Technical Session Schedule of

in

Presidency University

Organized by the Department of Chemistry

Inaugural Session: Day 1 / 12th September, 2025

8:30 a.m. onwards	**Registration at Derozio Hall**
Inauguration at the Derozio Hall	
9:00 a.m.	Invocation and lighting of lamp
9.05 a.m.	**Welcome address by Prof. Arnab Halder, President, FCFA-2025**
9:10 a.m.	**Presidential address** by **Prof. Nirmalya Narayan Chakraborty, Vice-Chancellor, Presidency University**
9:20 a.m.	Address by **Prof. Deb Shankar Ray, Guest of Honour**
9.35 a.m.- 9:40 a.m.	Vote of thanks by **Dr. Anjoy Majhi, Joint Convenor, FCFA-2025**
9:40 a.m.-10:10 a.m.	High Tea Break

Technical Session: Day 1 / 12th September, 2025

Session 1:

Time			
	Session 1: Chairperson: **Prof. D. S. Ray (Derozio Hall)**		
10:10 a.m.-10:40 a.m.	**KL-1: Keynote Address by Prof. Hirendra Nath Ghosh, Director, DAE-NISER, Bhubaneswar** ***Title: Ultrafast Plasmon Dynamics in Non-Stoichiometric Near Infrared Active Semiconductor Nanocrystals***		
10:45 a.m.-11:15 a.m.	**KL-2: Keynote Address by Dr. Jagabandhu Kole, Vice-President, JSW Cement Ltd.**		
11:20 a.m.-11:50 a.m.	**KL-3: Keynote Address by Prof. S. Sinha Ray, Chief Researcher/Director, CSIR South Africa** ***Title:*** **Nanoengineered Materials for Healthcare Applications**		
	Tea Break 11:50 a.m.-12:05 p.m.		
	Functional Inorganic Chemistry **Chairperson: Prof. Sujoy Baitalik, JU (PCM Auditorium)**		***Functional Polymeric Materials*** **Chairperson: Prof. B. Das PU, Kolkata (MS Auditorium)**
12:05 p.m.-12:35 p.m.	**PL-1 Prof. Indrajit Mukhopadhyay**	12:05 p.m.-12:35 p.m.	**PL-2 Prof. Tushar Jana**

	Pandit Deendayal Energy University Gandhinagar ***Title: Electrodeposited Te nano-structures as non-enzymatic redox sensor for H_2O_2***		School of Chemistry, HCU, Hyderabad ***Title: Polymer Membranes for the Production of Green Hydrogen***
12:40 p.m.-1:10 p.m.	**PL-3** **Prof. Tapas Maji** JNCASR, Bangalore ***Title:* Solar Fuel Production through Post-Synthetic Modification of Metal-Organic Frameworks**	12:40 p.m.-1:10 p.m.	**PL-4** **Prof. Suhrit Ghosh** IACS, Kolkata ***Title: Hierarchical Assembly of Foldable Polymers and Functional Materials***
1:15 p.m.-1:45 p.m.	**PL-5** **Prof. Tapan Kanti Paine** IACS, Kolkata ***Title: Lewis Acid Promoted Iron Catalyzed Selective Oxygenation of Olefins with Hydrogen Peroxide: Is Supporting Ligand Necessary?***	1:15 p.m.-1:45 p.m.	**PL-6** **Prof. Suresh Kumar Jewrajka** CSIR-CSMCRI, Bhavnagar ***Title:* Self-assembly for surface modification and fabrication of molecular selective membrane**
1:50 p.m.-2:10 p.m.	**IL-1** **Prof. Subal Dey** IISER-Berhampur ***Title: Electrocatalytic Nitrate Reduction by Bioinspired Copper Complexes***	1:50 p.m.-2:10 p.m.	**IL-2** **Prof. Raj Kumar Roy** IISER-Mohali ***Title: Controlling Folding Pathways in Aromatic Polyamides and their Functional Assemblies***
Lunch Break 2:10 p.m.-3:00 p.m.			
Session 2			
	Synthetic Organic Chemistry: Organocatalysis **Chairperson: Prof. Chhanda Mukhopadhyay, Calcutta University)** **(PCM Auditorium)**		***Supramolecular Chemistry*** **Chairperson: Prof. Suhrit Ghosh, IACS** **(MS Auditorium)**
3:00 p.m.-3:30 p.m.	**PL-7** **Prof. Shoubhik Das** University of Bayreuth, Germany ***Title: Lighting the Way: Photocatalysis for a Sustainable Chemical Future***	3:00 p.m.-3:30 p.m.	**PL-8** **Prof. Partha Sarathi Mukherjee** IISc-Bangalore ***Title: Functional Molecular Vessels***
3:35 p.m.-4:05 p.m.	**PL-9** **Prof. Subhabrata Sen** Shiv Nadar Institution of Eminence ***Title: From Electrons, to Force, to Light: Modern Green Pathways to Heterocycles***	3:35 p.m.-3:55 p.m.	**IL-3** **Dr. Priyadarshi Chakraborty** IIT-Hyderabad ***Title: From Enzymes to Hydrogels: Translating Nature's Catalysts***
4:10 p.m.-4:30 p.m.	**IL-4** **Dr. Biplab Maji**	4:00 p.m.-4:20 p.m.	**IL-5** **Dr. Bappaditya Gole**

	IISER-Kolkata ***Title: Advancing Asymmetric Catalysis with Earth-Abundant Cobalt Complexes***		Shiv Nadar University ***Title: Electroactive multi-stack dye oligomers and their folding behavior***
Tea Break 4:20 p.m.- 4:45 p.m.			
Session 3 (Industrial Session): Chairperson Prof. Professor S. Sinha Ray (Derozio Hall)			
4:50 p.m.-5:20 p.m.	**KL-4: Keynote Address by Dr. V. K. Gupta, Sr. Vice President & Head, R&D-Polymer, Reliance Industries Ltd.**		
	Industry Innovation Talks		
	Advanced materials, Pharmaceuticals and Nanochemistry **Chairperson: Prof. B. Das, Presidency University, Kolkata (PCM Auditorium)**		***Energy and Power Technologies*** **(Chairperson: Prof. Tushar Jana, HCU, Hyderabad)** **(MS Auditorium)**
5:25 p.m.-5:45 p.m.	**IL-6** **Dr. Soumen Sensarma** TCG Life Sciences Chembiotek ***Title: Laboratory to Market***		**IL-7** **Dr. Mahasweta Nandi** Visva-Bharati University ***Title: B/N-co-doped Carbon Nanostructures for Electrochemical Energy Storage Applications***
5:50 p.m.-6:10 p.m.	**IL-8** **Dr. Soumyadipta Rakshit** Motilal Nehru National Institute of Technology Allahabad ***Title: Ultrafast Dynamics in Quantum Dots with Deep-Blue and Visible Emission***		**IL-9** **Dr. Prosenjit Daw** IISER-Berhampur ***Title: Renewable Hydrogen Production from Biomass-Derived Alcohols and Plastic Wastes using Bifunctional Ruthenium Catalyst***
6:15 p.m.-7:15 p.m.	**Panel Discussion on "Driving Innovation in Chemical Sciences: From Lab to Market"** **(Moderator: Dr. Arup Ghosh, Lead Scientist (IP), SABIC, Bangalore) (Derozio Hall)** ○ ***Industry needs vs academic research*** ○ ***Barriers to tech transfer*** ○ ***Role of sustainability and regulation*** ○ ***Skills gaps and workforce development***		
	Conference Dinner: 7:15 p.m.-9:30 p.m.		

Technical Session: Day 2 / 13th September, 2025

Time	
	Session 1: Chairperson: **Prof. Priyadarshi De (Derozio Hall)**
9:30 a.m.-10:00 a.m.	**KL-5: Keynote Address by Prof. Nikhil Kumar Singha, IIT Kharagpur** ***Title: Design Strategies for Mechanoresponsive Polymers with Multifunctional Applications***
10:05 a.m.-10:35 a.m.	**KL-6: Keynote address by Dr. Amit Das, Senior Scientist, Leibniz-Institut fur Polymerforschung, Dresden, Germany.** ***Title: From Baby Pacifier to Formula 1 Tires: The Fascinating Chemistry of Rubbers Across Life and Speed***
10:40 a.m.-11:10 a.m.	**KL-7: Keynote address by Prof. Tarun Kumar Mandal, IACS, Kolkata** ***Title: Polar Amino Acids: Versatile Building Blocks for Libraries of Stimuli-Responsive Polymers***
11:15 a.m.-11:45 a.m.	**KL-8: Keynote address by Prof. Susanta Banerjee, IIT-Kharagpur** ***Title: Semi-Fluorinated High-performance Polymers: Membrane-Based Applications***
Tea Break (11:45 a.m.-12:10 p.m.) & Poster Session (11:45 a.m.- 5:30 p.m.)	
Session 2:	
Suresh Prasanna Ray and Amrita Ray Memorial Session **Chairperson: Prof. D. Mandal (Retd. PU, Kolkata)** **(PCM Auditorium)**	***Applied Functional Materials*** **Chairperson: Prof. Uday Chand Ghosh, (Retd. PU, Kolkata)** **(MS Auditorium)**
12:15 p.m.-12:45 p.m.	**PL-10** **Prof. Nirmalya Ballav** IISER-Pune
	PL-11 **Prof. Sudip Malik** IACS-Kolkata ***Title: Aryl-Substituted Buta-1,3-Diene as Luminescent Core for Monomers and Copolymers: Design, Synthesis and Applications***
12:50 p.m.-1:10 p.m.	**IL-10** **Dr. Goutam Ghosh** Ramanujan Faculty CNSMS, Bangalore ***Title: Designing Peptide-Based Nanomaterials for Tailored Piezoelectric Properties via Nanostructural and Chiroptical Activity Modulation***
	IL-11 **Dr. Susanta Kumar Bhunia** VIT University, Vellore ***Title: Bright yellow fluorescent N-doped Ti3C2 MXene quantum dots as "on/off/on" nanoprobe for selective As^{3+} ion detection***
1:15 p.m.-1:35 p.m.	**IL-12** **Dr. Udayan Basak** NPDF, IACS-Kolkata ***Title: Exploration of the ATRP Initiation Site Originating from the PVDF Backbone***
	IL-13 **Dr. Biswajit Mondal,** IIT-Gandhinagar ***Title: Molecular Electrochemical Mediator for Oxidative Multi-Site Proton-Coupled Electron Transfer***
1:40 p.m.-2:00 p.m.	**IL-14** **Dr. Shovon Chatterjee** NPDF, ICT Bhubaneswar ***Title: Photophysics of Graded Alloy Core/Shell 'Giant-Quantum Dots':***
	IL-15 **Dr. Naiwrit Karmodak** Shiv Nadar Institute of Eminence

	Effect of Outer Layer Composition Variation		*Title: Multiscale Modelling of the Stability and Catalytic Activity of Materials for sustainable energy resources*
2:05 p.m.- 2:25 p.m.	**OL-1** **Ms. Poulami Bag** SRF, Presidency University *Title: Large-scale dynamics in visual quorum sensing chiral suspensions*		**IL-16** **Dr. Nimai Mishra** ICT, Bhubaneswar *Title: How to Make Stable Perovskite Nanocrystals: For LED and Photocatalytic Applications*
Lunch Break 2:25 p.m.-3:25 p.m.			
Session 3:			
	Spectroscopy **Chairperson: Prof. S. Malik IACS, Kolkata (PCM Auditorium)**		***Covalent Organic Framework and Catalysis*** **Chairperson: Prof. Gandhi K. Kar (Retd., PU) (MS Auditorium)**
3:25 p.m.- 3:55 p.m.	**PL-12** **Prof. Partha Sarathi Chakraborty** IIT Kharagpur *Title: Speciation studies for sustainable deep-sea mining*	3:25 p.m.- 3:45 p.m.	**IL-17** **Prof. Ranjan Jana** IICB-Kolkata *Title: Development of Visible Light-Mediated Sustainable Cross-coupling Reactions*
4:00 p.m.- 4:30 p.m.	**PL-13** **Prof. Sobhan Sen** JNU, New Delhi *Advancing the fundamental understanding on Design, Synthesis and Mechanistic Insight into the Kinetics of Ligand-Binding to DNA G-Quadruplex*	3:50 p.m.- 4:10 p.m.	**IL-18** **Dr. John Mondal**, IICB, Kolkata *Title: Catalytic applications of functional Porous-Organic-Polymer (POP)*
4:35 p.m.- 4:55 p.m.	**IL-19** **Dr. Hirak Chakraborty** School of Chemistry Sambalpur University *Title: Fusion peptide modulates membrane organization and dynamics: A macroscopic to nanoscopic view*	4:15 p.m.- 4:35 p.m.	**IL-20** **Dr. Md. Selim Arif Sher Shah,** North Bengal University *Title: Electronic structure manipulation of molybdenum carbide-based materials for electrochemical water oxidation*
5:00 p.m.- 5:20 p.m.	**IL-21** **Dr. Arghyadeep Bhattacharyya** Tripura University *Title: Addressing the Aggregation Phenomenon in a Model AIE Coupled ESIPT Active Probe: Correlating Aggregation states to their Photodynamics*	4:40 p.m.- 5:00 p.m.	**IL-22** **Dr. Mahuya Bandyopadhyay** IITRAM, Maninagar, Ahmedabad *Title: Green catalytic process for highly selective and sustainable synthesis of cyclic carbonates from epoxides and CO_2 using copper-based hybrid silicoaluminophosphates*
Tea Break 5:00 p.m.-5:30 p.m.			
Session 4			

Perspective of Chemical Education in India: The Pivotal Role of 'Presidency' **Chairperson: Prof. Sabyasachi Bhattacharya, PU (Derozio Hall)**			***Theoretical and Computational Chemistry*** **Chairperson: Prof. Pinaki Chaudhury, CU, Kolkata (MS Auditorium)**
5:30 p.m.-6:00 p.m.	**PL-14** **Prof. Syamal Chakrabarti** University of Calcutta ***Title: History of Chemistry: Past, Present and Future***	5:30 p.m.-5:50 p.m.	**IL-23** **Dr. Debabrata Mukherjee** IISER-Kolkata ***Title: Donor-functionalized NHCs, CAACs, and NHOs towards catalysis and small molecule activation***
6:05 p.m.-6:35 p.m.	**PL-15** **Dr. Madhumita Mazumdar** ***Title: A chemistry lab for Presidency College: Reading in between the lines of a historic floorplan***	5:55 p.m.-6:15 p.m.	**IL-24** **Dr. Debasish Mondal** IIT-Tirupati ***Title: Brownian Information Engines: The Essentials for Best Performance***
6:40 p.m.-7:10 p.m.	**PL-16** **Prof. Projit Bihari Mukharji** Professor of History, Ashoka University ***Title: Chemical Vernaculars: Chemistry, Bengali and the Shifting Politics of Vernacularity, c. 1900 –1980***	6:20 p.m.-6:35 p.m.	**SIL-1** **Dr. Prabuddha Bhattacharya** Mrinalini Datta Mahavidyapith ***Title: Molecular Dynamics Insights into the L110M Mutation: Structural and Stability Effects on ATTR(105–115) Peptide Assemblies***
7:15 p.m.-7:45 p.m.	**PL-17** **Dr. Upal Chakrabarti,** Presidency University, Kolkata		
	Dinner: 7:45 p.m.-10:00 p.m.		

Day 3 / 14th September

Session 1:

Frontiers of Chemistry **Chairperson: Prof. S. Palani (Presidency University, Kolkata) (CLT-1)**			***Oral Presentations (Supported by ACS)*** **Chairperson: Prof. A. Majhi, Presidency University, Kolkata (PCM Auditorium)**
Time		Time	
9:40 a.m.-10:10 a.m.	**PL-18** Prof. Ayan Datta, IACS-Kolkata ***Title: Buckling and Defects in Two -Dimensional Atomically Thin Monolayers***	9:40 a.m.-9:52 a.m	**OL-2** **Mr. Syed Yunus Ali** ***Title: Exact distributions of threshold crossing times of proteins under post-transcriptional regulation by small RNAs***

10:15 a.m.- 10:35 a.m.	**IL-25** **Dr. Anindya Bandopadhyay** **(In online mode)** Head Biotechnology CIMMYT (CGIAR)	9:55 a.m.- 10:07 a.m	**OL-3** **Mr. Lalmohan Das** ***Title: Bay-substituted perylene diimide based donor-acceptor type copolymers: design, synthesis, optical and energy storage behaviours***
10:40 a.m.- 11:00 a.m.	**IL-26** **Dr Supriyo Majumder** **Senior Manager (R&D), BPCL** **Title: Enhancing Heavy Oil Conversion in FCC through BHARAT BCA: From Laboratory Development to Commercial Deployment**	10:10 a.m.- 10:22 a.m	**OL-3** **Mr. Netai Aditya** ***Title: An Iridium-Lewis Acid Bifunctional Catalyst Enabled Regio- and Enantioselective C(sp2)–H meta-Borylation of α,α-Diarylcarboxamides***
11:05 a.m.- 11:20 a.m.	**SIL-2** **Dr. A. Sunil** Assistant Professor Sri Sathya Sai Institute of Higher Learning ***Title: Green synthesis of nanotitania for efficient photocatalytic degradation of dyes***	10:25 a.m.- 10:37 a.m	**OL-4** **Ms. Ritwika Samaddar** ***Title: Ligand-free "Fe-Sc Complex": An Efficient Catalyst for Peroxide-Dependent Alcohol Oxidation***
11:25 am- 11:40 a.m.	**SIL-3** **Dr. Subhankar Saha** Assistant Professor Islampur College ***Title: Crystal Engineering of Mechanically Flexible Molecular Crystals***	10:40 a.m.- 10:52 a.m	**OL-5** **Ms. Riya Ghanti** ***Title: A new coumarin-pyridyl based probe for Zn(II) and effective detection of nitro aromatics by Zn(II) complex in aqueous medium: Live cell imaging and practical applications***
11:45 a.m.- 12:00 p.m.	**SIL-4** **Ms. Nilufa Khatun** Assistant Professor Harimohan Ghose College ***Title: Visible-light photoredox-catalyzed Giese reaction and further transformation***	10:55 a.m.- 11:07 a.m	**OL-6** **Ms. Smitaroopa Kahali** ***Title: Fluorescent Sensors for Decoding Cellular Chemistry***
		11:10 a.m.- 11:22 a.m	**OL-7** **Mr. Sreedev G. Nair** ***Title: DFT and Experimental study of a phenol-Based chromium(III) sensor***
Tea Break 11:25 a.m.-11:40 a.m.			
		11:40 a.m.- 11:52 a.m.	**OL-8** **Mr. Harikrishna Rajeev Nair** ***Title: Structure and dynamics of Curcumin-Gold nanocomposite: A Molecular Dynamic study***

		11:55 a.m.-12:07 p.m.	**OL-9** **Ms. Ankita Halder** ***Title: Synthesis of Novel Trinuclear Platinum(II) NHC Complexes and their Cytotoxic Effects Against Triple-Negative Breast Cancer Cell Lines***
		12:10 p.m.-12:22 p.m.	**OL-10** **Mr. Anup Ghosal** ***Title: Dendrimers in Nutraceuticals: Emerging Nanocarriers for Enhanced Bioavailability and Targeted Delivery***
		12:25 p.m.-12:37 p.m.	**OL-11** **Mr. Suvamay Pramanik** ***Title: Peel to Power: PPD-Modified Electrolyte and Chemically Activated Litchi Peel Carbon for High-Performance Supercapacitors***
	Session 2:		
12:45 p.m.-1:00 p.m.	**Valedictory Session (P.C. Mahalanobis Auditorium)** **Address by Dr. Biplab Biswas, Presidency University**		
	Lunch		