

Technical Session 1

Subject - Agricultural Sciences including Veterinary Sciences

Date: 24.01.2025

Time: 2:30 PM - 5:45 PM

Venue: Room V6

INVITED LECTURE: Dr. Suprabhat Mukherjee

Developing animal models for intervening infectious and inflammatory diseases: Immunopharmacological perspectives

Sl. No.	Application No.	Name of the Presenting Author	Title of the Abstract
1	024201	Anannya Dhar	Nano DAP as a sustainable nutrient input for enhancing the performance of summer greengram [<i>Vigna radiata</i> (L.) Wilczek] in the New Alluvial Zone of West Bengal
2	085228	Bhaskar Paul	Current Susceptibility Status of Fall Armyworm, <i>Spodoptera frugiperda</i> (Lepidoptera: Noctuidae) Infesting Maize against Commonly Used Insecticides in Different Agro-Ecological Fields from Uttar Dinajpur, West Bengal
3	054133	Biswajit Patra	Resistance status of okra jassid, <i>Amrasca biguttula biguttula</i> and its management
4	103146	Biswanath Karmakar	Application of Starch-Based Edible Coatings for Preservation of Nutritional Quality and Shelf-Life Improvement of Tomato Fruits
5	024258	Dibakar Ghosh	Synthesis of Hydrogel-based Nutrient-encapsulated Mesoporous Silica Nanocomposites and their Application in Ameliorating Salinity Stress in Wheat
6	101836	Lagnojita Pal	Exploring the Role of Zinc Oxide Nanoparticles in Alleviation of Arsenic-Induced Toxicity in Chickpea (<i>Cicer arietinum</i> L.): An In-Depth Analysis of Growth Dynamics and Physiological Resilience
7	042019	Nonigopal Shit	Probiotics: Profitable Solution to Improve Production and Quality Meat of Kadaknath Chicken for Business Potential and Better Rural Economy
8	105446	Oendrilla Chakraborty	A cross- compatibility study in <i>Gladiolus</i> (<i>Gladiolus grandiflorus</i> L.) in Terai region of West Bengal
9	011138	Prabir Barma	Sustainable Water Management in Agriculture: Enhancing Conservation and Irrigation Efficiency
10	032518	Preeti Subba	Terror of the Looper Pest (<i>Hyposidra Talaca</i>) in Northeast India's Tea Plantations: Risk Assessment and Management Challenges

Technical Session 2

Subject - Application of AI/ML in Sustainable Development

Date: 24.01.2025

Time: 2:30 PM - 5:45 PM

Venue: Room 4

INVITED LECTURE: Dr. Saptarshi Ghosh Sustainable Education for Nation Building: Role of AI/ML for Academia

Sl No.	Application No.	Name of the Presenting Author	Title of the Abstract
1	024355	Akhileshwar Prasad	Progress in Machine Learning for Chemistry: A 25-Year Perspective with a Case Study on Predicting Liquid Crystal Transition Temperatures
2	110016	Souvik Konar	AI Tools for Students and Researchers for Scientific Literature Reviews and Analysis: Quality and Effectiveness
3	122732	Nilanjan Bal	Understanding Land Degradation Neutrality (SDG 13.3.1) at the Local Level Using Dense-net Long-term Short-term Memory Network (LSTM) Based Deep Learning Algorithm and Structural Equation Modeling (SEM): A Case Study on Ramnagar-Mughalsarai Planning Region, India
4	042733	Prosenjit Barman	A Deep Learning Approach for Measuring Transit-Oriented Development of the Kolkata Metropolitan Area
5	012610	Sagarika Saha	Integrating Machine Learning with Blockchain: A Secure Patient-Centric Electronic Health Record System for Breast Cancer Detection
6	112843	Sayantani Barsha	Navigating the Possibilities of Artificially Intelligent Information Systems in achieving Sustainable Development: Challenges and Prospects of Third World Countries
7	124317	Sourav Mazumder	A Scientometric Review of Global Research on Energy Consumption in Data Centers: Trends, Challenges, and Sustainability
8	111515	Subham Ch Shil	Artificial Intelligence Driven Innovation in Banking: Tools and Approaches for Sustainable Financial Growth
9	064117	Suvojyoti Paul	Technology driven solutions for forest Conservation: Mitigating Human-Induced Environmental Challenges in Coochbehar
10	112350	Tanushree Biswas	Application of AI-based Learning Analytics in HEIs: Opportunities & Challenges

Technical Session 3

Subject- Botany

Date: 24.01.2025

Time: 2:30 PM-5:45 PM

Venue: Room V4

INVITED LECTURE: Dr. Amit Kumar Rai

Understanding the Microbiome and biotransformation of food components in traditional fermented foods for development of plant based functional foods using multi-omics approaches

Sl No.	Application No.	Name of the Presenting Author	Title of the Abstract
1	063113	Ashish Prasad	Autophagy and RNAi shake hands for defence against ToLCNDV
2	125534	Gitanjali Basumata	Crown Rot Disease of Banana and Trial of Sustainable Management
3	082624	Jayita Sarkar	Determination of LD50 (Lethal Dose) of Ethyl Methane Sulphonate (EMS) for Inducing Mutagenicity in Three Local Rice Cultivators
4	105149	Jaysoon Subba	Morpho-molecular Identification of fungal pathogens infecting some locally growing fruits of Darjeeling Himalaya
5	110203	Kavita Ghosal	"CRISPR-CAS: THE CUTTING-EDGE SOLUTION FOR COMBATTING OXIDATIVE STRESS IN PLANTS"
6	081423	Koushik Maji	Enhancing the Survival of Brassica juncea Under Salinity Stress Through Exogenous Glutamate Application in a Microfluidic Device
7	042736	Pallabi Mandal	Documentation of Algal Diversity of Three Freshwater Source
8	113120	Prashan Kumar Chhetri	Phytotoxic Effects of Lead Exposure on Hydroponically Grown Ornamental Ferns (<i>Asplenium nidus</i> L. and <i>Davallia griffithiana</i> Hook.) from Kalimpong District, West Bengal
9	124546	Puja Saha	Evaluation of the size-dependent uptake of silica nanoparticles in plants and their impact on salinity stress responses

Technical Session 4

Subject- Chemical Sciences

Date: 24.01.2025

Time: 2:30 PM - 5:45 PM

Venue: Room V1

INVITED LECTURE: Dr. Pranab Ghosh

Biodegradable multifunctional lube oil additive: A Sustainable Approach towards the reduction of Environmental Pollution

Sl No.	Application No.	Name of the Presenting Author	Title of the Abstract
1	053118	Ajit Tudu	Multienzyme mimicking cascade Co-Mn ₃ O ₄ Nanozyme for ROS elimination and label free detection of Cystine
2	055435	Amarjit Kamath	Synthesis, crystal structure, DFT study of a novel Cu(I) complex with promising catalytic and biological properties
3	083903	Ankita Shome	Flower-like oxidase and peroxidase mimic Co-CuO nanoparticles
4	010700	Ayesha Hossain	Probing Host-guest Inclusion Complex of DHP with β -CD in Augmenting Bioavailability to Boost Biochemical applications Optimized by Physicochemical and Molecular Docking
5	104933	Debadrita Roy	Assembly of Adiphenine Hydrochloride and (2-Hydroxypropyl) – β - Cyclodextrin into A Supramolecule – Synthesis, Comprehensive Characterization and Applications
6	053745	Dilip Sarkar	Fluorogenic detection of mercury ion in aqueous environment using a potent chemosensor
7	100658	Nilanjan Roy	Development of a New Methodology for the Determination of Metal Ion Released from Unstable Metal Organic Framework
8	085645	Ningma Dorzi Sherpa	Acid functionalized CNTs decorated with Non-Nobel Metal for Electrochemical Nitrate reduction to ammonia
9	110423	Pallobi Sarkar	A Blue Light Emitting Ionic Liquid derived low dimensional organic material for detection of Mutagenic Nitro Aromatic Compounds
10	103647	Priyanka Roy	Exploring Host-Guest Inclusion Complex of a Medicinal Drug with α -CD for Its Innovative Applications in Biochemical Systems by Physicochemical and Computational Approach

Technical Session 5

Subject- Earth Sciences including Geoinformatics and Hydrogeology

Date: 24.01.2025

Time: 2:30 PM - 5:45 PM

Venue: Geog Lab

INVITED LECTURE: Dr. Punarbasu Chaudhuri

Scope of Earth Science Research through Indian Antarctic Program

Sl No.	Application No.	Name of the Presenting Author	Title of the Abstract
1	115109	Akash Biswas	Degradation Risk Assessment of the Geomorphosites in the Hilly Region of Darjeeling District of West Bengal, India
2	013927	Amit Sarkar	An Assessment of Lateral Migration of River Torsa and Kaljani and Its Impact on the Land Use Land Cover of the Torsa Kaljani Interfluve Region, West Bengal
3	021755	Arjun Saha	Impacts of Urban Growth on Spatial and Seasonal Water Quality of Urban River in Siliguri Planning Area, India
4	064105	Dipankar Das	Flood Susceptibility Mapping in Cooch Behar District, India Using Fuzzy AHP and TOPSIS MCDA: An Integrated R Studio and GIS Approach
5	103123	Ershad Ali	Mapping Methodology of Public Urban Green Spaces Using Remote Sensing and GIS: An Example of Jalpaiguri Urban Agglomeration, India
6	101836	Gopal Das	Monitoring Urban Growth And Its Effects On Land Use Land Cover Changes In Jalpaiguri Town, West Bengal
7	050618	Jhumpa Barman	Assessment of Rainfall Variability in the Damodar River Basin, using a Multi-Criteria-Decision-Making (MCDM) Model
8	102658	Mantu Das	Examining the effect of terrain characteristics on resource management and landscape design in the Chotanagpur plateau region: A case study of Sanka River Basin
9	040522	Md Jiarul Alam	Assessment of rapid terrestrialization of abandoned channels and vulnerability assessment in the Himalayan foreland basin area in India: A machine learning algorithm - based approach
10	080215	Md Khurshid Alam	Spatio -Temporal Dynamics of Wetlands in Near-Urban and Remote-Urban Areas: A Comparative Study

Technical Session 6

Subject- Engineering and Technology Sciences including Emerging Technologies

Date: 24.01.2025

Time: 2:30 PM-5:45 PM

Venue: Room V7

INVITED LECTURE: Dr. Gautam Kr. Panda
Non-Linear Dynamics of Systems with Maps

Sl. No.	Application No.	Name of the Presenting Author	Title of the Abstract
1	084904	Aditi Sengupta	Microstructural Study, Electrical Transport Mechanism, and First-Principles DFT Analysis of $\text{Li}_2\text{O} - \text{ZnO} - \text{MoO}_3 - \text{SeO}_2$ Glass - Nanocomposites and Their Crystalline Equivalents
2	092637	Alok Sarkar	Survey on Radioscopic Image Classification using Deep Learning Techniques
3	041120	Ankan Mandal	Parametric Optimization of Petroleum Supply Chain Management using Blockchain Technology
4	092147	Arijit Mitra	Artificial Neural Network Based Modelling of Rectangular Microstrip Patch Antenna Operating at 4.5GHz for 5G Communication
5	035320	Chinmoy Ghosh	Significant Changes and Innovations in Web Technology: A Review
6	101110	Dripta Majumdar	CNN-Based Ensembled Classifier Powered by GAN: A Framework for Crime Data Analysis
7	072842	Jhuma Dutta	Unlocking the potential of Non - Fungible Tokens and its implementation
8	011229	Joydeep Dutta	Priority-based Clustered Orienteering Problem: A real - world model
9	112556	Kaushik Saha	Artificial Neural Network Based Modelling of Hexagonal Slotted Microstrip Patch Antenna Operating at 4.5 GHz for 5G Communication
10	012121	Kunal Ranjan	Using BERT and LSTM for Real-Time Sentiment Analysis and Stock Price Prediction: A real-time model

Technical Session 7

Subject- Environmental Sciences including Climate Change

Date: 24.01.2025

Time: 2:30 PM - 5:45 PM

Venue: Room V9

INVITED LECTURE: Dr. Mahendra Nath Roy
Are Plastic to blame for Environmental Pollution?

Sl No.	Application No.	Name of the Presenting Author	Title of the Abstract
1	080823	Abhidip Hazra	A Study on Seasonal Variation of some Physiochemical Properties of Sikia Jhora, Buxa Tiger Reserve, Alipurduar, West Bengal
2	101726	Anushree Baul Das	Unlocking the Potential of Municipal Solid Waste Compost as Black Gold for Climate-Smart Agricultural Practices and Environmental Sustainability in Tea Cultivation
3	120344	Bhupen Barman	Monitoring the Impact of Rapid Urbanization on Land Surface Temperature Using Remote Sensing Data: Case Study in Siliguri Municipal Corporation (SMC), West Bengal, India
4	110252	Chhandalina Shil	Temporal Asymmetry In Diurnal Temperature Range Over Siliguri City : In Warming Scenario
5	113714	Guneswar Barman	Ethnic Communities and Their Socio-Cultural Significance in North Bengal
6	070633	Hritam Sarkar	A Simple Weather Station: Recording and monitoring weather and predict climate changes
7	010621	Krishnendu Majhi	Evaluation of the Cu removal efficacy of Bacillus zanthoxyli GKSM2: A novel approach to mitigate mining contaminants
8	051842	Kumar Chhetri	Ethnicity and Entrepreneurship: An Ethnographic Exploration of Siliguri Gorkhay Hatt
9	062522	Lovely Sarkar	Soil and Groundwater Contamination in Perspective of Physicochemical Characteristics, Quality Index and Health Implications

Technical Session 8

Subject - Physical Sciences

Date: 24.01.2025

Time: 2:30 PM - 5:45 PM

Venue: Room V3

INVITED LECTURE: Dr. Amitabha Mukhopadhyay
Social implications of researches in Basic Science

SI No.	Application No.	Name of the Presenting Author	Title of the Abstract
1	035829	Apsari Parvin	Thermal and Optical Studies on the Critical Behaviour near the N - SmA Phase Transition of a Polar-Nonpolar Binary System
2	101619	Avijit Talukdar	Performance Enhancement of Perovskite Solar Cells with doped PEDOT:PSS Hole Transport Layer: A Combined Experimental and Simulation Study
3	122218	Dibakar Dhar	Particle Reconstruction using Graph Neural Networks (GNNs) in Heavy - Ion Collisions
4	122717	Himangshu Roy	Understanding the Dielectric Behaviour of two ferroelectric liquid crystal compound through DFT and experimental study for display applications
5	110007	Jiban Ghosh	Electrical Relaxation Phenomena of Fe Doped Glassy Semiconductor
6	083316	Joy Sarkar	Bandgap tuning via interstitial Cu-doping in Cs ₂ AgBiBr ₆ double perovskite for enhanced optoelectronic performance: A DFT Study
7	064903	Madhumita Dhar	SU(3)-Symmetric Energy Density Functional for Hyperons in Dense Nuclear and Neutron Star Matter
8	092347	Md Abu Sayeed Sujan	Effects of Adsorption and Catalytic Reaction on NO _x Sensing Properties of a WO ₃ -based Potentiometric Sensor
9	115850	Md Tobrej	Unveiling the unique features observed in the Be/X-ray binary pulsar IGR J06074+2205
10	124148	Prabir Sarkar	Calorimetric Study a Binary System Exhibiting Smectic-A to Smectic - F Phase Transition

Technical Session 9

Subject - Statistics, Mathematical Sciences, IT and its Applications

Date: 24.01.2025

Time: 2:30 PM - 5:45 PM

Venue: Room V8

Invited Lecture: Dr. Manoranjan Singha

Topology for Non-Topologist

Sl. No	Application No.	Name of the Presenting Author	Title of the Abstract
1	105139	Dawa Jangbo Sherpa	Mathematical Analysis of Behavioural Shifts in Indian ELSH Mutual Funds during the COVID Pandemic: A Six-Parameter Approach
2	082011	Kalyan Sinha	The R_0 -matrix completion problem
3	090504	Manab Biswas	Growth of solutions of non-linear complex differential equations
4	053114	Mousumi Ghosh	Study of A Class of Additive Cyclic Codes
5	110944	Raju Sen	Onset of Instability in Power-Law Fluid Throughflow in a Porous Medium due to variable gravity with contrasting heat sources
6	072648	Sanchita Barman	Relativistic strange quark star in 4 - dimensions with Finch and Skea Geometry and its maximum mass on finite strange quark mass($m_s \neq 0$); 0)
7	093224	Sourasish Mitra	Real-Time Health Monitoring integrating Low-cost IoT with Bluetooth LE and Cloud through a Local Server
8	123554	Sourav Kar	A note based on different aspects of sharing values or sets between Entire and Meromorphic functions
9	032645	Subhajit Barman	Private Blockchain Based Land Registration System Using Hyperledger Fabric
10	112545	Subrata Roy	The (2+1)-dimensional nonlinear damped Schrodinger equation in plasma: Bilinear form, multi soliton, breather, resonant soliton solutions
11	030220	Suman Modak	Deep Learning for Diabetic Retinopathy Detection Using Convolutional Neural Networks (CNNs)
12	060000	Zaid Mahmud	Survey on Recent Deep Learning Optimization Algorithms

Technical Session 10

Subject - Zoology

Date: 24.01.2025

Time: 2:30 PM - 5:45 PM

Venue: Room V2

Invited Lecture: Dr. Amlan Ghosh

*ceRNA network, a non-coding RNA driven mechanism regulating post - transcriptional gene expression ,
and its role in tumorigenesis*

Sl No.	Application No.	Name of the Presenting Author	Title of the Abstract
1	051039	Abhirup Saha	Effect of Different Synthetic Insecticides on Detoxifying Enzymes of Wild <i>Culex quinquefasciatus</i> Mosquitoes from Sub-Himalayan West Bengal, India
2	054718	Anisha Chhetri	Assessing The Avifaunal Diversity And Synergistic Effects Of Dense Forest Cover And Human Interference On Avian Communities In Fragmented Habitats Of Rabindra Sarobar During Summer Months
3	122442	Nilu Limboo	Overlooked factors in vector control: Addressing biological compromises in permethrin-resistant <i>Aedes aegypti</i>
4	101853	4 Prapti Das	Investigating the role of cytochrome P450 monooxygenase in the pyrethroid resistant larvae and adults of wild <i>Aedes albopictus</i> populations from Jalpaiguri district, West Bengal, India
5	020655	Souparna Ghosh	Detection Of Microplastics in Selected Portions of The Three Himalayan Foothill Rivers: Mahananda, Teesta (Gajoldoba) And Balason Using ATR-FTIR
6	123950	Subhajit Das	Carboxylesterase-Mediated Malathion Resistance in <i>Aedes albopictus</i> from Sub-Himalayan West Bengal