

## 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, <b>Merck &amp; Co Inc, USA</b>	<b>Keynote:</b> 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, <b>Codexis</b> (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, <b>Shasunmed Life-Sciences Pvt. Ltd.</b>	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, <b>Piramal Pharma Ltd.</b>	Industrial Case Study	25 min PPT, 5 min Q&A
12:30 - 13:00 hr	Dr. Ahir Pushpanath, Techno Commercial Director - Biocatalysis, <b>bitBiome</b>	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, <b>Advanced Enzymes Pvt. Ltd.</b>		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, <b>Institute of Chemical Technology (ICT)</b>	Enzymatic route for Bio-surfactant synthesis	25 min PPT, 5 min Q&A
15:00 - 15:30 hr	Dr. Pravin Kumar, Founder, Chairman & CSO, <b>KCat Enzymatic Solutions Pvt. Ltd.</b>	AI-Driven Protein Engineering: Enzymes for Therapeutics and Sustainable Chemical Synthesis	25 min PPT, 5 min Q&A
15:30 - 16:15 hr	<b>Moderator: Dr. Mofazzal Husain</b> <b>Panel Members:</b> Dr. Santosh Padhi, University of Hyderabad Dr. Ahir Pushpanath, bitBiome Dr. Saravanan, Shashunmed Dr. Pravin Kumar, KCat Enzymatic Solutions	<b>Panel Discussion on "Bioprospecting for Novel Enzymatic Routes"</b>	45 min Panel Discussion
16:15 - 16:30 hr	Mr. Nagaraj Maddur, Principal Scientist (Biocatalysis), <b>Advanced Enzymes Technologies Pvt. Ltd.</b>	Recent advances in biocatalysis: A case study	10 min PPT, 5 min Q&A
16:30 - 16:45 hr	Mr. Gladstone Sigamani, <b>CEO, K-Cat Enzymatic Solutions Pvt. Ltd.</b>	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	<b>Quantumzyme</b> (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