



# Programme Schedule



7<sup>th</sup>

**Regional Science & Technology Congress, 2024-25**

**Region 5**

*Jointly Organised by*

**Bidhan Chandra Krishi Viswavidyalaya**

**&**

**Department of Science and Technology and Biotechnology**

**Govt. of West Bengal**

**Address: Mohanpur, Nadia, West Bengal, PIN-741252**

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## **EVENT VENUE, DATE AND TIMING**

**JANUARY 14-15, 2025 | Bidhan Chandra Krishi Viswavidyalaya**

<b>PROGRAMME AT A GLANCE</b>	
<b>TIMING</b>	<b>DAY-1 14<sup>TH</sup> JANUARY, 2025 (TUESDAY)</b>
08:30AM - 10.30AM	REGISTRATION / BREAKFAST
10:30AM - 12.30 PM	<b>Inaugural Function</b>
12:30PM - 12:40PM	<b>Tea Break</b>
12:40PM - 01.15PM	PROF. PRASANTA CHANDRA MAHALANOBIS MEMORIAL LECTURE: PROF AYANENDRANATH BASU, ISI, KOLKATA
01:15PM - 02.00PM	LUNCH BREAK
02:00PM - 06.00PM	TECHNICAL SESSIONS
08:15PM - 09.15PM	DINNER
<b>TIMING</b>	<b>DAY-2 15<sup>TH</sup> JANUARY, 2025 (WEDNESDAY)</b>
08:30AM - 9.30AM	REGISTRATION/BREAKFAST
10:00AM - 1.30PM	TECHNICAL SESSIONS
01:30PM - 02.30PM	LUNCH BREAK
2:30PM - 03.10 PM	SIR C. V. RAMAN MEMORIAL LECTURE: PROF. TAPAS CHAKRABARTY, VC, MAKAUT
03:10PM - 03.50PM	SIR A. J. C. BOSE MEMORIAL LECTURE: PROF PARTHA PRATIM DUTTA, IISER KOLKATA
03:50PM - 04.30PM (SPECIAL SESSION)	<b>Innovation and Entrepreneurship in West Bengal</b> Dr. Sonali Roy, Chief Operating Officer, Rise Foundation, IISER
04:30PM Onwards	VALEDICTORY SESSION & AWARD CEREMONY

**Day 1**  
**14<sup>th</sup> January 2025 (Tuesday)**

**Opening of the Registration Desk: 8:30 - 10:30 AM**  
**Breakfast: 8:30 - 10:30 AM**  
(Venue- *Basement of Directorate of Research, BCKV, Mohanpur, Nadia*)

**Inaugural Function**  
(Venue: *Convocation Hall, BCKV Administrative Building, 2<sup>nd</sup> Floor*)  
(10:30 A.M. - 12:30 P.M.)

**Coordinator of Inaugural Function**  
**Prof. Madhumita Mitra Sarkar, Hon'ble Registrar, BCKV**

Timing	Programme Outline
10:30 - 10:55 AM	<ul style="list-style-type: none"> <li>▪ Welcoming of the Dignitaries on the Dais, Floral Reception</li> <li>▪ Invocation Song</li> <li>▪ Lamp Lightning Ceremony by the Dignitaries on the Dias</li> </ul>
10:55 - 11:00 AM	<b>Welcome Address by the Nodal Officer (BCKV, Host institute) &amp; Joint Organising Secretary, BCKV: Dr. Kusal Roy</b>
11:00 - 11:05 AM	<b>Address by the Hon'ble Vice Chancellor, BCKV: Dr. Ashok K Patra</b>
11:05- 11:10 AM	<b>Address by the Regional Nodal Officer &amp; Joint Organising Secretary of DSTBT, Govt. of WB: Smt. Subrata B. Dutta</b>
11:10 - 11:15 AM	<b>Address by the Secretary, DSTBT, GoWB: Shri Vijay Bharti, IAS</b>
11:15 - 11:25 AM	<b>Unveiling of Abstract Volume by the Dignitaries</b> <b>Release of Books/Articles from by the Dignitaries on the Dias</b>
11:25- 11:30 AM	<b>Address by the Special Guest of the Congress: Dr. RC Agrawal, Hon'ble DDG (Education), ICAR, New Delhi</b>
11:30- 11:40 AM	<b>Address by the Guest of Honour of the Congress: Shri Pradip Kumar Mazumdar, Hon'ble Minister In-Charge</b> Department of Panchayats & Rural Development, Govt. of West Bengal &
11:40 - 11:50 AM	<b>Address by the Guest of Honour of the Congress: Shri Sobhandeb Chattopadhyay, Hon'ble Minister In-Charge</b> Department of Agriculture, Govt. of West Bengal
11:50 - 12:00 PM	<b>Inaugural Address by the Chief Guest of the Congress: Shri Ujjal Biswas, Hon'ble Minister-In-Charge</b> Department of Science and Technology and Biotechnology, Govt. of West Bengal
12:00- 12:25 PM	<b>Keynote Address: Integrating New Education Policy with Science and Technology for Sustainable Development</b> <b>Dr. RC Agrawal, Hon'ble DDG (Education), ICAR, New Delhi</b>
12:25 - 12:30 PM	<b>Vote of Thanks by: Dr Sumana Roy</b> Hon'ble Director of Research, BCKV & Organizing Secretary of 7 <sup>th</sup> RSTC, BCKV
12:30- 12:40 PM	<b>Tea Break</b>
12:40 - 01.15 PM	<p style="text-align: center;"><b>PROF. PRASANTA CHANDRA MAHALANOBIS MEMORIAL LECTURE</b></p> <p style="text-align: right;"><b>Coordinator of Memorial Lecture Session</b> <b>Prof. Madhumita Mitra Sarkar, Hon'ble Registrar, BCKV</b></p> <p><b>SPEAKER: PROF AYANENDRANATH BASU, ISI, KOLKATA</b> <b>Topic: An Overview of Robust Statistical Inference</b></p>
<p>--- -- <b>Lunch Break</b> --- --</p> <p style="text-align: center;"><b>Venue: Food Court Near Directorate of Extension Building</b> <b>(01:15 - 02:00 PM)</b></p>	

# Technical Sessions

Day 1: January 14<sup>h</sup>, 2024 (Tuesday)

(Venue- Convocation Hall, UG & PG Class Rooms, Faculty of Agriculture/Horticulture)

## Technical Session -1

Discipline-11:

Agriculture, Horticulture, Fisheries and Veterinary Sciences

Venue

Date

Session Duration

Convocation Hall, 2<sup>nd</sup> Floor,  
BCKV Administrative Building

14<sup>th</sup> January 2025

02:00 - 06:00 P.M.

Invited Talk:

Prof. Shankar Kumar Acharya  
Department of Agril. Extension, BCKV, Mohanpur, Nadia

Title of the Talk:

Entropy, chaos and co-creation: Resilience in farming ecosystem confronts threats and opportunity

Sl. No.	Application No.	Name of the Presenting Author	Title of the Abstract
1	WBSSTC/2024-25/R5/AHFVS/061725	Anshu Kumar	Mass multiplication and optimization of media components for chitinase production by native rhizospheric bacteria for their antifungal activity
2	WBSSTC/2024-25/R5/AHFVS/111104	Moumita Panda	Management strategy for post-harvest disease of fruit crops with manipulation of bio-inoculant: the yeasts
3	WBSSTC/2024-25/R5/AHFVS/080213	Mriganka Dolui	Nexus between livelihood diversification and socio-demographic predictors among tribal households in Paschim Medinipur district of West Bengal: A cross-sectional study
4	WBSSTC/2024-25/R5/AHFVS/021829	Sudip Bhattacharyya	Decontamination magnitudes of thermal impacts, and different water-based techniques for removing pesticide residues from regularly consumed veggies and food safety analysis
5	WBSSTC/2024-25/R5/AHFVS/122950	Debnath Sarkar	Optimizing integrated nutrient management practices for sustainable rice-based cropping system in lower Indo-Gangetic Plains
6	WBSSTC/2024-25/R5/AHFVS/102208	Arkadeep Sarkar	Characterization and management of fusarium head blight, an emerging disease of wheat in West Bengal
7	WBSSTC/2024-25/R5/AHFVS/122016	Avimanyu Palit	Effect of nano urea in rice hybrids ( <i>Oryza sativa</i> L.) During kharif season under new alluvial zone of West Bengal
8	WBSSTC/2024-25/R5/AHFVS/082930	Arup Sen	Development of liquid bioformulations of phosphate solubilizing <i>Enterobacter</i> sp. (AJ14) for acid soils
9	WBSSTC/2024-25/R5/AHFVS/112442	Debolina Sarkar	Assessing coastal salinity: fusing remote sensing and EM data for sustainable land use in the Indian Sundarbans
10	WBSSTC/2024-25/R5/AHFVS/110819	Rajdeep Guha Mallick	Inheritance of Host Plant Resistance against Viral Diseases and Role of Defense Related Biochemical Traits in Okra
11	WBSSTC/2024-25/R5/AHFVS/030526	Kaushik Saha	Temperature Sensitivity of Soil Nitrogen in Long-Term Fertilization for Climate-Resilient Nutrient Management
12	WBSSTC/2024-25/R5/AHFVS/075706	Dr Dibyendu Sarkar	Novel boron application technology for improving quality of tomato ( <i>Solanum lycopersicum</i> L.) and cauliflower ( <i>Brassica oleracea</i> var. botrytis L.)

13	WBSSTC/2024-25/R5/AHFVS/112145	<b>Sourav Garai</b>	Assessment of global warming potential, carbon balance and farm energetics from varied field experiments: A pathway towards eco-friendly crop management and net-zero goal
14	WBSSTC/2024-25/R5/AHFVS/010849	<b>Amitava Dutta</b>	Arko Provo (WBSH-2021): First Sunflower Hybrid Developed in West Bengal Notified for Cultivation
15	WBSSTC/2024-25/R5/AHFVS/080433	<b>Partha Saren</b>	Unravelling seeds of uncertainty in a selected area of West Bengal using FCM and ML tools
16	WBSSTC/2024-25/R5/AHFVS/085024	<b>Sayani Ghosh</b>	Compositional Changes in Fresh and Processed Products in Crosses between Standard Tomato and Cherry Tomato Involving Varied Fruit Colours.
17	WBSSTC/2024-25/R5/AHFVS/114124	<b>Arnab Banerjee</b>	Mental Modeling of Human Elephant Conflict Using Fuzzy Cognitive Mapping and Decision Ecology for Conflict Resolution
18	WBSSTC/2024-25/R5/AHFVS/122330	<b>Sanjoy Das</b>	Utilization of Sensor-based technology for Low-Cost Meteorological Information Delineate System
19	WBSSTC/2024-25/R5/AHFVS/081533	<b>Arindam Sarkar</b>	Trichoderma Improves nutrient uptake and yield of Tomato ( <i>Solanum lycopersicum</i> ) in Red and Laterite Soils of eastern India
20	WBSSTC/2024-25/R5/AHFVS/071217	<b>Eshita Kundu</b>	Priming with PEG-6000 positively influenced seedling development of carrot

## Technical Session -2

<b>Discipline-12:</b>	<b>Applications of Emerging Technologies including AI/ML in Sustainable Development [Focal Theme]</b>	
<b>Venue</b>	<b>Date</b>	<b>Session Duration</b>
Colloquium Hall, Department of Ag. Extension, 2 <sup>nd</sup> Floor, Faculty of Agriculture Building	14 <sup>th</sup> January 2025	02:00 P.M. – 06:00 P.M.
<b>Invited Talk:</b>	<b>Prof. Ram Sarkar</b> Department of Computer Science & Engineering, Jadavpur University, Kolkata, India	
<b>Title of the Talk:</b>	<b>Deep Learning Applications for Medical Image Analysis and Deepfake Detection</b>	

Sl No.	Application No.	Name of the Presenting Author	Title of the Abstract
1	WBSSTC/2024-25/R5/FT-AETSD/042537	<b>Mahua Nandy Pal</b>	Federated Quantum Neural Network for Privacy-Preserving Classification of Retinal Images
2	WBSSTC/2024-25/R5/FT-AETSD/090514	<b>Mandira Dey</b>	A Study on Artificial Intelligence and its fostering role in enhancing Emotional Intelligence among the Autistic individuals.
3	WBSSTC/2024-25/R5/FT-AETSD/011316	<b>Mrittunjoy Paul</b>	Ancient Knowledge Meet Modern Technology to Address Human-Animal Conflicts in West Bengal: A Narrative Review
4	WBSSTC/2024-25/R5/FT-AETSD/113431	<b>Sreemanta Barman</b>	Human Movement Replication System Using Robots for Advanced Remote Intervention in Industrial Works
5	WBSSTC/2024-25/R5/FT-AETSD/121410	<b>Snehadhanya Dutta</b>	Forecasting Employment Trends in India's IT Sector: Leveraging Advanced Predictive Models for Sustainable Workforce Development
6	WBSSTC/2024-25/R5/FT-AETSD/013616	<b>Anubhab Maity</b>	Evaluating the Best Deep Learning Architectures for Medical Image Segmentation
7	WBSSTC/2024-25/R5/FT-AETSD/030357	<b>Biswajit Biswas</b>	Artificial Intelligence for Sustainable Development: A Framework for Business Ecosystem Transformation in Marketing
8	WBSSTC/2024-25/R5/FT-AETSD/035601	<b>Sontu Ball</b>	A Study on Gender Inequality and Sustainable Development: Measuring Feminist Progress in Working Organization
9	WBSSTC/2024-25/R5/FT-AETSD/044727	<b>Dr Soumen Roy</b>	Real-Time Parkinson's Disease Screening Through Gait and Keystroke Pattern Analysis
10	WBSSTC/2024-25/R5/FT-AETSD/054040	<b>Dr Biswarupa Ghosh</b>	Application of geospatial technology in the assessment of forest fragmentation in Rajaji National Park, Uttarakhand
11	WBSSTC/2024-25/R5/FT-AETSD/083652	<b>Spandan Ghosh</b>	India's Growing Electronic Footprint Prediction: A Machine Learning Approach

## Technical Session -3

<b>Discipline-8:</b>	<b>Biotechnology</b>	
<b>Venue</b>	<b>Date</b>	<b>Session Duration</b>
UG Classroom T-1, 3 <sup>rd</sup> Floor, Faculty of Agriculture Building	14 <sup>th</sup> January 2025	02:00 P.M. – 06:00 P.M.
<b>Invited Talk:</b>	Prof Sampa Das Retired Professor, Division of Plant Biology, Bose Institute	
<b>Title of the Talk:</b>	Understanding Plants' Defense Response Mechanism in Genomic Era	

Sl No.	Application No.	Name of the Presenting Author	Title of the Abstract
1	WBSSTC/2024-25/R5/BIOTECH/035158	Suman Samanta	Leishmania GP63 targets the macrophage miR-122–hepcidin pathway to alter Nramp1 levels for efficient iron acquisition
2	WBSSTC/2024-25/R5/BIOTECH/082246	Subham Dutta	Unravelling Mungbean Yellow Mosaic India Virus (MYMIV) and its Satellite Complexes: 3D Structural Modelling and Functional Insights into Viral Pathogenesis
3	WBSSTC/2024-25/R5/BIOTECH/022359	Debanil Dhar	CUEDC2 Down-regulation: A Strategy to Enable Endocrine Therapy in HR-Negative Breast Cancer
4	WBSSTC/2024-25/R5/BIOTECH/122533	Priyanka Raha	A Low-Cost Immersion Culture System for in vitro Propagation of Limonium in a Mesh Raft with a Wire Stand
5	WBSSTC/2024-25/R5/BIOTECH/053855	Deepanwita Ray	Protein structure modulation by microplastic – A new route of neurodegeneration
6	WBSSTC/2024-25/R5/BIOTECH/110347	Suraj Pal	Comparative molecular diagnostics & treatment strategies for polycystic ovarian syndrome (PCOS)
7	WBSSTC/2024-25/R5/BIOTECH/072459	Suhasini Mallick	Potential antibiofilm effect of biogenic ZnO nanoparticles using <i>Catharanthus roseus</i> flower extract
8	WBSSTC/2024-25/R5/BIOTECH/102648	Soumyasubhra Hajra	Evaluation of Plant Extracts from Datura metel L. and Kalanchoe pinnata L. for their Antibacterial Properties against some Selected Pathogens
9	WBSSTC/2024-25/R5/BIOTECH/105201	Hirak Bhowmik	Beta vulgaris Extract Ameliorates Diabetic Peripheral Neuropathy by Enhancing Nerve Function and Glycemic Control in Diabetic Rats
10	WBSSTC/2024-25/R5/BIOTECH/034904	Sudipta Chakraborty	AI-Assisted Modelling of Clinical and Genetic Data for Early Diagnosis of Neurodegenerative Disorders
11	WBSSTC/2024-25/R5/BIOTECH/103342	Ankit Saha	Understanding Rhabdomyosarcoma: Advances in Research, Clinical Perspectives and Outcomes
12	WBSSTC/2024-25/R5/BIOTECH/122648	Dr Priyanka Ray	Formulation and evaluation of Oral fast dissolving films of Diclofenac Sodium
13	WBSSTC/2024-25/R5/BIOTECH/083311	Niladri Sarkar	Elucidation of antibiofilm activities of extracellular $\alpha$ -amylase from Bacillus subtilis SM-RRR 2023

14	WBSSTC/2024-25/R5/BIOTECH/103340	<b>Amrita Dey</b>	Molecular characterization and identification of a leaf curl virus infecting Multivitamin ( <i>Sauropus androgynus</i> L. Merr) plant
15	WBSSTC/2024-25/R5/BIOTECH/122356	<b>Abul Hasan Sardar</b>	MicroRNA mediated regulation of hypertriglyceridemia in active visceral Leishmaniasis
16	WBSSTC/2024-25/R5/BIOTECH/104959	<b>Pratiksha Jha</b>	Antibiotic resistance (ABR) <i>Aeromonas</i> species isolated from Indian Major Carps in west Bengal
17	WBSSTC/2024-25/R5/BIOTECH/044125	<b>Indrakshi Mandal</b>	Isolation, Identification and Molecular Characterization of <i>Vibrio parahaemolyticus</i> isolated from indian major carps (IMCs) in West Bengal, India
18	WBSSTC/2024-25///030046	<b>Sabnam Khatun</b>	Therapeutic Potential of <i>Phyllanthus embelica</i> Phytochemicals in Gallstone Disease: 5-Lipoxygenase Inhibition and Molecular Dynamics Insights
19	WBSSTC/2024-25/R5/BIOTECH/115157	<b>Debarati Chatterjee</b>	Exploring the antibiofilm potential of green zinc oxide quantum dots from <i>Amaranthus viridis</i> against <i>P. aeruginosa</i> .
20	WBSSTC/2024-25/R5/BIOTECH/121757	<b>Sakshar Saha</b>	Unlocking the Antidiabetic Potential of <i>Raphanus sativus</i> Leaves: A Triad of In-Vitro, In-Vivo, and In-Silico Studies Targeting L6 Myoblasts

## Technical Session -4

<b>Discipline-2:</b>	<b>Chemical Science</b>	
<b>Venue</b>	<b>Date</b>	<b>Session Duration</b>
UG Classroom-T5, 3 <sup>rd</sup> Floor, Faculty of Agriculture Building	14 <sup>th</sup> January 2025	02:00 P.M. – 06:00 P.M.
<b>Invited Talk:</b>	Prof. (Dr.) Subhajit Bandyopadhyay Department of Chemical Sciences, IISER-Kolkata	
<b>Title of the Talk:</b>	Setting dynamic molecules in action with light energy	

SI No.	Application No.	Name of the Presenting Author	Title of the Abstract
1	WBSSTC/2024-25/R5/CHEM/105237	<b>Dr Indrani Sarkar</b>	Tyrosine Kinases as Targets for Anticancer Agents: Study of Receptor Drug-Interaction by Pharmacophore and Molecular Docking Studies
2	WBSSTC/2024-25/R5/CHEM/045731	<b>Antara Roy</b>	Effect of $\beta$ -Sitosterol Additive for Enhancing Oxidative Stability and Health Benefits in Sesame-Mustard Oil Blend
3	WBSSTC/2024-25/R5/CHEM/122229	<b>Indrajit Das</b>	Development of Zinc (II) Complexes of Anthracene-Based Based Organic Ligand as Potent Antibiofilm Agents Against Multi Drug-Resistant Bacteria with Biomedical Applicability
4	WBSSTC/2024-25/R5/CHEM/104305	<b>Sariful Molla</b>	All-photon photo switching in a photochromic dyad with overlapping absorption bands
5	WBSSTC/2024-25/R5/CHEM/043555	<b>Malabika Ghosh</b>	Electrochemically Deposited Molecular Imprinted Polymer (MIP) based Sensor for Detection of Noro Virus-like Particles
6	WBSSTC/2024-25/R5/CHEM/123632	<b>Sukanya Das</b>	Discovery Of Novel Uracil-Containing Cyclic Hypervalent Iodine Reagent & Its Application
7	WBSSTC/2024-25/R5/CHEM/124627	<b>Soumen Adak</b>	Arylazopyrazoles photoswitch-based flexible organic single crystals
8	WBSSTC/2024-25/R5/CHEM/051846	<b>Jakir Ahmed</b>	Switching Racemase Activity On and Off: A Photo-Tunable Pyridoxal-5-Phosphate Mimic Incorporating Dimethyl-Dihydropyrene
9	WBSSTC/2024-25/R5/CHEM/063950	<b>Dr Subhra Kanti Mandal</b>	L-DOPA Based Versatile Organogelator for Potential Oil Spillage Recovery and Waste Water Treatment
10	WBSSTC/2024-25/R5/CHEM/095438	<b>Soumya Bhowal</b>	High performance rapid fluorescence and colorimetric sensing of Al <sup>3+</sup> and Fe <sup>3+</sup> ions and selective mitochondria tracking by lanthanide (Eu <sup>3+</sup> , Tb <sup>3+</sup> ) metal organic frameworks
11	WBSSTC/2024-25/R5/CHEM/025723	<b>Pradip Pattanayak</b>	Spectral Chameleons: Broadcasting TADF and RTP Dynamics in Flexible Polymorphic Optical Waveguides
12	WBSSTC/2024-25/R5/CHEM/045201	<b>Sajal Kar</b>	Photo-responsive Generation and Depletion of a Stable Organic Radical Cation
13	WBSSTC/2024-25/R5/CHEM/054157	<b>Moumita Dinda</b>	Unveiling the Bonding and Coordination Dynamics of Carbon in Protonated Methane (CH <sub>5</sub> <sup>+</sup> ): Insights from Molecular Handycam Technique
14	WBSSTC/2024-25/R5/CHEM/065547	<b>Susanta Kumar Manna</b>	New Synthetic Route of Bioactive Pyrrolonaphthoquinone and Benzimidazolequinone
15	WBSSTC/2024-25/R5/CHEM/070443	<b>Dr Satyadip Paul</b>	One-pot Fabrication of Enzyme Encapsulated Covalent Organic Framework
16	WBSSTC/2024-25/R5/CHEM/073557	<b>Dr Saikat Santra</b>	Integrating Theory and Practice: A Comprehensive Undergraduate Chemistry Experiment in Rotaxane Synthesis and Anion Removal
17	WBSSTC/2024-25/R5/CHEM/093018	<b>Rabindra Nath Sana</b>	Synthesis of N-bridgehead Route of new pyridopyrimidinium ion and its DNA intercalation studies



## Technical Session -5

### Discipline-5:

### Earth Sciences including Geoinformatics and Hydrogeology

Venue	Date	Session Duration
Seminar Room of Dept. of Economics, 2 <sup>nd</sup> floor, Near Department of Ag. Extension, Faculty of Agriculture Building	14 <sup>th</sup> January 2025	02:00 P.M. – 06:00 P.M.

<b>Invited Talk:</b>	<b>Dr Subhadip Dey</b> Department of Agriculture and Food Engineering, IIT Kharagpur, West Bengal
<b>Title of the Talk:</b>	Microwave Remote Sensing for Earth Observation

Sl No.	Application No.	Name of the Presenting Author	Title of the Abstract
1	WBSSTC/2024-25/R5/ESGH/100527	<b>Tulika Koley</b>	Transformation of Land and Livelihood in Peri-urban Basirhat: A Spatio- Temporal Analysis
2	WBSSTC/2024-25/R5/ESGH/030431	<b>Palash Das</b>	Integrating Soil Moisture and Temperature Data using GIS Technology for Precision Farming
3	WBSSTC/2024-25/R5/ESGH/120045	<b>Anish Jana</b>	Assessment of Groundwater Quality for Irrigational Purpose in the Drought Prone Region of Purulia District of West Bengal
4	WBSSTC/2024-25/R5/ESGH/110947	<b>Jyotibrata Chakraborty</b>	Geodiversity Assessment and Its Analytical Perspectives for Biodiversity Conservation and Environmental Planning in the Darjeeling Himalayan Region, West Bengal, India
5	WBSSTC/2024-25/R5/ESGH/124453	<b>Swetangee Chowdhury</b>	Reconstructing Geomorphic Changes in Bidyadhari-Padma Palaeo-meander Bend Region Near the Chandraketurgarh Archaeological Site of Lower Deltaic Bengal
6	WBSSTC/2024-25/R5/ESGH/032820	<b>Bhagyashree Chakraborty</b>	Urban Growth and its Environmental Impact - An analysis on Groundwater Resource and Land Subsidence in India
7	WBSSTC/2024-25/R5/ESGH/040426	<b>Kumkum Dey</b>	Large-scale Classification and Monitoring of Water Bodies' Current Health Conditions - A Study in Nadia, West Bengal
8	WBSSTC/2024-25/R5/ESGH/110254	<b>DR Kaustabi Maitra</b>	An assessment of the environmental issues brought about by brick kiln industry in parts of Nadia district with emphasis on air quality and human health: a geospatial approach
9	WBSSTC/2024-25/R5/ESGH/114815	<b>Mainul Islam</b>	Groundwater Recharge Discharge Dynamics in Quaternary Alluvial Aquifers of Tropical River Floodplains, Eastern India, West Bengal
10	WBSSTC/2024-25/R5/ESGH/120055	<b>Suman Deb Barman</b>	Mapping dynamic reservoir bed topography changes owing to sediment deposition by integrating remote sensing, machine learning, and hydrographic survey techniques
11	WBSSTC/2024-25/R5/ESGH/034238	<b>Dr Deepa Bhattacharyya</b>	Land Use Transformation and Subsidence Risks: Geoinformatics Insights from Joshimath's Sinking Landscape
12	WBSSTC/2024-25/R5/ESGH/103136	<b>Dr Rupam Kumar Dutta</b>	Characteristics of avulsion in the braided Ganga River Channel, Haridwar, Uttarakhand

## Technical Session -6

<b>Discipline-4:</b>	<b>Engineering Science and Technology</b>	
<b>Venue</b>	<b>Date</b>	<b>Session Duration</b>
UG Classroom T-31, 3 <sup>rd</sup> Floor, Faculty of Agriculture Building	14 <sup>th</sup> January 2025	02:00 P.M. – 06:00 P.M.
<b>Invited Talk:</b>	<b>Prof. Subhadip Basu</b> Professor, Department of Computer Science and Engineering, Jadavpur University	
<b>Title of the Talk:</b>	<b>Minding the Machines: Ethics and Accountability in AI Development</b>	

Sl No.	Application No.	Name of the Presenting Author	Title of the Abstract
1	WBSSTC/2024-25/R5/EST/063213	<b>Ankita Dutta</b>	Application of soil bio- technology for treatment of grey water
2	WBSSTC/2024-25/R5/EST/093107	<b>Debasis Soren</b>	An Internet of Things (IoT) based continuous monitoring system for fruit ripening chamber
3	WBSSTC/2024-25/R5/EST/083057	<b>Bibhas Nayak</b>	Model Development and Analysis of a Greenhouse Air-Conditioning System Coupled with a Desiccant-Coated Heat Exchanger and Dew Point Indirect Evaporative Cooler
4	WBSSTC/2024-25/R5/EST/104154	<b>Mohit Kumar Halder</b>	Advanced Deep Learning Based Object Detection for Physical Attendance Management System
5	WBSSTC/2024-25/R5/EST/034845	<b>Amit Kumar Bar</b>	Design and Development of a Moisture Sensor Based Automated Drip Irrigation System
6	WBSSTC/2024-25/R5/EST/090146	<b>Souryodipto Debnath</b>	Approach to Design Smart T-shirt for Health Monitoring
7	WBSSTC/2024-25/R5/EST/111122	<b>Sneha Ray</b>	TiO <sub>2</sub> -Epoxy Nanocomposite Optical Fiber Structures for Wide-Range Programmable Optically Variable Resistors
8	WBSSTC/2024-25/R5/EST/114239	<b>Rubia Khatun</b>	The impact of operating parameters on an atmospheric-type condenser's heat transfer characteristics
9	WBSSTC/2024-25/R5/EST/111021	<b>Saniya Paul</b>	Design of an Advanced Automated System for Cleaning Metropolitan Underground Drainage Networks
10	WBSSTC/2024-25/R5/EST/110828	<b>Sunita Roy</b>	A New Activation Function and Its Impact on Recently Proposed CNN-based Models for Multimodal Brain Tumour Segmentation
11	WBSSTC/2024-25/R5/EST/064412	<b>Dr Abhijit Mondal</b>	Development of green paving mix for Low Volume Road
12	WBSSTC/2024-25/R5/EST/120137	<b>Subhadeep Mondal</b>	An Experimental Study on Soft soil Improvement by Admixture using Fiber
13	WBSSTC/2024-25/R5/EST/010238	<b>Dhritiman Debnath</b>	Targeted Delivery of Ketoconazole Using Smart Chitosan-Based Polymeric Nanoparticles: A Novel Approach in Antifungal Therapy
14	WBSSTC/2024-25/R5/EST/120921	<b>Shreya Ghosh</b>	Formulation and In Vitro Evaluation of Density-Dependent Floating Tablets of Ofloxacin: A Comparative Study of Formulation Parameters and Release Kinetics
15	WBSSTC/2024-25/R5/EST/122409	<b>Sayan Mondal</b>	Formulation and Characterization of Ciprofloxacin-Loaded Niosomes: A Comprehensive Approach to Drug Delivery
16	WBSSTC/2024-25/R5/EST/112756	<b>Biswajit Patwari</b>	Enhancing Image Steganography: A Hybrid Approach Using Edge Detection Technique
17	WBSSTC/2024-25/R5/EST/122013	<b>Prosun Ganguly</b>	Enhancing Antimicrobial Activity of Silver Nanoparticles Through Natural Polymer Conjugates
18	WBSSTC/2024-25/R5/EST/010217	<b>Anusua Mazumder</b>	Energy-Efficient and Fault-Tolerant Power Systems: A Federated Learning Approach Using Digital Twin Models

19	WBSSTC/2024-25/R5/EST/072123	<b>Khandakar Nafees Hossain</b>	Smart Solar-Powered EV with Vehicle-to-Vehicle (V2V) Charging for Sustainable Mobility Solutions
20	WBSSTC/2024-25/R5/EST/012555	<b>Kamalika Bhattacharjya</b>	Entropy-Driven Federated Learning for Energy Efficient and Sustainable Internet of Underwater Things

## Technical Session - 7

<b>Discipline-7:</b>	<b>Environmental Sciences including Climate Change</b>	
<b>Venue</b>	<b>Date</b>	<b>Session Duration</b>
UG Classroom T-17, 3 <sup>rd</sup> Floor, Faculty of Agriculture Building	14 <sup>th</sup> January 2025	02:00 P.M. – 06:00 P.M.
<b>Invited Talk:</b>	Prof. Dr. Lalu Das Department of Agricultural Meteorology & Physics, BCKV, Nadia, WB	
<b>Title of the Talk:</b>	Environmental challenges under projected climate change scenarios over India	

Sl No.	Application No.	Name of the Presenting Author	Title of the Abstract
1	WBSSTC/2024-25/R5/ESCC/112650	<b>Tanaya Das</b>	Kitchen waste: gruel and rotten fruits are natural sources for fungal medium preparation and fungi isolation for mycoremediation of dye
2	WBSSTC/2024-25/R5/ESCC/041138	<b>Urbi Sarker</b>	Analysis of Common Airshed of Atmospheric PM10 in Kolkata and Howrah
3	WBSSTC/2024-25/R5/ESCC/120950	<b>Arghadeep Das</b>	A comparative study on mangrove self-restoration at Indian Sundarbans and Bhitarkanika after severe cyclonic events - a remote sensing-based approach
4	WBSSTC/2024-25/R5/ESCC/113304	<b>Riya Dey</b>	Exploring the Invisible Pathways: How Aerosols Travel and Deposit in Upper Respiratory Tract
5	WBSSTC/2024-25/R5/ESCC/061317	<b>Tirthankar Saha</b>	Presence of Antibiotic Resistant Mycobacterium fortuitum in Bathing Pond Water of North 24 Parganas District, West Bengal: A Preliminary Report
6	WBSSTC/2024-25/R5/ESCC/090817	<b>Srotaswini Bhowmik</b>	Surface and Ground Water Quality Assessment in a Selected Meander Stretch of the Adi Ganga River using Multivariate Statistical Analysis, WQI and GIS
7	WBSSTC/2024-25/R5/ESCC/122027	<b>Supratick Seal</b>	Comparative Study on the Effects of Idol Immersions on the Water Quality of River Ganga at Ghats of Six Municipal Zones of North Twenty Four Parganas, West Bengal
8	WBSSTC/2024-25/R5/ESCC/112726	<b>Arindam Datta</b>	Receptor Modeling-Based Source Apportionment of Ambient Particulate Matter in Howrah City
9	WBSSTC/2024-25/R5/ESCC/030704	<b>Rupali Khatun</b>	Interactive Web Application for Analyzing Light Pollution in Darjeeling Using Remote Sensing and Google Earth Engine
10	WBSSTC/2024-25/R5/ESCC/045528	<b>Kushal Roy</b>	Exploring water footprint and sustainable approaches for water security in the Raniganj Block, Paschim Bardhaman, West Bengal, India: Advancing SDGs through agricultural resilience, water security, and responsible mining
11	WBSSTC/2024-25/R5/ESCC/101415	<b>Anwasha Sengupta</b>	Hourly forecasting of PM2.5 using different missing value imputation techniques-A comparative study
12	WBSSTC/2024-25/R5/ESCC/101859	<b>Chatterjee Sandipan</b>	Simple scalable transformation of waste laser tonner into magnetic black pigments by pyrolysis and its application in magnetic leather finishing
13	WBSSTC/2024-25/R5/ESCC/125137	<b>Samarpita Ghosh</b>	Clean fuel use, Political representation and Forest cover: Evidence from Rural India

14	WBSSTC/2024-25/R5/ESCC/041520	<b>Chandrima Bandyopadhyay</b>	Analysis of Spatiotemporal Trends in Climatic Variables in the Coastal Plain of West Bengal
15	WBSSTC/2024-25/R5/ESCC/081537	<b>Purba Datta Goswami</b>	Simulation of future rice production under downscaled climate change scenarios over south Bengal
16	WBSSTC/2024-25/R5/ESCC/101410	<b>Sulagna Khan</b>	Climate Crisis and Gender Discrimination: A Crucial Scenario of Injustice
17	WBSSTC/2024-25/R5/ESCC/111926	<b>Shreya Pal</b>	Promoting climate resilience among youth through sustainable practices

## Technical Session -8

**Discipline-9:**

**Physiology and Medical Sciences including Forensic sciences**

**Venue**

**Date**

**Session Duration**

D.R. Sarkar Hall, 2<sup>nd</sup> Floor, Near  
Department of Ag. Extension, Faculty  
of Agriculture Building

14<sup>th</sup> January 2025

2:00 pm to 6:00pm

**Invited Talk:**

**Dr. Soumyajyoti Bandyopadhyay**  
Associate Prof., MBBS, MD(FMT), FMT, COMJNMH

**Title of the Talk:**

**Forensic Medicine and Modern Treatment, an Overview**

Sl No.	Application No.	Name of the Presenting Author	Title of the Abstract
1	WBSSTC/2024-25/R5/PMSFS/051501	<b>Soumya Halder</b>	Finding the antagonist molecule of HIV-1 reverse transcriptase through E-pharmacophore modelling approach
2	WBSSTC/2024-25/R5/PMSFS/103548	<b>Monosij Jyoti</b>	Production of bioplastic from soil bacteria to combat environmental issues
3	WBSSTC/2024-25/R5/PMSFS/093809	<b>Debanjan Chakraborty</b>	Respiratory Problems among Male Conch shell artisans engaged at Unorganised Sectors in West Bengal: A Multi Parameter Assessment Study
4	WBSSTC/2024-25/R5/PMSFS/014015	<b>Mayukh Chatterjee</b>	Delineating Identity Through Dermal Inscriptions: A Forensic Investigation into Tribal Tattoos as Markers of Regional Origin, Sociodemographic Affiliation, Marital Status, Age, Thematic Choice, and Cognitive Processes
5	WBSSTC/2024-25/R5/PMSFS/013754	<b>Devdipro Bhaduri</b>	Enhancing Forensic Science Through Advanced Artificial Intelligence Integration
6	WBSSTC/2024-25/R5/PMSFS/104414	<b>Rashni Chatterjee</b>	Assessment of Heavy Menstrual Bleeding using Self-Perceived Pictorial Blood Assessment Chart (PBAC) among Adult Bengalee Women in Kolkata, West Bengal, India
7	WBSSTC/2024-25/R5/PMSFS/044204	<b>Sneha Majumder</b>	Phytochemicals from Caesalpinia bonduc as Potential Anti-Stroke Agents: A Molecular Docking and Dynamics Approach Targeting tPA
8	WBSSTC/2024-25/R5/PMSFS/085416	<b>Aditya Nath</b>	The Physiological Impacts of Occupational Heat Exposure on Male Harvesters: Implications of Climate Change Scenarios
9	WBSSTC/2024-25/R5/PMSFS/084008	<b>Arghya Saha</b>	Ergonomic Analysis of Work-Related Musculoskeletal Disorders of Male Power Loom Workers in Santipur, Nadia, West Bengal
10	WBSSTC/2024-25/R5/PMSFS/100056	<b>Sambaran Mondal</b>	Development and Analysis of a Novel Dietary Fiber rich Food Supplement: Concerning the Issue of Geriatric Constipation
11	WBSSTC/2024-25/R5/PMSFS/100937	<b>Jenia Bhaumik</b>	Respiratory impairments leads to increase oxidative stress among marble cutting workers engaged in unorganized sector in West Bengal, District: North 24 Parganas
12	WBSSTC/2024-25/R5/PMSFS/010050	<b>Lipika Mondal</b>	Prevalence of Abnormal Eating behavior and Related Psychological factors of Female College Students (18-23 years)
13	WBSSTC/2024-25/R5/PMSFS/032126	<b>Atreyee Ganguly</b>	Anti-Arthritic Potential of Methanolic Extract of Purified Roots of Plumbago zeylanica-An In Vivo Study

14	WBSSTC/2024-25/R5/PMSFS/054547	<b>Pritha Roy</b>	Anthropometric Variation between Orphan and Non-Orphan Children: A Socio-Nutritional Approach
15	WBSSTC/2024-25/R5/PMSFS/075337	<b>Oindriya Bakshi</b>	Federated learning based Privacy preserving Real time digital forensic
16	WBSSTC/2024-25/R5/PMSFS/014836	<b>Mala Dey</b>	Impact of Water, Hygiene & Sanitation (WASH practice) on the growth of children aged 1 to 5 years
17	WBSSTC/2024-25/R5/PMSFS/040140	<b>Sweety Bardhan</b>	Implication of Socioeconomic Status on the Risk of Diabetes on Bengali Young Adults in the Southern Region in West Bengal
18	WBSSTC/2024-25/R5/PMSFS/060111	<b>Sudipta Banerjee</b>	Paradigm of protein intake from plant and animal sources among young adult urban females in West Bengal
19	WBSSTC/2024-25/R5/PMSFS/063013	<b>Didhiti Singha</b>	mTOR inhibition using Torin1 resulted in increased stability of Wee1, an oncoprotein in various cancers: A possible reason for the ineffectiveness of mTOR inhibitors in clinics
20	WBSSTC/2024-25/R5/PMSFS/085618	<b>Tanmoy Das</b>	Downregulation of S6K1 activity is associated with increased sensitivity to protein synthesis perturbations in multiple myeloma

## Technical Session - 9

<b>Discipline-3:</b>	<b>Statistics, Mathematical Sciences, IT and its Applications</b>	
<b>Venue</b>	<b>Date</b>	<b>Session Duration</b>
Seminar Room, Faculty of Horticulture Building	14 <sup>th</sup> January 2025	02:00 P.M. – 06:00 P.M.
<b>Invited Talk:</b>	Prof. Smarajit Bose Interdisciplinary Statistical Research Unit, Indian Statistical Unit	
<b>Title of the Talk:</b>	Generalized quadratic discriminant analysis	

Sl No.	Application No.	Name of the Presenting Author	Title of the Abstract
1	WBSSTC/2024-25/R5/SMSA/034233	Dr Ayan Paul	Does Non-Consumptive effects influence hunting strategy?: An illustration through the lens of classical mechanics
2	WBSSTC/2024-25/R5/SMSA/095923	Dipankar Hazra	Brain Inspired Quantum Spiking Neural Network for Medical Image Classification
3	WBSSTC/2024-25/R5/SMSA/081156	Soumita Sen	Exploring the impact of viral infection on population dynamics of zooplankton-fish system
4	WBSSTC/2024-25/R5/SMSA/113751	Dr Shilpi Pal	An EOQ Model for Deteriorating Items with Time- and Reliability-Dependent Demand and Partial Backordering Using Triangular Intuitionistic Fuzzy Numbers
5	WBSSTC/2024-25/R5/SMSA/054637	Joydeb Bhattacharyya	The Future of Mosquito Control: Wolbachia and Beyond
6	WBSSTC/2024-25/R5/SMSA/122328	Sarmad Hossain	A Study of Galois Group of Covering Spaces as a Topological Group
7	WBSSTC/2024-25/R5/SMSA/045933	Dr Sushovon Jana	Advanced Clustering and Multivariate Analysis for Unveiling Patterns in Active Galactic Nuclei Classification
8	WBSSTC/2024-25/R5/SMSA/093951	Suddhyashil Sarkar	Exploring sterile mosquito release strategies with natural enemies for mosquito control
9	WBSSTC/2024-25/R5/SMSA/013016	Niren Biswas	Study of the effect of booster vaccination on disease control
10	WBSSTC/2024-25/R5/SMSA/081349	Dr Sudarshan Bardhan	Random pricing, product collection, and green investment strategies in a closed-loop supply chain with price dependent demand and remanufacturing
11	WBSSTC/2024-25/R5/SMSA/114923	Sayani Maity Roy	Gravitational waves in the paradigm of $f(Q)$ gravity
12	WBSSTC/2024-25/R5/SMSA/015635	Dr Nikhilesh Sil	A Mathematical Perspective on Parasitic Infections: Taeniasis and Cysticercosis
13	WBSSTC/2024-25/R5/SMSA/022048	Santanu Bag	Norm and Numerical Radius of One Parameter Family of Matrices
14	WBSSTC/2024-25/R5/SMSA/022937	Indrani Modak	Random pricing, warranty and green strategy in a two-echelon closed-loop supply chain
15	WBSSTC/2024-25/R5/SMSA/051119	Santanu Mukherjee	AI-Enabled Autonomous Farming
16	WBSSTC/2024-25/R5/SMSA/062839	Surapati Pramanik	FUCOM -MABAC Strategy to Identify the Most Suitable Waste to Energy Technologies for Converting Waste into Green Energy under Q-rung Orthopair Fuzzy Set Environment
17	WBSSTC/2024-25/R5/SMSA/070733	Debopriya Dey	Supply Chain Management of Single Deteriorating item during Production Crisis
18	WBSSTC/2024-25/R5/SMSA/092532	Labani Halder	Regulated Data Baffling Scheme



19	WBSSTC/2024-25/R5/SMSA/072929	<b>Santana Mondal</b>	Evolution of prey body size under the influence of fear of predators and its carry over effect
20	WBSSTC/2024-25/R5/SMSA/120706	<b>Banjul Bhattacharyya</b>	Application of Machine Learning techniques for forecasting Yield of Agricultural crops: A case of Rice in Tamil Nadu, India

----- *Dinner* -----

**Venue: Will be served at the guest house**

**08:15 - 09:15 P.M.**

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## Day 2: 15<sup>th</sup> January 2025 (Wednesday)

Registration/Breakfast: 8:30 - 9:30 A.M.

(Venue- Basement of Directorate of Research, BCKV, Mohanpur, Nadia)

## Technical Sessions

Day 2: 15<sup>th</sup> January 2025 (Wednesday)

(Venue- Faculty of Agriculture/Horticulture)

(10:00 A.M.- 01:30 P.M.)

### Technical Session - 10

Discipline-6:

Botany

Venue

Date

Session Duration

Colloquium Hall, Department of Ag.  
Extension, 2<sup>nd</sup> Floor, Faculty of  
Agriculture Building

15<sup>th</sup> January 2025

10:00 A.M. - 12:30 P.M.

Invited Talk:

Prof. (Retd.) Kashinath Bhattacharya  
Dept. of Botany, Visva Bharati University, Santiniketan, Bolpur

Title of the Talk:

Origin of Life and Evolution

Sl No.	Application No.	Name of the Presenting Author	Title of the Abstract
1	WBSSTC/2024-25/R5/BTNY/065323	Ananya Roy Chowdhury	Effect of plant growth promoting rhizobacteria (PGPR) on salt stress tolerance of <i>Capsicum annum</i> L.
2	WBSSTC/2024-25/R5/BTNY/094552	Noorie Shama	Quantitative Analysis of Heavy Metals in the roots of <i>Hemidesmus indicus</i> by AAS (Atomic Absorption Spectroscopy)
3	WBSSTC/2024-25/R5/BTNY/100428	Mushtaq Ahmad Najar	Transcriptome-based identification and validation of selected genes for <i>Macrophomina</i> tolerance in Sesame
4	WBSSTC/2024-25/R5/BTNY/103232	Bratati Sikdar	Disrupting Quorum Sensing (QS) Network in <i>Chromobacterium violaceum</i> by Epigallocatechin-3-gallate (EGCG)
5	WBSSTC/2024-25/R5/BTNY/022247	Debapriya Basuli	Plantation Disparities as Influencers in Provisions of Mangrove Ecosystem Services: A Case Study on <i>Bruguiera gymnorhiza</i>
6	WBSSTC/2024-25/R5/BTNY/061503	Sahina Khatun	Estimation of Ascorbic Acid Content of Some Human Dietary Food and its Correlation with the Human Dietary Reference Intakes

## Technical Session - 11

<b>Discipline-1:</b>	<b>Physical Sciences</b>	
<b>Venue</b>	<b>Date</b>	<b>Session Duration</b>
Seminar Room of Dept. of Economics, 2 <sup>nd</sup> Floor, Near Department of Ag. Extension, Faculty of Agriculture Building	15 <sup>th</sup> January 2025	10:00 A.M. – 01:00 P.M.
<b>Invited Talk:</b>	Prof. Debasish Majumdar Department of Physics, RKMVERI, Belur Math, Howrah-711202	
<b>Title of the Talk:</b>	Universe, an unending enigma: Dark Matter, Dark Energy, Gravitational Waves	

Sl No.	Application No.	Name of the Presenting Author	Title of the Abstract
1	WBSSTC/2024-25/R5/PHYS/015148	<b>Rakhijul Alam Faruque</b>	Early findings on the relationship between the Atmospheric Electric Field and Air Quality Index monitored from two tropical sites
2	WBSSTC/2024-25/R5/PHYS/092740	<b>Sk Abdul Kader Md Faruque</b>	Synchronization of Heterogeneous Oscillators through Inductor Coupling: Insights from Chua and LC Tank Circuits
3	WBSSTC/2024-25/R5/PHYS/125719	<b>Medha Das</b>	Study of Wigner Function as a measure of non-classicality for Photon-Added Schrodinger Cat State
4	WBSSTC/2024-25/R5/PHYS/015050	<b>Rinku Sarkar</b>	Na <sup>+</sup> Substitution Effects on GdMnO <sub>3</sub> : Structural Integrity and Enhanced Dielectric Properties for Next-Generation Electronics
5	WBSSTC/2024-25/R5/PHYS/034225	<b>Bidyut Sarkar</b>	Enhanced Magnetocaloric Performance of Y <sub>0.10</sub> Ca <sub>0.90</sub> MnO <sub>3</sub>
6	WBSSTC/2024-25/R5/PHYS/043318	<b>Debashri Saha</b>	All-optical Method of Developing OFSK Using Photonic Band Gap Crystal
7	WBSSTC/2024-25/R5/PHYS/072245	<b>Himanshu Sekhar Sahoo</b>	Photoelectrochemical Hydrogen Production Using Copper(I) Oxide Based Semiconductors
8	WBSSTC/2024-25/R5/PHYS/111848	<b>Subhajit Kar</b>	Unveiling Galactic Wolf-Rayet Stars through Machine Learning

## Technical Session - 12

<b>Discipline-7:</b>	<b>Zoology</b>	
<b>Venue</b>	<b>Date</b>	<b>Session Duration</b>
UG Classroom T-17, 3 <sup>rd</sup> Floor, Faculty of Agriculture Building	15 <sup>th</sup> January 2025	10:00 A.M. – 01:30 P.M.
<b>Invited Talk:</b>	Professor Subhankar Kumar Sarkar Professor and Head, Department of Zoology, University of Kalyani	
<b>Title of the Talk:</b>	Insects do matter: Identification, diversity, and application in forensics	

Sl No.	Application No.	Name of the Presenting Author	Title of the Abstract
1	WBSSTC/2024-25/R5/ZOLGY/095538	<b>Supriyo Acharya</b>	Assessment of potentiality of Tartrazine in promoting Liver damage in <i>Oreochromis niloticus</i> .
2	WBSSTC/2024-25/R5/ZOLGY/113727	<b>Subhan Dutta</b>	<i>Spathodea campanulata</i> , a hidden gem for pollinator conservation
3	WBSSTC/2024-25/R5/ZOLGY/111936	<b>Ankush Mitra</b>	Morphological Insights into The Antennal Sensilla of True Fruit Flies (Insecta: Diptera: Tephritidae) – Novel Study from The Gangetic Plains of West Bengal, India
4	WBSSTC/2024-25/R5/ZOLGY/040325	<b>Souvik Mazumdar</b>	Effect of Soil Edaphic Factors on Diversity of Collembola in Anthropogenic Grasslands of Medinipur, West Bengal, India
5	WBSSTC/2024-25/R5/ZOLGY/095634	<b>Abhik Rong</b>	Assessing Aquatic Beetle Diversity (Coleoptera) in Relation to Physiochemical Parameters of the Coastal Region of Purba Medinipur, West Bengal, India
6	WBSSTC/2024-25/R5/ZOLGY/120054	<b>Monalisa Pramanik</b>	Larvicidal activity of crude leaves extracts of two medicinal plants <i>Enhydra fluctuans</i> (Family: Asteraceae) & <i>Bauhinia picta</i> (Family: Fabaceae) for the control of mosquito vectors of filariasis & dengue
7	WBSSTC/2024-25/R5/ZOLGY/122321	<b>Ishani Panda</b>	How Ditch Jewels overtake others in the race?
8	WBSSTC/2024-25/R5/ZOLGY/013257	<b>Keya Sarkar</b>	Impact of Neonicotinoid Pesticides on Honeybee Molecular Physiology and Mitigation through Hydrogel Supplementation
9	WBSSTC/2024-25/R5/ZOLGY/022936	<b>Anima Barman</b>	First Report of Microplastic Detection and Characterization from the Riverine system of three Famous Tourist spots of Sundarban Delta Region
10	WBSSTC/2024-25/R5/ZOLGY/102657	<b>Khokan Naskar</b>	Foraging behaviour strategy of <i>Camponotus compressus</i> and <i>Oecophylla smaragdina</i> ants in semi-arid area of West Bengal
11	WBSSTC/2024-25/R5/ZOLGY/104701	<b>Priyanka Singh</b>	The Role of Ecology in Supporting Economic Growth: An Interdisciplinary Approach to Sustainability
12	WBSSTC/2024-25/R5/ZOLGY/033002	<b>Monojit Das</b>	Nanodrug Impregnated Hydrogel Promotes Scarless Wound Healing by Reprogramming Phase Transitions through its Redox Buffering Capacity in Preclinical Mouse Model: A Special Reference to Water Dynamics of Hydrogel
13	WBSSTC/2024-25/R5/ZOLGY/034036	<b>Abhijit Biswas</b>	Estrogen induced hepatotoxicity in cases of Frozen Embryo Transfer cases of IVF

14	WBSSTC/2024-25/R5/ZOLGY/104236	<b>Prosenjit Ghosh</b>	Association of Ants with invasive Mealybugs ( <i>Phenacoccus solenopsis</i> Tinsley) in Ashwagandha ( <i>Withania somnifera</i> L.) plant
15	WBSSTC/2024-25/R5/ZOLGY/090635	<b>Dr Priyankar Sanphui</b>	Activation of FoxO-miR21-FasL axis in neurodegeneration relevant to Parkinson's Disease

# Technical Session- 1

Continuation from Day-1

<b>Discipline-11</b>	<b>Agriculture, Horticulture, Fisheries and Veterinary Sciences</b>	
<b>Venue</b>	<b>Date</b>	<b>Session Duration</b>
Convocation Hall, 2 <sup>nd</sup> Floor, BCKV Administrative Building	15 <sup>th</sup> January 2025	10:00 A.M. – 01:30 P.M.

Sl No.	Application No.	Name of the Presenting Author	Title of the Abstract
21	WBSSTC/2024-25/R5/AHFVS/045256	Dr Shyamali Das	Performance of tossa jute ( <i>Corchorus olitorius</i> L.) under various weed management practices
22	WBSSTC/2024-25/R5/AHFVS/111212	Mainak Sarkar	LCC-based top dressing and organic manure for improvement of growth, yield and quality of GI-tagged Gobindabhog rice
23	WBSSTC/2024-25/R5/AHFVS/113523	Thakur Prasad Rathour	Mango plantation nutrients feeding device (MPNFD)
24	WBSSTC/2024-25/R5/AHFVS/050655	Poulomi Gangopadhyay	Anthraco-nose of lucky bamboo: Morphological and cultural characterization
25	WBSSTC/2024-25/R5/AHFVS/114750	Debasmita Saha	A Two stage System for Categorization of Cat Fishes Using Image Processing Techniques
26	WBSSTC/2024-25/R5/AHFVS/113251	Prerona Saha	Response of Black-husked Aromatic Rice Cultivars to LCC-based N top dressing in Lower Gangetic Plains
27	WBSSTC/2024-25/R5/AHFVS/043843	Suwendu Bhattacharjee	Analysis of furrow profiles using a furrow profile analyser and image-based digitization for enhanced soil disturbance assessment
28	WBSSTC/2024-25/R5/AHFVS/075927	Abhismita Samajder	Genotype screening of faba bean ( <i>Vicia faba</i> L.) in field condition for leaf miner and pod borer resistance
29	WBSSTC/2024-25/R5/AHFVS/120114	Mousumi Murmu	Genetic variability studies of grain physical traits, hydration properties and starch content in Mungbean
30	WBSSTC/2024-25/R5/AHFVS/075640	Soma Biswas	Impact of DAESI course on knowledge level of input dealers in some selected areas of West Bengal

## Technical Session- 3

Continuation from Day-1

<b>Discipline-8:</b>	<b>Biotechnology</b>	
<b>Venue</b>	<b>Date</b>	<b>Session Duration</b>
UG Classroom T-1, 3 <sup>rd</sup> Floor, Faculty of Agriculture Building	15 <sup>th</sup> January 2025	10:00 A.M. – 01:30 P.M.

Sl No.	Application No.	Name of the Presenting Author	Title of the Abstract
21	WBSSTC/2024-25/R5/BIOTECH/075931	Neeladri Hazra	Medi-Guardian: A Multifunctional Biomedical Box for Medication Adherence, Patient Monitoring, and Remote Family Care
22	WBSSTC/2024-25/R5/BIOTECH/124453	Mubashshir Hasan	Bio - remediation of heavy metals from wastewater by using crosslinking of biochar with chitosan and nanoparticles
23	WBSSTC/2024-25/R5/BIOTECH/050658	Abdul Sakil Khan	Investigation and in depth analysis of antibiotic resistance <i>Bacillus</i> species and its implication in Food Microbiology
24	WBSSTC/2024-25/R5/BIOTECH/122959	Rupal Sahoo	Unveiling the Power of Guava: A Comparative Phytochemical and Antimicrobial Study of Flowers, Fruits, and Leaves
25	WBSSTC/2024-25/R5/BIOTECH/045109	Arpan Ghosh	Identification and Molecular Analysis of the Role of Industrial Waste Degrading Bacteria, Isolated from Kolkata, India
26	WBSSTC/2024-25/R5/BIOTECH/033127	Nistha Sinha	AAA+ ATPase ATAD5: Implications for Oncogenesis and Therapeutic Targeting
27	WBSSTC/2024-25/R5/BIOTECH/014256	Ishani Paul	In silico Therapeutic Development Targeting DosS of <i>Mycobacterium tuberculosis</i> : An Approach to Overcome Drug-Resistance Mechanism
28	WBSSTC/2024-25/R5/BIOTECH/094909	Marshal Murmu	Bioinformatical Characterization of Cellulose Synthase Like (CSL) Proteins in Two Cultivated Jute Species
29	WBSSTC/2024-25/R5/BIOTECH/103040	Sanjukta Maity	Accelerating Targeted Therapeutic Development: Advanced Machine Learning for the Discovery of Novel MMP-1 Inhibitors in Disease Treatment
30	WBSSTC/2024-25/R5/BIOTECH/110507	Ankita Datta	A comparative study among <i>Coffee arabica</i> , green coffee and a commercial coffee powder based on their antioxidant & antimicrobial property

## Technical Session-4

Continuation from Day-1

<b>Discipline-2:</b>	<b>Chemical Science</b>	
<b>Venue</b>	<b>Date</b>	<b>Session Duration</b>
UG Classroom-T5, 3 <sup>rd</sup> Floor, Faculty of Agriculture Building	15 <sup>th</sup> January 2025	10:00 A.M. – 01:30 P.M.

Sl No.	Application No.	Name of the Presenting Author	Title of the Abstract
18	WBSSTC/2024-25/R5/CHEM/095113	Smita Mondal	Modeling on Heterogenous Catalytic performance of 1,2-Propanediol production from bio-glycerol using Artificial Neural Network
19	WBSSTC/2024-25/R5/CHEM/113532	Uddipan Dasgupta	Electrochemical Detection of Ammonia for Food Quality Monitoring Using Cu <sub>3</sub> N-PANI Nanostructures
20	WBSSTC/2024-25/R5/CHEM/010519	Arijit Bag	Electronic structure based designing of non- metal electrodes for energy harvesting from seawater
21	WBSSTC/2024-25/R5/CHEM/073806	Tapas Kumar Ghosh	Integrating Extracts from Indian gooseberry into Polymers to Develop Antibacterial Composite Films for the Preservation of Dry Fruits/ Vegetables and Other Food items
22	WBSSTC/2024-25/R5/CHEM/014113	Shefali Jayswal	Heteroepitaxial growth of ZnO shell on Ln <sup>3+</sup> -Li <sup>+</sup> co-doped Y <sub>2</sub> O <sub>3</sub> phosphor core
23	WBSSTC/2024-25/R5/CHEM/055345	Snehanka Bose	Enzyme Instructed Selective Disruption of Bacterial Membrane by Bioengineered Antibacterial Peptide
24	WBSSTC/2024-25/R5/CHEM/075146	Aditya Poddar	Electrodeposited Bismuth Vanadate Thin Films for Photoelectrochemical Applications



## Technical Session - 6

Continuation from Day-1

<b>Discipline-4:</b>	<b>Engineering Science and Technology</b>	
<b>Venue</b>	<b>Date</b>	<b>Session Duration</b>
<b>T-31 Classroom, 3<sup>rd</sup> Floor, Faculty of Agriculture Building</b>	<b>15<sup>th</sup> January 2025</b>	<b>10:00 A.M. – 01:30 P.M.</b>

SI No.	Application No.	Name of the Presenting Author	Title of the Abstract
21	WBSSTC/2024-25/R5/EST/103432	Sagnik Chakraborty	Entrapment of Polyphenol Extracted from Centella asiatica in Biopolymeric Hydrogel Matrix
22	WBSSTC/2024-25/R5/EST/120642	Trisha Paul	Designed and Developed Low-Cost 3D Printed Prosthetic Arm for Medical Rehabilitation
23	WBSSTC/2024-25/R5/EST/091940	Moinuddin Sk	Simulation of shovel type furrow opener using the Discrete Element Method (DEM)
24	WBSSTC/2024-25/R5/EST/071842	Jeet Banerjee	Enhancement of Isolation in a Super-wideband MIMO Antenna with Polarization Diversity utilizing a Fractal Neutralization Line
25	WBSSTC/2024-25/R5/EST/120752	Mousam Maity	Acid-Hydrolyzed Alginate Nanoparticles Enhance Diclofenac Sodium Delivery: A Promising Strategy for Improved Therapeutic Outcomes
26	WBSSTC/2024-25/R5/EST/120524	Meghna Santra	Predicting Sildenafil Disposition in PAH using PK-Sim: A Comprehensive PBPK Model
27	WBSSTC/2024-25/R5/EST/045324	Dr Debal Pramanik	Next-Generation Nanocomposites: Sustainable Performance of Recycled RN66 for Dynamic Shear Application in Engineering
28	WBSSTC/2024-25/R5/EST/124823	Debmitra Ghosh	Sensor-Based Detection System for Parasites in Water: A Case Study of the Agarpara Region
29	WBSSTC/2024-25/R5/EST/071055	Kanu Gopal Pilsima	A holistic approach for reduction of equipment failure applying tpm tool at XYZ limited
30	WBSSTC/2024-25/R5/EST/061540	Suparna Biswas	An efficient sleep apnea detection method using wavelet transform and entropy

## Technical Session -8

Continuation from Day-1

**Discipline-9:**

**Physiology and Medical Sciences including Forensic sciences**

**Venue**

**Date**

**Session Duration**

D.R. Sarkar Hall, 2<sup>nd</sup> Floor, Faculty of Agriculture Building

15<sup>th</sup> January 2025

10:00 am-1:30pm

Sl No.	Application No.	Name of the Presenting Author	Title of the Abstract
21	WBSSTC/2024-25/R5/PMSFS/094630	<b>Enakshi Chakraborty</b>	A comparative study between different motor ability among field hockey players according to their different playing position
22	WBSSTC/2024-25/R5/PMSFS/105310	<b>Kanu Gopal Biswas</b>	A Study on Oxidative Stress and Hematological Profile Among Carpentry Site Worker of West Bengal, India
23	WBSSTC/2024-25/R5/PMSFS/011339	<b>Shilpa Saha</b>	A Study on Nutritional Status of Children Aged 9y from North 24 Parganas
24	WBSSTC/2024-25/R5/PMSFS/035143	<b>Rubia Mondal</b>	The association of Tmprss6 polymorphism rs2413450 and rs4820268 with iron and haematocrit parameters among Women of Reproductive age group in rural population of Nadia district, West Bengal
25	WBSSTC/2024-25/R5/PMSFS/102223	<b>Dr Animesh Dey</b>	Detection of Evolutionary Dynamics and Molecular Parallels of Chloramphenicol Resistance Genes via Advanced Phylogenetic Analysis
26	WBSSTC/2024-25/R5/PMSFS/024536	<b>Debolina Chatterjee</b>	Modulation of toll like receptors (TLRs) and Interferons (IFNs) by glycyrrhizin from Glycyrrhiza glabra in Japanese Encephalitis virus infected chick embryo model
27	WBSSTC/2024-25/R5/PMSFS/044120	<b>Prashant Kumar Jha</b>	Development of RADI-SO-SCAN: A Novel Breast Scanning Modality
28	WBSSTC/2024-25/R5/PMSFS/084421	<b>Anumita Pal</b>	Digital Breadcrumbs: How Metadata on The Dark Web Leads to Hidden Criminal Networks
29	WBSSTC/2024-25/R5/PMSFS/105305	<b>Diptendu Sarkar</b>	An approach based on systemic biology to comprehend the impact of several mentha phytochemicals on human breast cancer

**Technical Session - 9**  
Continuation from Day-1

<b>Discipline-3:</b>	<b>Statistics, Mathematical Sciences, IT and its Applications</b>	
<b>Venue</b>	<b>Date</b>	<b>Session Duration</b>
Seminar Room, Faculty of Horticulture Building	January 15 <sup>th</sup> , 2025	10:00 A.M. – 01:30 P.M.

Sl No.	Application No.	Name of the Presenting Author	Title of the Abstract
21	WBSSTC/2024-25/R5/SMSA/063253	<b>Dr Debarghya Bhattacharya</b>	Generalized Theory of Magneto-thermo-diffusion in Rotating Media with Memory dependent Derivatives and Four-phase Lag
22	WBSSTC/2024-25/R5/SMSA/100541	<b>Shaikh Ibrahim Abdullah</b>	F-index: Properties and Applications in Bipolar Fuzzy Graphs
23	WBSSTC/2024-25/R5/SMSA/112831	<b>Amrit Das</b>	A Mathematical Approach to Understanding the Moral Hazard Problem in Government Education Subsidy Policy
24	WBSSTC/2024-25/R5/SMSA/014229	<b>Krishnakali Roy</b>	Construction of $2^n$ Row-Column Factorial Designs Using Incidence Matrices of Incomplete Block Designs
25	WBSSTC/2024-25/R5/SMSA/034716	<b>Sathi Patra</b>	A fractional-order mathematical approach to dengue transmission: encompassing genetic algorithm-based optimization
26	WBSSTC/2024-25/R5/SMSA/041953	<b>Suman Mondal</b>	Stability analysis of a delayed predator-prey model with Cosner-type functional response
27	WBSSTC/2024-25/R5/SMSA/091329	<b>Prity Maji</b>	Construction of Balanced Incomplete Block Designs (BIBD) from Sudoku Square Designs

----- **Lunch Break** -----  
**Venue: Food Court Near Directorate of Extension Building**  
**(01:30 – 02:30 P.M.)**

## Day 2: 15th January 2025 (Wednesday)

**Registration/Breakfast: 8:30 - 9:30 A.M.**  
**(Venue-Basement of Directorate of Research, BCKV, Mohanpur, Nadia)**

**Technical Sessions**  
**Day 2: 15th January 2025 (Wednesday)**  
**(Venue- Faculty of Agriculture/Horticulture)**  
**(10:00 A.M.– 01:30 P.M.)**

**----- Lunch Break -----**  
**Venue: Food Court Near Directorate of Extension Building**  
**(01:30 – 02:30 P.M.)**

### Sir Chandrasekhara Venkata Raman Memorial Lecture

**2:30 - 03.10 PM** | Prof. Tapas Chakrabarty  
VC, MAKAUT, Haringhata, Nadia  
**Title:** Mobility Mass Spectrometry: A Complementary Tool of Raman Spectroscopy in Chemical Analysis

### Acharya Jagadish Chandra Bose Memorial Lecture

**03:10 - 03.50 PM** | Prof. Partha Pratim Dutta  
Department of Biological Science, IISER Kolkata  
**Title:** Exploring new drug targets in bacteria: CgtA a case study, and 2.8Å cryo-EM structure of a plant virus causing huge agricultural loss globally  
**Memorial Lecture Session Coordinator**  
Prof. AB Sharangi, BCKV

### Special Session

(03:50 P.M. - 04:30 P.M.)

### Innovation and Entrepreneurship in West Bengal

Dr. Sonali Roy, Chief Operating Officer, Rise Foundation, IISER

### Valedictory Session & Award Ceremony

04:30 P.M. Onwards

- Prof. Tapas Chakrabarty, VC, MAKAUT, Haringhata, Nadia
- Dr. Ashok Kumar Patra, Vice Chancellor, BCKV
- Dr. Gouranga Kar, Director, ICAR-CRIJAF, Barrackpore
- Smt. Subrata B Dutta DSTBT, Govt. of West Bengal and Joint Organizing Secretary
- Dr. Aditi Acharya, Senior Scientist, DSTBT, GoWB

#### Session Coordinator

Prof. AB Sharangi, BCKV

### Programme Summary by

Dr. Kusal Roy, Nodal Officer (BCKV) and Joint Organizing Secretary, 7<sup>th</sup> RSTC, 2024-25  
BCKV, Mohanpur, Nadia, West Bengal, India  
PIN: 741252

### Announcement of Awards

#### Vote of Thanks by

Prof. Abhijit Saha, BCKV, Member-Convenor, Organising Committee, 7<sup>th</sup> RSTC, 2024-25  
BCKV, Mohanpur, Nadia, West Bengal, India PIN: 741252

**----- National Anthem-----**

## Contact Us

<b>Dr. Sumana Roy, Director of Research and Organizing Secretary M: 9635630842</b>	<b>Prof. Abhijit Saha Member Convener, 7th RSTC M: 9433317027</b>	<b>Dr. Kusal Roy, Nodal Officer (BCKV) and Joint Organizing Secretary M: 6290183112</b>
<b>Prof. Arup Chattopadhyay Convener, Academic Committee M: 9239402700</b>	<b>Dr. Sanchita Mondal Convener, Invitation, Reception &amp; Registration Committee M: 8336944902</b>	<b>Dr Asis Mukherjee For Accommodation M: 8001731196</b>