

IC-HEIAC 25

International Conclave 2025

Health & Environment through Interdisciplinary Approaches in Chemistry

25-27 November 2025 Organised by the Department of Chemistry, SAS, VIT Vellore

SPONSORS









PROGRAMME SCHEDULE

PROGRAMME AT A GLANCE

1	Tuesday, 25 th November Ambedkar Auditorium	Wednesday, 26 th November Session IV	Thursday, 27 th November Session VIII
	Ambedian Additorian	TT Gallery II	TT Gallery II
	8:00-10:00 Registration	Chair: Akella Sivaramakrishna	Chair: Shivashankar M
An	nbedkar Auditorium registration desk 10:00-10.45	PL2: 9:30-10:15	KL9: 9:30-10:00
	Opening ceremony and inauguration	Arindam Mukherjee	Chithirai Pon Selvan (Online)
	Giorgia Pastorin	IISER Kolkata	Curtin University, Australia, Dubai
	Chief Guest	Designing Smarter Metal Complexes:	Campus
	National University of Singapore,	Overcoming Cellular Sequestration and	
	Singapore	Hypoxia Limitations in Cancer	IL8: 10:00-10:20
	Vito Ferro	Therapeutics	Mukul Pradhan
	Guest of Honour		NIT Warangal
	University of Queensland, Australia		Sustainable Transformation of Waste to
		KL4: 10:15-10:45	Wealth for Energy Application IL9: 10:20-10:40
		Sayan Bhattacharyya	Jagannathan Madhavan
		IISER Kolkata	Thiruvalluvar University
		Contrasting Structures in the Art of	Bismuth-based Semiconducto
		Electrocatalyst Design	Photocatalysts for Wastewate
			Remediation
	10.45-11:10		IEL3: 10:40-11:00
	Photo Session, Tree plantation		Parijat Kundu
			Diagnostics Department Velsera,
			Pune Bridging the Genomic Data Tsunami
			From Scientific Discovery to Clinica
			Action in Personalized Medicine
		Coffee Break	
		10:45-11:10	A. 100 100 100
	Session I TT Gallery II	Session V TT Gallery II	Session IX TT Gallery II
_	Chair: Rajagopal D	Chair: Priyankar Paira	Chair: Sumathi S
	Chair. Rajagopai D	Ollali . Priyalikai Palia	Chan. Sumatin S
	PL1: 11:10-11:55	PL3: 11:10-11:55	IL10: 11:15-11:35
	Giorgia Pastorin	Vito Ferro	Kaushik Pal
	NUS, Singapore	The University of Queensland,	IIT Tirupati
De	esign Of Pt (IV) Anticancer Complexes,	Australia	Role of minuscule force in immune cell-
	reening In 3d Spheroids and Delivery To	Chemical Tools for	pathogen interactions
An	imal Cancer Models	Mucopolysaccharidosis Therapeutic	CIL 5: 44:25 44:50
		Development	SIL5: 11:35-11:50 Debasish Mandal
			Thapar Institute of Technology,
			Patiala
			AI/ML-Guided Design of Novel Inhibitors
			Targeting FGFR Tyrosine Kinase and
			KDM4C for Cancer Therapy
_	KL1: 11:55-12:25	KL5:11:55-12:25	CH C: 14 EO 10:05
	Debayan Sarkar	Uttam Manna	SIL6: 11:50-12:05 Chandan Maity
	IIT Indore	IIT Guwahati	VIT Vellore
Ris	se of Tribromide Tools – Precision		
	earomatisation for 3D Molecular	Functional Interface	Catalysis for Smart Health and
	ameworks		Sustainability Solutions
			SIL7: 12:05-12:20
			Atanu Chakraborty
			VIT Vellore
			Observational Desiry Districts
			Chemical Design Principles for Gene
			Therapeutic Nanoparticles: Enabling
			Therapeutic Nanoparticles: Enabling Immune Cell and Extrahepatic Delivery of
	II 1: 12:25-12:45	II 5: 12:25-12:45	Therapeutic Nanoparticles: Enabling Immune Cell and Extrahepatic Delivery o Nucleic Acid
	IL1: 12:25-12:45 Pankai Kumar Koli	IL5: 12:25-12:45 Tamas Kumar Panda	Therapeutic Nanoparticles: Enabling Immune Cell and Extrahepatic Delivery of Nucleic Acid SIL8: 12:20-12:35
	IL1: 12:25-12:45 Pankaj Kumar Koli IISER Tirupati	IL5: 12:25-12:45 Tamas Kumar Panda VIT Vellore	Therapeutic Nanoparticles: Enabling Immune Cell and Extrahepatic Delivery of Nucleic Acid
Nit	Pankaj Kumar Koli	Tamas Kumar Panda	Therapeutic Nanoparticles: Enabling Immune Cell and Extrahepatic Delivery of Nucleic Acid SIL8: 12:20-12:35 Rinku Chakrabarty (Online) Alipurduar University
Bio	Pankaj Kumar Koli IISER Tirupati trate/Nitrite Reduction to Nitric Oxide: A omimetic Modelling and Mechanistic	Tamas Kumar Panda VIT Vellore Mechanochemistry: An Opportunity to do Disorder Engineering in Metal-	Therapeutic Nanoparticles: Enabling Immune Cell and Extrahepatic Delivery of Nucleic Acid SIL8: 12:20-12:35 Rinku Chakrabarty (Online) Alipurduar University Copper and Zinc Complexes of Quinoline-Based Flexible Amide
Bio	Pankaj Kumar Koli IISER Tirupati trate/Nitrite Reduction to Nitric Oxide: A	Tamas Kumar Panda VIT Vellore Mechanochemistry: An Opportunity to	Therapeutic Nanoparticles: Enabling Immune Cell and Extrahepatic Delivery of Nucleic Acid SIL8: 12:20-12:35 Rinku Chakrabarty (Online) Alipurduar University Copper and Zinc Complexes of Quinoline-Based Flexible Amide Receptor as Fluorescent Probe for
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PROGRAMME AT A GLANCE

	Lunch Break	
Session II	13:00-14:00 Session VI	Session X
TT Gallery II	TT Gallery II	TT Gallery II
Chair: Vijayakumar V	Chair: Vijayaraghavan R	Chair: Madhvesh Pathak
KL2: 14:00-14:30 Srikanta Patra IIT Bhubaneswar Cyclometalated Iridium Complexes and Their	KL6: 14:00-14:30 Rakesh Kumar Pathak IISER Berhampur	OP11:14:00-14:10 S. Nikila Sambandan
Biological Aspects	Metal–Drug Conjugates: Rediscovering the Dual Roles of Metal Ions as Therapeutics and Delivery Vehicles in Cancer Therapy	OP12:14:10-14:20 Harini S OP13:14:20-14:30
IL2: 14:30-14:50	IL6: 14:30-14:50	Vidhyadevi G OP14:14:30-14:40
Nagaraju Barsu CSIR-NCL Pune Development of Sustainable Methods: from	Mrinmoy De IISc, Bangalore Selective Antibacterial Activity of	Metha A M OP15:14:40-14:50 Renuka B S
Plastic to Fine Chemicals IL3: 14:50-15:10 Somnath Maji	Functionalized Nano-antibiotics IL7: 14:50-15:10 Krishna Pada Bhabak	OP16:14:50-15:00 Subhashree Praharaj
IIT Hyderabad Bio-inspired Transition Metal Complexes for Solar Fuel Generation	IIT Guwahati Stimuli-responsive Turn-on Fluorogenic Prodrugs of Anticancer Drugs	OP17:15:00-15:10 Rishav Das
IL4: 15:10-15:30 Sunandan Sarkar NIT Tiruchirappalli	IEL2: 15:10-15:30 R Sankara Subramanian Vishwa-Syntharo PharmaChem Pvt	OP18:15:10-15:20 Somasundaram Sangeetha OP19:15:20-15:30
Twist, Transfer, and Triplets: Tailoring Molecular Luminescence through Quantum-	Ltd, TN, India Design of Chemical Processes -	Pravinkumar Selvam
Chemical Approaches	Efficiency, Safety & Divironment	OP20:15:30-15:40 Pratheeksha
15:30-		
Session III TT Gallery II	Session VII TT Gallery II	TT Gallery II
Chair: Karpagam S KL3: 15:45-16:15	Chair: Mary Saral A KL7: 15:45-16:15	16:30-17:30
Arindam Talukdar IICB Kolkata Target-Based Screening, Identification and Optimization of Entry Inhibitors Targeting SARS-CoV-2 Spike–ACE2 Interaction	Ekambaram Balaraman IISER Tirupati Sustainable Chemical Production via Catalytic Dehydrogenation	Valedictory Function Kaushik Pal Chief Guest IIT Tirupati, India
IEL1: 16:15-16:35 Atreyee Banerjee (Online) Freudenberg Technology and Innovation (FTI), Germany Data-Driven Approaches for Simplifying and Interpreting Molecular Simulation Data	KL8: 16:15-16:45 Gouriprasanna Roy IIT Tirupati Biomimetic Studies on Metal Detoxification	17:30-18:30 TT Gallery II Collection of Participation Certificates
SIL2: 16:35-16:50 Tamalika Ash (Online) Iowa State University, Iowa, USA Ab Initio Investigations of Zwitterionic Polymers and Their Interactions with Water	SIL4: 16:45 -17:00 Munmun Ghosh Ashoka University Proton Reduction by Iron Complexes: Impact of Proton Residue	
and Ice 17:00-18:00	Concentration at Catalyst Sites 17:00-18:00	
Foodys Poster Presentation (PP1-PP35)	Foodys Poster Presentation (PP36-PP65)	
	OP1:17:00-17:10 Nikita Das OP2:17:10-17:20	
	Selvakumaran Balasubramaniam OP3:17:20-17:30 Meena R	
,	OP4:17:30-17:40 Risav Banerjee (Online)	
Campus Visit	OP5:17:40-17:50 Elavarasi Mogansundar	Plenary Lecture (PL)- (40+5) minutes
	OP6:17:50-18:00 Trisha Bhattacharya	Keynote Lecture (KL)- (25+5) minutes
	OP7:18:00-18:10 Ram Pravin Kumar Muthuramalingam	Invited Lecture (IL)- (17+3) minutes
	OP8:18:10-18:20 Lydia Ann Vinod OP9:18:20-18:30	Industrial Expert Lecture (IEL)- (17+3) minutes Short Invited Lecture (SIL)- (12+3) minutes
	Nivedya T	
19:30 Onwards Foodys		Oral Presentation- (8+2) minutes
Conclave Dinner		

General instructions IC-HEIAC 25

All the lectures will be held at TT VOC Gallery (2nd Floor).

Plenary Lecture (PL)- 45 minutes
Keynote Lecture (KL)- 30 minutes
Invited Lecture (IL)- 20 minutes
Industrial Expert Lecture (IEL)- 20 minutes
Short Invited Lecture (SIL)- 15 minutes

The Organizers request all the speakers to upload their lectures on the laptop provided by the organizers at the venue, during the breaks (lunch/tea) preceding their respective sessions.

Laser pointers and Slide changers will be provided during the lectures.

TT 2nd FLOOR PLAN

