## 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.

edit organisation name of Mentor - Dr. Suhas Jawlekar , Dr. Reddy's Laboratories Ltd.

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> Green Engineering for Process Safety and Benign Environment	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, Merck & Co Inc, USA	<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>	The Flow: A Human Centered Sustainability in Green Manufacturing - A Philosophical Framework	25 min PPT, 5 min Q&A
12:00 - 12:30 hr	Mr. Sangam Shaha, Team Lead Engineering Management & Process Engineering, <b>BASF</b>	Sustainability Engineering – Energy Transformation and Heat Recovery	25 min PPT, 5 min Q&A
12:30 - 13:00 hr	Dr. Devender Mandala, Director, Aurigene Pharmaceutical Services (Invited)	Title of presentation awaited (Topic - 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 Itd.</b>	Greening a Legacy Batch Process via Flow	25 min PPT, 5 min Q&A
13:30 - 14:30 hr		Lunch Break, Visiting IGCW Expo.	

14:30 - 15:15 hr	Panel Discussion on "How new emerging technologies can make processes greener and safer?"  Panel Moderator: Dr. Suhas Jawalekar Associate Director - Process Engineering, Polymorph development & New technology, Dr. Reddy's Laboratories Ltd. Panel Members:  1. Mr. Subhash Dhar - Head of Plant Technology , Deepak Nitrite Ltd. (Invited)  2. Dr. Sandeep Mohanty Head - API Synthetic & Oncology R&D, Biocon Ltd.  3. Dr. Ralph Zhao Sr. Principal Scientist, Environmental and Process Safety Engineering (EPSE) Lead, Merck & Co Inc.  4. Dr. Sandeep Jain - Sr. Director - Special Technologies, PI Industries Ltd.  5. Dr. Vishwanath Dalvi - R. A. Mashelkar Assistant Professor, Department of Chemical Engineering, Institute of Chemical Technology		45 min Panel Discussion
15:15 - 15:45 hr	Dr. Sanket Salgaonkar, Principal Engineer - Autochem Scale-up Systems, <b>Mettler</b> <b>Toledo India Pvt. Ltd.</b>	Prowess of mechanistic modelling in sustainable scale up of a coumarin intermediate	25 min PPT, 5 min Q&A
15:45 - 16:15 hr	Dr. Gopal Kasat, Project Manager, <b>Tridiagonal Solutions</b> (Invited)	Good Mixing Makes Money	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	15 min PPT and Q&A
16:30 - 16:45 hr	Dr. Makrand Pimplapure, MD, MaxSpeed Technologies Pvt. Ltd.	From Lab to Production: Safer and Greener Chemical Processes Using Flow Technology	15 min PPT and 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	15 min PPT and Q&A

17:00 - 17:15 hr	Mr. Chandrakant K Sethia National Head – Sales & Business development, Corning Advanced-Flow Reactor (AFR) Technologies	Efficiency, Innovation, and Sustainability: "Continuous chemical manufacturing with Corning AFR"	15 min PPT and Q&A
17:15 - 17:25 hr	Mentors for the Session	Closing Remarks & Acknowledgements	
17:25 - 18:00 hr	Tea/Coffeee 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 Laboratories Ltd.