

List of accepted abstracts for Poster Presentation at the conference
‘Advances in Quantum Materials using Synchrotron Techniques (AQMUST 2026)’
Saha Institute of Nuclear Physics, Kolkata

Poster No	Participants Name	Affiliation	Title of the Poster
P1	Rumal Singh	Shiv Nadar Institution, Noida	“Kinetics and Structures of an Antimicrobial Peptide Assembly In and Around Phospholipid Monolayers at the Air–Water Interface.”
P2	Amruta A	UGC-DAE CSR, Indore	Engineering Magnetic Anisotropy in Co₂FeAl Thin Films Through Columnar growth on Rippled and Flat Substrates
P3	Manish Verma	CeNS, Bangalore	Probing Light-Driven Evolution of Active Sites in Photoelectrocatalysts via X-ray Absorption Spectroscopy
P4	Suvashree Mukherjee	IISER, Kolkata	Probing pressure-induced structural evolution and its impact on the optical behaviour of the vacancy-ordered halide double perovskite Rb₂TeBr₆
P5	Asish Kumar Mishra	IISER, Kolkata	Pressure-induced ferromagnetic to antiferromagnetic phase transition in transition metal chalcogenide Cr₃Te₄
P6	Bhagyashree Giri	IISER, Kolkata	Pressure induced Iso-structural phase transition in Tri-rutile oxide CaV₂O₆
P7	Rachana Sain	IIT (BHU), Varanasi	Low-Temperature Synchrotron XRD Insights into Structure–Magnetism Coupling in Frustrated Pyrochlores
P8	Mandeep Singh	University of Petroleum and Energy Studies, Dehradun	Interface Induced Magnetic Anisotropy in Mo/CoFeB/Mo heterostructure using Depth Resolved X-ray Probes
P9	Debjit Biswas	IISER, Kolkata	Pressure Driven Exciton to Excimer Emission Toggling in Perylene Bisimide based H-aggregates
P10	Abhirup Das	IIT, Kharagpur	Concentration-induced phase separation of spin crossover nanoparticles in polymer thin film revealed by x-ray reflectivity (XRR)
P11	Avantika Chauhan	University of Petroleum and Energy Studies, Dehradun	A thermal stability and hydrogen interaction studies of Pd based alloy thin films using in-situ synchrotron radiation X-ray diffraction
P12	Sunaina Singh	VECC, Kolkata	Carbon Ion Engineering of Silicon Cathodes for Enhanced Photoelectrochemical Hydrogen Evolution
P13	Preyash Kumar Bal	IIT (ISM), Dhanbad	Graphene-enabled nanoplatform for cholesterol-related disease therapeutics: Insights from model biomembranes
P14	Soumya Bhowmik	SINP, Kolkata	Violation of the standard Slater-Pauling Rule in anti-Heusler alloy Al₂MnCu

P15	Gourav Sharma	BML Munjal University, Haryana	Low Energy Ion-implantation-induced Structural & Magnetic Modifications in Cr/SmCo₅/Pt/Co₂₀Fe₆₀B₂₀ Multilayer Thin Films
P16	Suprita Paul	IIT (ISM), Dhanbad	Carbon-based nanoplatform for protein-level detection and probing lipid protein interactions
P17	Anirban Saha	UGC-DAE CSR Kolkata	Critical magnetic and structural investigation of doped and pure antiferromagnetic RGa₂ (R = Gd, Tb) alloy system
P18	Sanchita Ghosh	UGC-DAE CSR Kolkata	Enhanced Magnetocaloric Properties Driven by an Incomplete Martensitic Phase Transition in the Dual-Doped MnNiGe Alloy
P19	Rosni Roy	UGC-DAE CSR Kolkata	Structural Investigation and Anomalous Hall effect in Fe_{3-x}Co_xGaTe₂
P20	Riya Roy	UGC-DAE CSR Kolkata	Strategic use of dual doping for the modification of structural and magnetic behaviors of MnNiGe Alloys
P21	Swapnadeep Goswami	Calcutta University	Impact of structural and electrical transport parameters on the Thermoelectric performance of Bi_{2-x}Sb_xGeTe₄ samples
P22	Dip Manna	SINP, Kolkata	Deposition pressure assisted vacancy engineering of rf sputtered TiO_{2-x} thin- lms in argon plasma leading to smaller optical band gap and room temperature resistive switching properties
P23	Subrata Paul	SINP, Kolkata	Magnetic domain imaging using magnetostriction: An electron microscopic approach
P24	Niladri Das	IISc, Bangalore	Probing the Structure of Confined Water in Ultra-Selective Polymer Membranes for Enhanced Desalination
P25	Suparna Sahoo	SINP, Kolkata	A Novel Phase in Quantum Hall Fluids: “Chiral Metal”
P26	Suman Kumar Ghosh	SINP, Kolkata	Beyond Free-Energy Minimization: Kinetic Control of Mixed Aggregates with Distinct Excitonic Coupling and Charge Transport in D-A Copolymer
P27	Arka Patra	SINP, Kolkata	Quenching of magnetic ordering in Quaternary Heusler NiFeVAI
P28	Sachin Majee	SINP, Kolkata	Cluster-driven exchange bias in an intercalated van der Waals antiferromagnet
P29	Suswapna Mukherjee	SINP, Kolkata	Study of nanoscale memory effect in π-bonded organic molecule and inorganic quantum dot hybrid system
P30	Nirabindu Ganguly	SINP, Kolkata	Interfacial Chemical Tuning of 2D BA₂PbBr₄ in Aqueous Environment: Formation of Formate Species
P31	Mofijul Sk	SINP, Kolkata	Moderate Rashba Spin Splitting in Sb(111)/MoS₂ Heterostructure: A First-Principles DFT Study
P32	Puja Das	SINP, Kolkata	Growth and electronic structure evolution of Co/Si(100): A LEEM and LEED Study

P33	Subhajit Mallik	SINP, Kolkata	Imaging AFM domain in NiO using threshold Photo emission electron microscopy (PEEM)
P34	Ayan Hatui	SINP, Kolkata	LEED Investigation of Thickness and Thermal Annealing Effects in Co/MoS₂(0001) Heterostructures
P35	Suvayan Saha	SINP, Kolkata	Role of Co/Mn Interaction in Developing Griffiths Phase with Reducing Particle Size in La₂CoMnO₆
P36	Pawan Kumar Ojha	SINP, Kolkata	Ultrafast Phase Transition in Voltage-Triggered VO₂ Thin Film
P37	Koushik Mondal	SINP, Kolkata	Role of Oxygen Vacancies in Resistive Switching and Charge Trapping Behaviour of VO_{2-x} Thin Films Deposited by RF Magnetron Sputtering
P38	Souvik Jana	SINP, Kolkata	Structure and charge transport of multimodal growth controlled Ph-BTBT-10 thin films
P39	Mantu Modak	SINP, Kolkata	Orthorhombic cotunnite phase in Er₂Ti₂O₇ under high-pressure
P40	Shuvankar Das	SINP, Kolkata	Growth and Phase Evolution of Sn on Ag(111): Transition from Metastable Ag₂Sn to Bulk Ag₃Sn
P41	Aditi Paliwal	SINP, Kolkata	Endotaxial growth of In₂O₃/Sapphire interface for Thin film transistor and phototransistor applications
P42	Arpan Bhattacharyya	Shiv Nadar Institution, Noida	Optimising Surfactant Driven Self-Assembly of Functionalized Nanoparticles in Air-Liquid and Liquid-Liquid Interface Using In-Situ SAXS and GISAXS and XRR Measurements
P43	Ashok Das	Calcutta University	Distortion Does the Magic: High-Performance Supercapacitors with Spin-Phonon Coupling
P44	Sanat Kumar Adhikari	Calcutta University	Role of Self-Doping in Shaping the Magneto-structural and Magnetocaloric Properties of MnNiGe Alloys
P45	Suman Kalyan Pradhan	SINP	Distinct origins of Colossal Magnetoresistance in layered Te-Doped Cr₂Se₃
P46	Tamaghna Maitra	SINP	Structural and optical characterization of Kesterite Cu₂ZnSnSe₄ single crystal grown via Bridgman technique
P47	Gobind Mandal	SINP	Enhanced Mobility of Edge-on Ordered Monolayer P₃DDT-based Organic Field-Effect Transistors