

IGCW2025 - Technical Session on Biocatalysis - A Powerful Tool for Green and Sustainable Chemistry

Venue for IGCW2025: Hotel Westin Mumbai Garden City, Goregaon (E), Mumbai, India

Date for this Technical Session: **8th October'2025 (Wednesday)**

Expected Participants: President-R&D, VP-R&D, GM-R&D, GM-Process Development, Senior Scientists

Expected No. of Participants: approx. 30 - 40

Objectives:

1. Basics of Biocatalysis, recent developments and innovations in the field.
2. Learning from real-world Case studies of Industries implementing Bio-catalytic processes and technologies.
3. Discussion on Bioprospecting - potential, challenges and way forward.
4. Connecting with potential solution providers offering Biocatalysts, Tools, Technologies and Services around Bio-catalysis.

Timing	Speaker, Designation, Company	Topics	Context & Content/Comments
8:30 - 9:30 hr	Registration, Tea/Coffee, Networking, Visiting IGCW Expo		
9:30 - 9:40 hr	Mentors for the Session	Welcome, Acknowledgement, Self-Introduction & sharing work, Creating Context for the workshop, Introducing Keynote Speaker	
9:40 - 10:15 hr	Dr. David Thaisrivongs, Director - Process Research & Development, Merck & Co Inc, USA	Keynote: The largest small molecule: Manufacturing process for enlicitide decanoate	30 min PPT, 5 min Q&A
10:15 - 10:45 hr	Dr. David Entwistle, Head of Process Chemistry, Codexis (Invited)	Title of Talk awaited	25 min PPT, 5 min Q&A
10:45 - 11:30 hr	Tea/Coffee Networking Break, Visiting IGCW Expo.		
11:30 - 12:00 hr	Dr. Saravanan, CSO, Shasunmed Life-Sciences Pvt. Ltd.	Case studies and research insights on bile acid and steroid biotransformation for industrial relevance	25 min PPT, 5 min Q&A
12:00 - 12:30 hr	Dr. Chandrasen, Piramal Pharma Ltd.	Industrial Case Study	25 min PPT, 5 min Q&A
12:30 - 13:00 hr	Dr. Ahir Pushpanath, Techno Commercial Director - Biocatalysis, bitBiome	Biocatalysis 4.0: Accelerating Green Chemistry from Enzyme Discovery to Commercial Deployment	25 min PPT, 5 min Q&A
13:00 - 13:30 hr	Mr. Abhijit Rathi, GM-R&D, Advanced Enzymes Pvt. Ltd.		25 min PPT, 5 min Q&A
13:30 - 14:30 hr	Lunch Break, Visiting IGCW Expo.		
14:30 - 15:00 hr	Prof. Amit Pratap, Professor & Head, Institute of Chemical Technology (ICT)	Enzymatic route for Bio-surfactant synthesis	25 min PPT, 5 min Q&A
15:00 - 15:30 hr	Dr. Pravin Kumar, Founder, Chairman & CSO, KCat Enzymatic Solutions Pvt. Ltd.	AI-Driven Protein Engineering: Enzymes for Therapeutics and Sustainable Chemical Synthesis	25 min PPT, 5 min Q&A
15:30 - 16:15 hr	Moderator: Dr. Mofazzal Husain Panel Members: Dr. Santosh Padhi, University of Hyderabad Dr. Ahir Pushpanath, bitBiome Dr. Saravanan, Shashunmed Dr. Pravin Kumar, KCat Enzymatic Solutions	Panel Discussion on "Bioprospecting for Novel Enzymatic Routes"	45 min Panel Discussion
16:15 - 16:30 hr	Mr. Nagaraj Maddur, Principal Scientist (Biocatalysis), Advanced Enzymes Technologies Pvt. Ltd.	Recent advances in biocatalysis: A case study	10 min PPT, 5 min Q&A
16:30 - 16:45 hr	Mr. Gladstone Sigamani, CEO, K-Cat Enzymatic Solutions Pvt. Ltd.	7D-GRID-AI Technology: A Technology that translates Enzymes from a Computer to Business with limited lab experiments	10 min PPT, 5 min Q&A
16:45 - 17:00 hr	Quantumzyme (Speaker to be confirmed)	Title of Talk awaited	
17:00 - 17:10 hr	Mentors for the Session	Closing Remarks & Acknowledgements	
17:10 - 18:00 hr	Tea/Coffee Break, Visiting IGCW Expo		

Industry Mentors: Dr. Mofazzal Husain, Associate Director, Bio R&D, Lupin Ltd.

Academia Mentor: Dr. Shamlan Reshamwala, Assistant Professor, Center of Energy Biosciences, ICT