## PHYSICAL SCIENCES

## Venue: Physics Lecture Theatre- 1, Department of Physics (Baker Building 1<sup>st</sup>. Floor) 17<sup>th</sup>. January 2025 Friday Technical Session- 1 (2:00 PM onward)

Sl No.	Application No.	Name of the Presenting Author	Name of the Institute/ Organization	Title of the Abstract
1	WBSSTC/2024- 25/R6/PHYS/082034	Debadyuti Jana	University of Calcutta	Design and Analysis of Perfectly Reflecting TiO <sub>2</sub> -Based Metasurfaces
2	WBSSTC/2024- 25/R6/PHYS/013347	Dr Soma Mukherjee	Guru Nanak Institute of Technology	BioActive glasses: Structural Characterization, transport properties and Applications
3	WBSSTC/2024- 25/R6/PHYS/083706	Debaprem Bhattacharya	Govt College of Engineering and Textile Technology Berhampore	A Novel Two-dimensional Metallic Carbon for Lithium-ion Battery with Connected Tetragonal-pentagonal Ring
4	WBSSTC/2024- 25/R6/PHYS/092521	Prithwijita Ray	ABN Seal College	Investigation of High Spin States for Magnetic Rotation in 116Sn
5	WBSSTC/2024- 25/R6/PHYS/120814	Shraddha Biswas	Indian Centre for Space Physics	Investigating Transit Timing Variations in the Exoplanet WASP-43b During the TESS Era
6	WBSSTC/2024- 25/R6/PHYS/063608	Nupur Mukherjee	Khanpur Nirmala Bala Sarkar Girls High School	Study of braneworld blackhole in the expanding universe
7	WBSSTC/2024- 25/R6/PHYS/053132	Suchismito Chattopadhyay	Government Girls General Degree College	Unveiling the Nature of Kilohertz QPOs in 4U 1636-536: Temporal and Spectral Insights from AstroSat
8	WBSSTC/2024- 25/R6/PHYS/065346	Biplab Ghosh	Vivekananda College for Women	Atomic entanglement and coherence mediated by the Fock state cavity field: a quantitative study
9	WBSSTC/2024- 25/R6/PHYS/093519	Anirban Roy	University of Calcutta	Metal-Free Group-IV Carbide Hetero-nanodots : Magnetic Edges, Circular Dichorism And Efficient Gas Sensing Prospects
10	WBSSTC/2024- 25/R6/PHYS/100514	Asfakujjaman	University of Calcutta	A New Phase of Monolayer Germa-graphene
11	WBSSTC/2024- 25/R6/PHYS/100802	Rati Ray Banik	Jadavpur University	Pressure Induced Topological Phase Transitions in Lanthanum Nitride: An Account from First-Principles Study

12	WBSSTC/2024- 25/R6/PHYS/111653	Subhamoy Singharoy	JIS College of Engineering	Studying Various Aspects of Quantum informatics and DNA Helix
13	WBSSTC/2024- 25/R6/PHYS/075923	Junik Sengupta	Gurudas College	Distance Scale Measurement of Nova using the Maximum Magnitude versus Rate of Decline [ MMRD ] process
14	WBSSTC/2024- 25/R6/PHYS/030044	Saikat Sen	Presidency University	Isospin symmetry breaking in mirror pair 19F-19Ne
15	WBSSTC/2024- 25/R6/PHYS/082317	Nandini Karmakar	Presidency University	Rabi Oscillation
16	WBSSTC/2024- 25/R6/PHYS/043905	Turni Biswas	Presidency University	Einstein's and Smoluchowski's Equation of Brownian Motion

## 18<sup>th</sup>. January 2025 Saturday Technical Session- 2 (10:00 AM)

17	WBSSTC/2024- 25/R6/PHYS/120506	Namrata Das	Jadavpur University	Water Drop-mediated Triboelectric Nanogenerator Employing Microporous Polymeric Film, using Single-step Microwave Irradiation
18	WBSSTC/2024- 25/R6/PHYS/065744	Debmalya Sarkar	Jadavpur University	Self-powered and Lightweight Electronic Skin (E-skin) Based on ZnS@PDMS Nanocomposite for Human Body Movements Detection
19	WBSSTC/2024- 25/R6/PHYS/031629	Habibur Rahaman	Presidency University	Evidence of Octupole Excitation in 82Kr
20	WBSSTC/2024- 25/R6/PHYS/093408	Surajit Mandal	Presidency University Kolkata	Spectroscopic Determination of Atmospheric Carbon Dioxide and Water Vapour Concentrations from AVIRIS-NG Hyperspectral Images for Three Distinct Regions of India
21	WBSSTC/2024- 25/R6/PHYS/081345	Indrajit Mondal	Jadavpur University	Next-Generation Self-Standing and Reusable Biopolymer-Based Piezo-responsive Membrane for Efficient Organic Effluents Degradation and Pathogenic Bacterial Eradication from Wastewater
22	WBSSTC/2024- 25/R6/PHYS/082155	Piyali Halder	Jadavpur University	Stimuli Responsive Dual-Functional Nanocomposites: A New Frontier in Environmental Remediation and Antibacterial Applications
23	WBSSTC/2024- 25/R6/PHYS/120041	Anuradha Bhattacharya	Techno India University	Ultrafast deposition of ZnO and its application
24	WBSSTC/2024- 25/R6/PHYS/043712	Sk Firoj Haque	Jadavpur University	Fabrication of All Liquid warm WLEDs with tunable properties for Artificial Lighting and Cancer Cell Imaging

25	WBSSTC/2024-	Sarbojita Mukherjee	Amity University Kolkata	Room Temperature Green Chemistry Synthesized a Novel Material as
	25/R6/PHYS/084215			a Good Photocatalyst and an Antibiotic