-2024)” held during 20.12.2024 to 23.12.2024 at IIT, Guwahati. The Convener was Subhradip Ghosh, IIT, Guwahati, Dr. Uday Narayan Maiti, IIT, Guwahati, Dr. Pankaj Kumar Mishra, IIT, Guwahati and Co-Convener was Dr. Saquib Shamim, Assistant Professor, S.N. Bose National Centre for Basic Sciences, Kolkata.

Other Seminars

A Departmental Seminar (CMMP) was held on 03.07.2024. Dr. Arnab Maity, Post-Doctoral Fellow, Department of Chemical Engineering, Technion, Israel, delivered a lecture on the topic ‘Atomically thin 2D-Field Effect Transistors and Printed Chemi-resistors for Rapid biopsy of Malignant Lesion, Chirality Identification, and Aquatic Hazards Assessment’

A Departmental Seminar (AHEP) was held on 08.07.2024. Dr. Subhrooneel Chakrabarti, Postdoctoral Researcher, The Institute of Physics of the Czech Academy of Sciences, delivered a lecture on the topic ‘An Ode to Action’.

A Departmental Seminar (CBS) was held on 09.07.2024. Dr. Krishnananda Chattopadhyay, Chief Scientist and the Head of the Structural Biology and Bioinformatics Division at CSIR-Indian Institute of Chemical Biology, Kolkata, delivered a lecture on the topic ‘Conformational fluctuations of proteins: from soft-matter physics to the disease biology of neuro-degenerations’.

A Departmental Seminar (PCS) was held on 12.07.2024. Prof. Dibyendu Das, Professor, Physics Dept, IIT Bombay, delivered a lecture on the topic ‘Analytical Distribution of Released Synaptic Vesicles: Binomial or Not?’.

A Departmental Seminar (CBS) was held on 13.08.2024. Dr. Neelanjana Sengupta, Associate Professor, IISER – Kolkata, delivered a lecture on the topic ‘Capturing Biomolecular Responses In Silico: Opportunities and (Some) Limitations’.

A Departmental Seminar (AHEP) was held on 23.09.2024. Dr. Nirupam Roy, Associate Professor, Department of Physics, Indian Institute of Science (IISc), Bangalore, delivered a lecture on the topic ‘Atomic ISM in galaxies, near and far: Results & Surprises’.

A Departmental Seminar (CBS) was held on 25.09.2024. Dr. Santosh Gupta, Scientific Officer, Radiochemistry Division, BARC, delivered a lecture on the topic ‘Phosphor Converted Light Emitting Diodes’.

A Departmental Seminar (PCS) was held on 17.10.2024. Dr. Dibyendu Roy, Associate Professor, Theoretical Physics, Raman Research Institute, delivered a lecture on the topic ‘Nonreciprocal transport in linear systems with balanced gain and loss in the bulk’.

A Departmental Seminar (PCS) was held on 28.11.2024. Dr. Anupam Kundu, Associate professor, International Centre for Theoretical Sciences, Bangalore, delivered a lecture on the topic ‘Restarting can expedite target search’.

A Departmental Seminar (CMMP) was held on 11.12.2024. Dr. Ramachandrarao Yalla, Assistant Professor, University of Hyderabad, delivered a lecture on the topic ‘Quantum photonics with fiber-based nanophotonic platforms’.

Early Career Talk

An Early Career Talk (PCS) held on 11.07.2024. Dr. Sambarta Chatterjee, Postdoctoral Research Associate, Jacobs Group, Princeton University, delivered the lecture on the topic ‘Programmable design of self-assembly: A multi-objective optimization approach’.

An Early Career Talk (AHEP) held on 15.07. 2024. Dr. Tanmoy Paul, Assistant Professor at Visva-Bharati University, Dept. of Physics delivered the lecture on the topic ‘Cosmology, Thermodynamics and Modified theories of gravity’.

An Early Career Talk (AHEP) held on 31.07.2024. Dr. Subhajeet Karmakar, NASA Postdoctoral Program (NPP) Fellow, Exoplanets and Stellar Astrophysics Laboratory, NASA Goddard Space Flight Center (GSFC), USA, delivered the lecture on the topic 'Are we looking at the correct habitable worlds? - A stellar astrophysicist's perspective'.

An Early Career Talk (PCS) held on 06.08.2024. Dr. Jasleen Kaur, PhD, IIT Bhubaneswar, delivered the lecture on the topic 'Energetics of the dissipative quantum oscillator'.

An Early Career Talk (PCS) held on 08.08.2024. Suman Dutta, PhD, NCBS-TIFR, delivered the lecture on the topic 'Persistent Active Fluids'.

An Early Career Talk (AHEP) held on 12.08.2024. Sayantani Bera, Postdoctoral Research Fellow, Relativity and Gravitation Group, Universitat de les Illes Balears, Palma, Spain delivered the lecture on the topic 'Probing cosmic expansion with gravitational wave-large scale structure correlations'.

An Early Career Talk (CMMP) held on 16.08.2024. Sudipta Dutta, Associate Professor, Department of Physics, Indian Institute of Science Education and Research (IISER) Tirupati, delivered the lecture on the topic 'Designing two-dimensional noncentrosymmetric systems for valley-polarization'.

An Early Career Talk (AHEP) held on 19.08.2024. Arpan Kundu delivered the lecture on the topic 'New Lessons from (Generalised) BMS Symmetries & Soft Graviton Theorems'.

An Early Career Talk (AHEP) held on 20.08.2024. Kinjal Roy, Research Fellow, Astronomy & Astrophysics Group, Raman Research Institute, Bengaluru, delivered the lecture on the topic 'Reprocessing environment in HMXB Pulsar'.

An Early Career Talk (CBS) held on 27.08.2024. Saswati Santra, Post-doctoral Fellow, Walter Schottky Institute, Technical University of Munich, Germany delivered the lecture on the topic 'Sub-nanoscale Engineering for Strategic Electrosynthesis of Green Chemicals'.

An Early Career Talk (AHEP) held on 03.10.2024. Ananada Maity, Post Doc at Okinawa Institute of Science and Technology, Japan delivered the lecture on the topic 'Conditions for catalytic state transformations: can they be made finite and practical?'.

An Early Career Talk (AHEP) held on 04.10.2024. Ruchi Pandey, Postdoctoral Research Fellow, Astronomy & Astrophysics Division, Physical Research Laboratory (a Unit of Dept. of Space, Govt. of India), Ahmedabad, India delivered the lecture on the topic 'Shock-induced dust formation in nova V2891 Cyg: A phenomenological approach'.

An Early Career Talk (AHEP) held on 21.10.2024. Suchetana Goswami, Senior Researcher, Quantum Software Lab, Informatics Forum, The University of Edinburgh, UK delivered the lecture on the topic 'Information locking and its resource-efficient extraction'.

An Early Career Talk (CMMP) held on 30.10.2024. Sourav Manna, Post-doctoral Research Associate, Department of Theoretical Condensed Matter Physics, Weizmann Institute of Science, Israel delivered the lecture on the topic 'Diagnostics of Anomalous Conductance Plateaus in Abelian Quantum Hall Regime'.

An Early Career Talk (CMMP) held on 09.12.2024. Pavan Nukala, Assistant Professor, Centre for Nano Science and Engineering, Indian Institute of Science (IISc), Bangalore delivered the lecture on the topic 'Visualizing solid state amorphization in ferroelectric In₂Se₃'.

An Early Career Talk (CBS) held on 10.12.2024. Premashis Manna, Assistant Professor, Department of Chemistry & Biochemistry, The Ohio State University Columbus, Ohio, delivered the lecture on the topic 'Energetics of protein-protein interactions in light-harvesting complexes'.

An Early Career Talk (CMMP) held on 12.12.2024. Abhishek Pandey, Senior Lecturer, University of the Witwatersrand, Johannesburg, Gauteng, South Africa, delivered the lecture on the topic 'Unconventional physical properties of a few tetragonal AT 2 Pn 2 compounds'.

An Early Career Talk (CMMP) held on 24.12.2024. Mukul Kabir, Professor, Department of Physics, Indian Institute of Science Education and Research, Pune, delivered the lecture on the topic 'Advancing 2D Magnetism: Room-Temperature Ordering to Quantum Topological States'.

Scientific Story

Study of Kindlins Reveal New Pathways to Cancer Treatment

Shubhasis Haldar

Siddharth Mukherjee, in his 2011 book Emperor of Maladies, writes, "Cancer is often described as the defining plague of our generation. Cancer is not one disease but many diseases. We call them all cancer because they share a fundamental feature: the abnormal growth of cells".

Generations of people, with exemplary grit, imagination, optimism and inventiveness have waged their battle against 'the emperor of all maladies, the king of terrors'. The battle against cancer is 4000 years old. The latest team to join this battle is from the Department of Chemical and Biological Sciences at S. N. Bose National Centre for Basic Sciences in Kolkata. Led by Debojyoti Chowdhury, under the guidance of Prof. Shubhasis Haldar, they have collected data of 10,000 patients with 33 cancer types from The Cancer Genome Atlas, to understand the role of Kindlins in turning normal cells into cancerous ones.

Kindlins are adapter proteins that exist inside the cells attached to the cell membranes of almost all types of cells in vertebrates. They act as mechanochemical transducers, transferring extracellular mechanical cues to biochemical signals inside the cell. Kindlins play a pivotal role in conveying extracellular signals by physically interacting

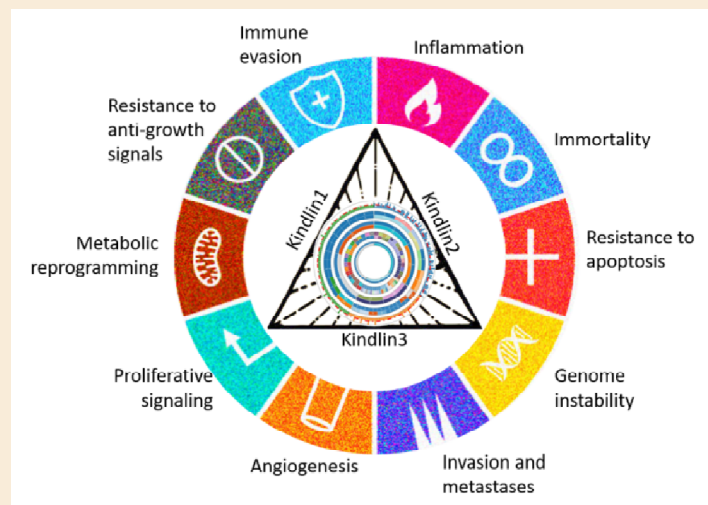
with structural proteins, receptors and transcription factors, triggering a cascade of chemical signals within the cell.

Structural disruptions in these proteins can have a global impact on mechanochemical signaling, leading to disruptions in the state of balance among all the body systems needed for the body to survive and function correctly. This balanced state of the body is called homeostasis.

Kindlins may undergo mutations under the influence of innumerable chemical and physical carcinogens like nicotine, ultraviolet rays and many more. Mutated Kindlin can potentially disrupt global mechanical homeostasis within cells. Therefore, understanding the consequences of genetic alterations in Kindlins holds the key to unraveling the intricate mechanisms leading to the growth of cancer cells.

In recent years, the role of Kindlins in cancer has gained much attention for two main reasons. First, in addition to the known role of Kindlins in integrin activation, they also act as adapter proteins to connect multiple cancer promotion and angiogenesis. Angiogenesis plays a critical role in the growth of cancer because solid tumors need blood supply for growing beyond a few millimeters in size, and tumors promote the formation of these blood supplies by releasing chemical signals that stimulate angiogenesis. Interestingly, it has been observed that Kindlins play an active part in triggering these chemicals.

Kindlin family of proteins contains three members: Kindlin 1, 2, 3. These proteins are the product of the three genes: FERMT1, FERMT2 and FERMT3 respectively. They have distinct amino acid sequences and tissue distribution. It has been observed that Kindlin 1 regulates the immune microenvironment in breast cancer. Cancer-specific metabolic regulation, such as proline biosynthesis, is governed by Kindlin 2. Debojyoti Chowdhury explains that 'Hippo signaling is a kind of signal in cancer cells that tells the cell to migrate and invade other tissues. Kindlin 2 can also regulate HIPPO signaling.



The association of alterations in kindlin family proteins with 10 hallmarks of cancer.

In their work 'pan cancer analysis to understand Kindlin associated global mechanochemical alterations', the team has

collected data on 10,000 cancer patients suffering 33 different types of cancer from reliable sources. The researchers employed structural and functional genomic tools on this data to investigate the influence of Kindlin family proteins on mechanochemical signaling in various cancers. The results highlighted the role of Kindlins in processes related to tumor progression, metastasis and epithelial-mesenchymal transition (EMT). In EMT, cells shift from being more like tightly packed, organized epithelial cells (like those lining our skin) to becoming more free-moving and flexible mesenchymal cells (like those in our muscles). This process happens when cancer cells spread to different parts of the body.

So, the study strongly suggests that Kindlins participate in essential mechanosensitive pathways. This study also suggests a potential link between Kindlin dysfunction and adverse survival outcomes. Here are the highlights of the finding from the study:

1. Kindlin alternations are found across multiple cancer types.
2. Kindlin mutations are linked with tumor progression and metastasis.
3. Mutations affect the structural-functional dynamics of Kindlins.
4. Kindlins coalter with their interactome to shape the global genomic signature in cancer.
5. Kindlin-related alterations are associated with cancer hallmark pathways.
6. Kindlins cooperate with the cancer mechanome and related biological processes. (The cancer mechanome refers to the mechanical properties of cancer cells and their surrounding environment. It reveals about the stiffness or softness of the tissues, how cells move and deform, and their response to physical forces.)

This structural genomics approach establishes associations with clinical parameters, providing evidence for the potential mechanochemical importance of Kindlins across diverse cancer stages and subtypes. "By studying all Kindlin family members collectively, we can gain a comprehensive understanding of their potential complementary and synergistic roles in cancer biology", says Debojyoti. "This includes examining the interaction of different Kindlin proteins with each other or with other cellular components to influence cancer cell behavior, tumor progression, and response to therapy".

The study conducted with data of 10,000 cancer patients corroborates to earlier studies. "The data related to Kindlin family alternations and mutational and stability analyses presented in our work strongly coincide with those of previous experimental studies. We found that Kindlin 2 expression is elevated in breast cancer, and it activates epithelial-mesenchymal transition (EMT)" asserts Chowdhury. Similar results had been obtained in earlier experiments too.

In what way has the present study taken our understanding of the ‘emperor of maladies’ forward in a significant way? The study has helped in deciphering the intricate interplay between tumors and their micro-environment. It has brought out the potentiality of Kindlins as promising targets for innovative mechano-modulatory cancer therapeutics, offering context-dependent avenues for intervention and treatment strategies.

Chemoresistance and tumor relapse are two major challenges faced by oncologists. The present study will serve as a beacon for developing future therapeutic strategies, targeting the roles of Kindlins in cancer treatment. This will open a new strategy in the 4000 years old war against cancer.

This write up is based on the paper “Pan-cancer analyses suggest kindlin associated global mechanochemical alterations” published in Communications Biology in 2024.

Ph.D. Awarded/Submitted

Ph.D. Awarded

Arnab Sarkar. A Study Of Cosmology With Gravitational Waves And Primordial Black Holes. Supervisor: Archan S Majumdar & Rajesh Kumble Nayak (IISER-K).

Anirban Mukherjee. Studies Of Hydrodynamics And Fluctuations In Sandpiles. Supervisor: Punyabrata Pradhan

Anupam Gorai. Magnetic and Microwave Properties of Transitional Metal Oxide Based Nanostructures. Supervisor: Kalyan Mandal.

Neeraj Kumar. Thermodynamic Aspects of Black Holes. Supervisor: Sunandan Gangopadhyay.

Sk Saniur Rahaman. Quantum Phases in Quasi-One Dimensional Frustrated Spin Systems. Supervisor: Manoranjan Kumar.

Suravi Pal. Structure and dynamics of modulated colloids: Theoretical studies. Supervisor: Jaydeb Chakrabarti.

Ardhendu Pal. Coherent And Incoherent Optical Source Based Cavity Enhanced Absorption Spectroscopy For Trace Molecule Sensing. Supervisor: Manik Pradhan.

Premashis Kumar. Nonequilibrium Thermodynamic Signatures of Some Complex Dynamical System. Supervisor: Gautam Gangopadhyay.

Thesis Submitted

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.

Manjari Dutta. Some Studies on Exact Solutions of Models In Noncommutative Spaces. Supervisor: Sunandan Gangopadhyay.

Narayan Chandra Maity. Understanding the Structural and Dynamical Complexities of Neat and Multi-component Media. Supervisor: Ranjit Biswas.

Ria Saha. Some Studies On The Conformational Stability, Hydration Dynamics And Activity Of Biomolecules In Presence Of Co-Solutes. Supervisor: Rajib Kumar Mitra.

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

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

Sreya Pal. Spin Dynamics of Ferromagnetic Thin Films, Heterostructures, and Nanostructures. Supervisor: Anjan Barman.

NEWS AND EVENTS (Administrative)

Nasha Mukht Bharat Abhiyan

In pursuance to the Office Memorandum No. Misc/33-2024-CDN dated 08.08.2024 issued by Deputy Secretary, Department of Science and Technology, Govt. of India, all the employees and students of the Centre were requested to take e-pledge with theme “Vikasit Bharat Ka Mantra, Bharat Ho Nashe Se Swatantra” in the Nasha Mukht Bharat Abhiyan (NMBA) portal on 12.08.2024. Total forty-six (46) employees and students took the e-pledge and submitted the e-certificate to Administration Section.

Independence Day Celebration

The Centre celebrated the 77th year of independence at its premises on 15th August, 2024. The staff members, students and visitors joined the programme. The national flag was hoisted by Prof. TanusriSaha Dasgupta, Director of the Centre at 10.00 a.m. and garlanding of S.N. Bose bust was held on this occasion.



Hindi Pakhwada

The Centre observed Hindi Pakhwada during 14th to 29th September, 2024 in its campus. Hindi Pakhwada was inaugurated on 17.09.2024 by Prof. Tanusri Saha-Dasgupta, Director, SNBNCBS. On this occasion, Mr. L. K. Singh, Department of Official Languages and Prof. Reshmi Panda Mukherjee from Gokhale Memorial Girls' College delivered their speeches. On 18.09.2024 a Hindi Essay Writing Competition was held in the Fermion Hall of the Centre on the theme "Mathematics is the Music of Wisdom". The students and staff participated in this competition. On 20.09.2024 a Hindi Karyashala was organized and Mr. Ajay Shankar Mishra, Senior Hindi Officer, SAIL, Kolkata conducted the programme. On 26.09.2024 a Hindi Quiz competition was organized at Silver Jubilee Hall of the Centre and the students and staff participated enthusiastically.

Eye Check Up Camp

An Eye Check Up Camp was organized at Centre on 04.10.2024 for the faculty, staff and students of the Centre. The Susrut Eye Foundation & Research Centre, Salt Lake, Kolkata who are enlisted with the Centre for cashless IPD treatment facilities as per CGHS rates, organized the camp. The free of cost tests comprises, refraction, blood pressure checking, colour vision checking, automated perimetry test, fundus photo of diabetic people by AI based equipment etc. A team of doctors comprising two Optometrists, three CHWs and two organizers from the hospital conducted the programme. Total One hundred and fifty-one (151) students, employees and other auxiliary staff participated in the Eye-Check-Up Camp.

Intra-Institute Chess Tournament

The Sports Activity Group of Mukangan organized an Intra-Institute Chess Tournament during 24.10.2024 and 25.10.2024 at Centre. Also, an Intra-Institute Football Tournament held during 28.10.2024 and 29.10.2024 at Centre premises organized by Sports Activity Group of Mukangan.

Vigilance Awareness Week

The Centre observed Vigilance Awareness Week-2024 from 28th October 2024 to 3rd November 2024 with the theme "सत्यनिष्ठा की संस्कृति से राष्ट्र की समृद्धि" "Culture of Integrity

for Nation's Prosperity" to promote integrity, transparency and accountability within the organization. The programme began at the Centre on 28th October 2024 at 11.00 a.m., taking pledge by all academic and administrative staff members of the Centre. The Pledge was administered by Dr. Suman Chakrabarty, Part-time Chief Vigilance Officer, S. N. Bose National Centre for Basic Sciences. Centre also organized an Essay Writing Competition as a part of observation of Vigilance Awareness Week-2024.

Hindi Workshop

A Hindi workshop was organized on 23.12.2024 at 4.00 p.m. at Silver Jubilee Hall of the Centre on the subject "Karyalayin Hindi Mein Kam Kaj Mein Samanya Trutiyaon Ka Nirakoron". Shri Narayan Shaw, Chief Manager (Rajbhasha), Power Grid Corporation of India Ltd., Kolkata conducted the workshop.

Observance of Swachchata Hi Seva

As per the Government of India directives, the S. N. Bose National Centre for Basic Sciences successfully observed the Swachchata Hi Seva from 17 September to 1st October 2024. During the fortnight, various swachchata activities done in the Centre in order to make surrounding of the campus clean and healthy. Motivated people to actively take part in the cleanliness drive as well as cheering up the housekeeping staff by honouring their services with "Swachchata Samman" certificates and prizes. and horticulture maintenance work.



Editorial Board:

Saumen Adhikari, Jaydeb Chakrabarti, Sanjoy Choudhury, Ramkrishna Das, Gurudas Ghosh, Manoranjan Kumar, Rajib Kumar Mitra, Punyabrata Pradhan.

For any comments, suggestions and input, please mail to: punyabrata.pradhan@bose.res.in

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