

## IGCW2025 - Technical Session on Green Engineering for Process Safety & Benign Environment

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

**Date for this Technical Session:** 7th November'2023 (Tuesday)

**Expected Participants:** Chief Sustainability Officer, Head-EHS, VP-EHS, GM-EHS, GM-Production, EHS Professionals, etc

**Expected No. of Participants:** approx. 50

**Objectives:**

1. To explore how digitization, automation and software solutions can drive development of Safer & Greener Processes.
2. To explore potential of Flow Chemistry and gain insights from companies implementing Flow Chemistry Technologies.
3. Learn from industry & academia experts, how emerging technologies can enable Green & Sustainable Chemistry.
4. Connect with solution providers offering Flow Chemistry and other innovating solutions.

| 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  | Mr. Pradeep Kumar Jain, COO, <b>PI Industries Ltd.</b>  | <b>Keynote:</b> Title of presentation awaited (Topic - Automization & Digitization to drive Sustainability)                | 30 min PPT, 5 min Q&A      |
| 10:15 - 10:50 hr | Dr. Ralph Zhao, Sr. Principal Scientist, Environmental and Process Safety Engineering (EPSE) Lead, <b>Merck &amp; Co Inc, USA</b> | <b>Keynote:</b> Chemical Process Safety Testing Considerations for Pharmaceutical Scale-Up from Lab to Plant               | 30 min PPT, 5 min Q&A      |
| 10:50 - 11:30 hr | Tea/Coffee Networking Break, Visiting IGCW Expo.  |  |                            |
| 11:30 - 12:00 hr | Dr. Sandeep Mohanty, Head - API Synthetic & Oncology R&D, <b>Biocon Ltd.</b>  | Title of presentation awaited  | 25 min PPT, 5 min Q&A      |

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| 12:00 - 12:30 hr | Mr. Sangam Shaha, Manager - Process Engineering, <b>BASF</b>  | Title of presentation awaited   | 25 min PPT, 5 min Q&A   |
| 12:30 - 13:00 hr | Dr. Aman Desai, Co-Founder and Director Research, Manufacturing, Operations <b>Aether Industries Ltd.</b>   | From the Bench to the Plant: Case Studies in Flow Chemistry and Continuous Technology     | 25 min PPT, 5 min Q&A   |
| 13:00 - 13:30 hr | Mr. Bhavik Shah, Head - Flow Chemistry, <b>UPL Ltd.</b>   | Title of presentation awaited   | 25 min PPT, 5 min Q&A   |
| 13:30 - 14:30 hr | Lunch Break, Visiting IGCW Expo.  |   |                         |
| 14:30 - 15:15 hr | <p><b>Panel Moderator:</b> Dr. Suhas Jawalekar<br/>Associate Director - Process Engineering, Polymorph development &amp; New technology, <b>Dr. Reddy's Laboratories Ltd.</b></p> <p><b>Panel Members:</b></p> <ol style="list-style-type: none"> <li>1. Mr. Subhash Dhar - Head of Plant Technology , <b>Deepak Nitrite Ltd.</b> (Invited)</li> <li>2. Dr. Sandeep Mohanty Head - API Synthetic &amp; Oncology R&amp;D, <b>Biocon Ltd.</b></li> <li>3. Dr. Ralph Zhao Sr. Principal Scientist, Environmental and Process Safety Engineering (EPSE) Lead, <b>Merck &amp; Co Inc.</b></li> <li>4. Dr. Sandeep Jain - Sr. Director - Special Technologies, <b>PI Industries Ltd.</b></li> <li>5. Dr. Vishwanath Dalvi - R. A. Mashelkar Assistant Professor, Department of Chemical Engineering, <b>Institute of Chemical Technology</b></li> </ol> | Panel Discussion on "How new emerging technologies can make processes greener and safer?" | 45 min Panel Discussion |
| 15:15 - 15:45 hr | Dr. Sanket Salgaonkar, Principal Engineer - Autochem Scale-up Systems, <b>Mettler Toledo India Pvt. Ltd.</b>  | Prowess of mechanistic modelling in sustainable scale up of a coumarin intermediate       | 25 min PPT, 5 min Q&A   |

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| 15:45 - 16:15 hr | Dr. Gopal Kasat, Project Manager,<br><b>Tridiagonal Solutions</b> (Invited)   | Title of presentation awaited  | 25 min PPT, 5 min Q&A |
| 16:15 - 16:30 hr | Dr. Chandrakant Gadipelly, Head of Flow Reactors, <b>Amar Equipment Pvt. Ltd.</b>   | Rethinking Aromatic Nitration: Sustainable Continuous Flow Technology without Mixed Acids        | 10 min PPT, 5 min Q&A |
| 16:30 - 16:45 hr | Dr. Makrand Pimplapure, MD, <b>MaxSpeed Technologies Pvt. Ltd.</b>  | From Lab to Production: Safer and Greener Chemical Processes Using Flow Technology               | 10 min PPT, 5 min Q&A |
| 16:45 - 17:00 hr | Mr. Abhijeet Kulkarni, MD & CEO, <b>Proburgeon Pvt. Ltd.</b>  | Implementation of Flow Reactor Technology as a greener Production route                          | 10 min PPT, 5 min Q&A |
| 17:00 - 17:15 hr | Mr. Chandrakant K Sethia<br>National Head – Sales & Business development, <b>Corning Advanced-Flow Reactor (AFR) Technologies</b> | Efficiency, Innovation, and Sustainability: "Continuous chemical manufacturing with Corning AFR" | 10 min PPT, 5 min Q&A |
| 17:15 - 17:25 hr | Mentors for the Session   | Closing Remarks & Acknowledgements   |                       |
| 17:25 - 18:00 hr | Tea/Coffee Break, Visiting IGCW Expo  |  |                       |

**Industry Mentors:** Dr. Sandeep Jain, Sr. Director - Special Technologies, PI Industries Ltd.

Dr. Suhas Jawlekar, Associate Director - Process Engineering, Polymorph development & New technology, Dr. Reddy's Labs Ltd.