

International Workshop on Industrial Crystallization

February 21-22, 2020



Institute of Chemical Technology (Formerly UDCT) Matunga East, Mumbai 400 019, Maharashtra, INDIA.

Organized By



World Forum for Crystallization, Filtration and Drying www.wfcfd.org



Department of Chemical Engineering, Institute of Chemical Technology www.ictmumbai.edu.in

INTRODUCTION TO THE SPEAKERS



Prof. Dr.-Ing. Joachim Ulrich

Professor Joachim Ulrich, Chair of Thermal Unit Operations in Chemical Engineering has been the Editor for the Journal of Crystal Growth & Design, Chairman and Member of European Federation of Chemical Engineering and Working Party on Crystallization. He is a Visiting Professor at the University of Rouen/France and a member of Editorial Advisory Board of the Chem. Engg. & Tech. He was also the Chairman of "Fachausschuss Kristallisation" (Working Party on Crystallization of the VDI-GVC/ProcessNet). He was Pro-Vice-Chancellor for research for Martin Luther University and the Chairman of the board of the Luckner Foundation, Halle. Awarded with Honorary doctor (Dr. H. C.) of the University of Szeged, Hungary. There are so far 93 PhD theses supervised and more than 600 papers, books, book contributions, refereed congress contributions and patents published.

Dr. Erik Temmel

Dr. Erik Temmel is presently working at Sulzer Chemtech Ltd., Winterthur, Switzerland as a Project Manager with Industrial Crystallization group. He has worked as Research project manager in the field of crystallization process development at DSM Nutritional Products AG, Sisseln, Switzerland. He has experience in the field of innovative measurement techniques at the Max Planck Institute for Dynamics of Complex Technical Systems, group of Physical and Chemical Foundations, Max Planck Institute for Dynamics of Complex Technical Systems As a Scientific coworker within the group of Physical and Chemical Foundations (Head: Prof. Andreas Seidel-Morgenstern), he has a major contribution. He has worked at Otto von Guericke University Magdeburg, Chair of Chemical Process Engineering under the tutelage of a renowned Professor Andreas Seidel-Morgenstern.





Dr. Severine Dette

Dr. Severine Dette, a dynamic chemical engineer with specialization in industrial crystallization, has been involved in the development of process solutions, establishing the lab scale and pilot scale tests and elucidation of crystallization process on industrial scale. She has been a regular participant in various crystallization meetings all over the globe, besides being a Member of Technical Conference Crystallization based in Germany. Dr. Dette is specialized in melt crystallization & suspension crystallization of organic compounds and freeze concentration of liquid foods and waste water.

Prof. Dr. A. B. Pandit

Prof. Dr. A. B. Pandit is Professor of Chemical Engineering and Vice Chancellor of Institute of Chemical Technology, Mumbai, India. He was educated at Banaras Hindu University (B.Tech.) and University Department of Chemical Technology, University of Mumbai (Ph.D.). His research interests include Multiphase Rector Design, Cavitation Phenomena, Pollution control, Bubble Dynamics, Acoustic Signal processing, Mixing and Hydrodymanics and Cavitational Transformations. Prof. Pandit is a sought-after consultant in the chemical industry. Prof. Pandit has authored over 350 publications, over 15 patents and is on Editorial board of several International Scientific Journals. He is a recipient of Vishwakarma Medal of Indian National Science Academy 2015, Fellow of The World Academy of Sciences2015, Fellow of Indian National Academy of Engineering and Indian Academy of Sciences, a Distinguished Alumnus awardee of ICT and IIT, Benaras.





Dr. Carmen Guguta

The process of crystallization involving the basics of nucleation and crystal growth, solubility and super-solubility curve determination are key to the success of various products, be it is, pharmaceuticals, food, personal care ingredients, dye molecules, or agrochemicals. Dr. Carmen has 15 years of experience in pharmaceutical development cycle, from discovery to formulation, covering small molecules, drug substance and drug product. With deep experience in solid state chemistry, she has previously worked with Avantium and Crystallics, contract research organizations. She holds a Ph.D. degree in Pharmaceutical Solid State chemistry from Radboud University Nijmegen, The Netherlands. Currently, Dr. Carmen Guguta is the product manager of Technobis Crystallization Systems.

Dr. Satyanarayana Thirunahari

Dr. Satyanarayana Thirunahari is currently working as a Process Engineering Expert in API R&D at Dr. Reddy's Laboratories Ltd. He holds a PhD in chemical engineering from National University of Singapore. Prior to Dr. Reddy's, he worked as a Scientist at A*Star Singapore. His research interests include application of PAT and QbD in pharmaceutical development, crystallization, process system engineering etc.





Dr. Srividya Ramakrishnan

Dr. Srividya Ramakrishnan heads Process Engineering (API) at Dr. Reddy's Laboratories Ltd. in Hyderabad. Prior to joining Dr. Reddy's, she was at Bristol-Myers Squibb, New Jersey, in Process R&D. She earned her B.Tech. in Chemical Engineering from Indian Institute of Technology, Madras, and Ph.D. from Princeton University. Dr. Srividya has presented her research at international conferences and has several patents and publications to her credit. She is also an ASQ-Certified Six Sigma Black Belt.

Prof. Dr. B. N. Thorat

Professor Bhaskar N. Thorat, is the Founder Director of ICT-IOC, Bhubaneswar with an Entrepreneurial mindset. He and his research students have several start-ups to their credit and have a mission to produce over 100 Entrepreneurs in coming years. Prof. Thorat has in his kitty several international awards including three Bill and Melinda Gates Foundation's top prize of USD 3,00,000; Michael Dell's Social Innovation Award of USD 60,000, 2 Millennium Alliance Award of 2 million USD. He credits all these awards to the innovative students of ICT. The notable entrepreneurial students of Prof. Thorat who are contributing immensely are Dr. Vaibhav Tidke, Dr. Tushar Gaware, Shri. Ganesh Bhere, Dr. Nupur Nagwekar, Shri. Swapnil Kokate, Dr. Dilip Jadhav and several others. He believes that there is much more in store for socio- and technoentrepreneurship and plenty of space is available to be occupied.



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Name of the Speaker & Affiliation	Proposed topic of Presentation		
Prof. DrIng. Joachim Ulrich	Thermodynamics/Phase diagrams for crystallization		
Martin Luther University Halle-Wittenberg, Germany	Kinetics of crystallization		
	Protein Crystallization		
	Polymorphs and solvates		
	Measurements of crystallization and Population Balances		
Professor A. B. Pandit Vice chancellor, Institute of Chemical Technology, Mumbai, India	Role of Mixing in Crystallization and Scale up Studies		
Ms. DrIng. Severine Dette Sulzer Chemtech Ltd, Winterthur, Switzerland	Crystallization of Bulk Organics Compounds: equipment and application examples		
	Solid layer melt crystallization, industrial perspective		
Mr. DrIng. Erik Temmel	Continuous solution crystallization		
Sulzer Chemtech Ltd, Winterthur, Switzerland	 Industrial Crystallization from Lab to Industrial Scale: Case Studies 		
Dr. Vivek Vitankar FluiDimensions, Pune, India	CFD Studies of particle suspension		
Dr. Carmen Guguta	Effective way of determination of solubility and super-solubility		
Technobis, The Netherlands	Recent Advances in Co-crystallization		
Dr. Satyanarayana Thirunahari Dr. Reddy's Laboratory, India	PAT-based process understanding and control strategy for API development		
Dr. Srividya Ramakrishnan Dr. Reddy's Laboratory, India	Crystallization as an integral part of API development		

Memories



Prof. M. M. Sharma and Prof. A. B. Pandit at 13th WFCFD. 2019



Prof. Joachim Ulrich with Prof. B. N.Thorat at 13th WFCFD, 2019



Prof. Harald Anlauf presenting at 13th WFCFD, 2019



Mr. Urban Stricker interacting with participants at 13th WFCFD, 2019



Dr. Carmen Guguta interacting with participants at 13th WFCFD, 2019



Dr. Thomas Vetter interacting with participants at 13th WFCFD, 2019



Participants asking queries to the Speakers at 12th WFCFD, 2018



Speakers and Organizing Team at 13th WFCFD, 2019



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K. V. Auditorium

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<i>Prof.</i>	M _{S.} REGISTRATION FC)KIVI
Name		
Position		
Organization/Institute		
Mailing Address		
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Email		
Registration Fees:		
Indian Delegates: INR 18,00	O/- Overseas Delegates: US \$ 350/-	
Please find a DD/ Cheque	in Favor of "WFCFD" payable at Mumbai	
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Last Date for Registration 15th February 2020 for online registration, visit: www.wfcfd.org

Please Complete above form and Return to,

Professor B. N. Thorat

 $\label{eq:continuous} \mbox{Department of Chemical Engineering, Institute of Chemical Technology (ICT),}$

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