

| ISIC 2026<br>Final program * |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6 September / Sunday         |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 12:00                        | Conference office / Registration opens                                                                                                                                                                                           |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
|                              | Helia                                                                                                                                                                                                                            | Panorama                                                                                                                                                                                                                  | Mercure                                                                                                                                                                                                                           |
| 14:00-15:45                  | Workshop & Tutorial:<br>Crystallization process monitoring and control                                                                                                                                                           | Workshop & Tutorial:<br>Industrial crystallization fundamentals                                                                                                                                                           | Workshop & Tutorial:<br>Aspects of industrial crystallization                                                                                                                                                                     |
| 15:45-16:15                  | Coffee break for workshop attendees                                                                                                                                                                                              |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
|                              | Helia                                                                                                                                                                                                                            | Panorama                                                                                                                                                                                                                  | Mercure                                                                                                                                                                                                                           |
| 16:15- 17:45                 | Workshop & Tutorial:<br>Crystallization process monitoring and control                                                                                                                                                           | Workshop & Tutorial:<br>Industrial crystallization fundamentals                                                                                                                                                           | Workshop & Tutorial:<br>Aspects of industrial crystallization                                                                                                                                                                     |
|                              | Helia                                                                                                                                                                                                                            |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 18:00-18:15                  | Welcome note<br>Session chair: Botond Szilágyi, Hajnalka Pataki                                                                                                                                                                  |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 18:15-19:00                  | Plenary lecture / Zoltán Nagy (Purdue University, United States):<br>Uncertainty-aware digital design and quality-by-control for intensified crystallization systems: from mechanistic models to AI across scales and industries |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 19:00-21:00                  | Welcome reception / Gallery                                                                                                                                                                                                      |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 7 September / Monday         |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 8:00                         | Conference office / Registration opens                                                                                                                                                                                           |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
|                              | Helia                                                                                                                                                                                                                            |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 8:30-8:45                    | Welcome session                                                                                                                                                                                                                  |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
|                              | Session chair: Marco Mazzotti                                                                                                                                                                                                    |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 8:45-9:30                    | Plenary lecture / Michael F. Doherty (University Of California, United States): Modeling crystal growth for molecular crystals – from the academy to the workplace                                                               |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 9:30-10:15                   | Plenary lecture / Elena Simone (Politecnico di Torino, Italy): Engineering crystalline formulations for pharmaceutical and food applications: an experimental and multi-scale modelling approach                                 |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 10:15-10:45                  | Coffee break / Gallery                                                                                                                                                                                                           |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
|                              | 1. Fundamentals of crystallization<br>(thermodynamics, kinetics, polymorphism, etc.)                                                                                                                                             | 2. Crystallization in fine chemicals,<br>specialty & life-science industries                                                                                                                                              | 3. Developments in large-scale industrial crystallization                                                                                                                                                                         |
|                              | Helia                                                                                                                                                                                                                            | Panorama                                                                                                                                                                                                                  | Mercure                                                                                                                                                                                                                           |
|                              | Session chair: Sven Schroeder                                                                                                                                                                                                    | Session chair: Huaiyu Yang                                                                                                                                                                                                | Session chair: Manfred Stepanski                                                                                                                                                                                                  |
| 10:45-11:05                  | Keynote lecture / Christos Xiouras (Johnson & Johnson Innovative Medicine, Belgium): Supersaturation in Crystallization: Implications for Kinetics and Solid-State Outcomes                                                      | Keynote lecture / Filipa Castro (University of Minho, Portugal): Workflow for whey proteins crystallization process design                                                                                                | Keynote lecture / Katalin Kátainé Fadgyas (EGIS Pharmaceuticals Plc., Hungary): Crystallization scale up challenges in DS development                                                                                             |
| 11:05-11:25                  | Arthur Salmon (CentraleSupélec, France): Cold plasma induced the nucleation of supersaturated aqueous glycine                                                                                                                    | Carlos A. Pons Siepermann (Merck Sharp & Dohme, United States): Commercial scale process development for the crystallization, isolation, and drying of novel macrocyclic peptide intermediates of enlicitide decanoate    | Bilal Ahmed (University of Strathclyde, United Kingdom): Scale-up framework for spherical agglomeration: process development and performance from lab to industrial manufacturing scale                                           |
| 11:25-11:45                  | Melinda Majerová (Slovak Academy of Sciences, Slovakia): Influence of particles size on thermal behavior and crystallization kinetics of gehlenite glasses                                                                       | Vivek Verma (University College Cork, Ireland): Engineering crystallisation for biopharmaceutical purification                                                                                                            | Bart Rimez (Secoya Technologies SRL, Belgium): Upscaling continuous flow nucleation of pharmaceutical processes                                                                                                                   |
| 11:45-12:05                  | Lorijn De Vrieze (KU Leuven, Belgium): Why the notion of a complex crystal-solution boundary layer might be unnecessary to explain secondary nucleation                                                                          | Lek Wantha (Suranaree University of Technology, Thailand): Crystallization of polymorphs and hydrates of L-lysine hydrochloride                                                                                           | Athanasios Arampatzis (National Technical University of Athens, Greece): Upscaling microwave assisted crystallization designs: from batch proof-of-concept to continuous operation                                                |
| 12:05-13:05                  | Lunch break / Episode restaurant                                                                                                                                                                                                 |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 13:05-14:35                  | Poster session 1 / Uranus                                                                                                                                                                                                        |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
|                              | 1. Fundamentals of crystallization<br>(thermodynamics, kinetics, polymorphism, etc.)                                                                                                                                             | 2. Crystallization in fine chemicals,<br>specialty & life-science industries                                                                                                                                              | 4. Crystallization for sustainability                                                                                                                                                                                             |
|                              | Helia                                                                                                                                                                                                                            | Panorama                                                                                                                                                                                                                  | Mercure                                                                                                                                                                                                                           |
|                              | Session chair: Lek Wantha                                                                                                                                                                                                        | Session chair: Filipa Castro                                                                                                                                                                                              | Session chair: Antonello Raponi                                                                                                                                                                                                   |
| 14:35-14:55                  | Keynote lecture / Sven L. M. Schroeder (University of Leeds, United Kingdom): Prediction of homogeneous crystal nucleation rates from solubility through Eyring-Polanyi Rate Theory: protic vs non-protic solvents               | Keynote lecture / Henrik Julian Felix Bettin (Heinrich-Heine-Universität Düsseldorf, Germany): Small-scale antisolvent nucleation for high-quality products in an Archimedes Tube Crystallizer                            | Keynote lecture / Marco Mazzotti (ETH Zurich, Switzerland): Solid-state deracemization processes for conglomerate-forming chiral compounds: theory, modelling, and experiments                                                    |
| 14:55-15:15                  | Shuntaro Amari (Tokyo University of Agriculture and Technology, Japan): Inducing nucleation in cooling crystallization using a temperature-responsive polymer                                                                    | Il Won Kim (Soongsil University, South Korea): Cocrystallization of APIs to improve their hygroscopic stability                                                                                                           | Yusuf Sadat Hasan Khan (University of Strathclyde, United Kingdom): Enhancing product yield, purity and sustainability by API and solvent recycling in pharmaceutical cooling crystallisation                                     |
| 15:15-15:35                  | Lucas M. Nahas (University of Strathclyde, United Kingdom): In situ generation of seed populations by partial dissolution: effects of seed surface area and supersaturation on secondary nucleation rate                         | Hanan Elhadjaji (Sanofi / Centralesupelec, France): Cold plasma–induced nucleation of paracetamol in a 1L stirred tank reactor                                                                                            | Ren Tao (KTH Royal Institute of Technology, Sweden): Selective recovery of rare Earth elements using tunable deep eutectic solvents and antisolvent crystallization                                                               |
| 15:35-15:55                  | Mae Macleod (University of Strathclyde, United Kingdom): Exploring interfacial effects on heterogeneous nucleation using molecular dynamics                                                                                      | Leon Yoon Ho (Singapore-MIT Alliance for Research and Technology, Singapore): Bottom-up production of crystalline suspensions of small-molecule actives and optimising filtration as concentration step                   | Ivan Červeňanský (Slovak University of Technology, Slovakia): Exploring the potential of hollow fibre anion exchange membrane modules for reactive membrane crystallization of magnesium hydroxide                                |
| 15:55- 16:25                 | Coffee break / Gallery                                                                                                                                                                                                           |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
|                              | 6. Crystal engineering<br>(polymorphism prediction, crystal habit control)                                                                                                                                                       | 7. Data-driven modeling, data science for design,<br>control and technology transfer                                                                                                                                      | 9. Mechanistic modeling and<br>numerical/analytical solution methods                                                                                                                                                              |
|                              | Helia                                                                                                                                                                                                                            | Panorama                                                                                                                                                                                                                  | Mercure                                                                                                                                                                                                                           |
|                              | Session chair: Marjatta Louhi-Kultanen                                                                                                                                                                                           | Session chair: Ashwin Kumar Rajagopalan                                                                                                                                                                                   | Session chair: Heiko Briesen                                                                                                                                                                                                      |
| 16:25-16:45                  | Keynote lecture / Rajan R. Bhawnani (Massachusetts Institute of Technology, United States): Polymorph control of indomethacin in continuous crystallization                                                                      | Keynote lecture / Antonello Raponi (Ecole des Mines de Saint Etienne, France): Multivariate optimization and inverse design of multiphase reactive systems via deep learning and 3D CFD-PBM simulations                   | Keynote lecture / Arne Bringewatt (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany): Inverse design of nanocrystal shapes in the kinetic regime                                                                        |
| 16:45-17:05                  | Hui Wang (Tianjin University, China): The governing mechanism of solvent effect on the polymorphic transformation from ε- to γ-CL-20                                                                                             | Mohammed Alsubeihi (The University of Manchester, United Kingdom): Hybrid SciML for population balance equations: insights, limitations, and future directions                                                            | Ferdinando D. Miciletta (Università degli Studi di Palermo, Italy): Numerical modeling of the Mg(OH)2 precipitation process in Double Feed Semi-Batch Reactors                                                                    |
| 17:05-17:25                  | Giulia Del Duca (Politecnico di Torino, Italy): Investigating the influence of polymorphism in the stabilization of Pickering formulations for encapsulation and controlled release of active ingredients                        | Joseph F. McHale (University of Leeds, United Kingdom): An adaptive neural ODE-based model predictive control for batch cooling crystallisation                                                                           | Katherine Young (Purdue University, United States): Population balance modeling of crystallization systems with kinetic-controlled incorporation of structurally similar impurities                                               |
| 17:25-17:45                  | Yashoda Abeykoon (University of Manchester, United Kingdom): Simple and low-cost crystallization of elusive form II paracetamol onto edible substrates for tablet-free drug delivery                                             | Martin Prostedrny (CMAC / University of Strathclyde, United Kingdom): Crystallisation screening data factory: a cyber-physical system for data-driven QbDD                                                                | Abdul Samad Rana (University of Leeds, United Kingdom): Well-mixed and segregated feed population balance modelling of semi-batch precipitation for calcium oxalate                                                               |
|                              |                                                                                                                                                                                                                                  | Panorama                                                                                                                                                                                                                  |                                                                                                                                                                                                                                   |
| 17:50-18:50                  |                                                                                                                                                                                                                                  | EFCE WP meeting (by invitation only)                                                                                                                                                                                      |                                                                                                                                                                                                                                   |
| 18:30-20:30                  | City center walking tour                                                                                                                                                                                                         |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 20:30-22:00                  | Wine tasting / Domus Vinorum                                                                                                                                                                                                     |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 8 September / Tuesday        |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 8:30                         | Conference office / Registration opens                                                                                                                                                                                           |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
|                              | Helia                                                                                                                                                                                                                            |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
|                              | Session chair:                                                                                                                                                                                                                   |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 08:45-09:30                  | Plenary lecture / Hiroshi Takiyama (Tokyo University of Agriculture and Technology (TUAT), Japan): Operation design of pH modulation for controlling internal seeding in reactive crystallization                                |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 09:30-10:15                  | Plenary lecture / Kerstin Forsberg (KTH - Royal Institute of Technology, Sweden): Crystallization challenges and opportunities in critical raw materials processing                                                              |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 10:15-10:40                  | Coffee break / Gallery                                                                                                                                                                                                           |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
|                              | 6. Crystal engineering<br>(polymorphism prediction, crystal habit control)                                                                                                                                                       | 2. Crystallization in fine chemicals,<br>specialty & life-science industries                                                                                                                                              | 1. Fundamentals of crystallization<br>(thermodynamics, kinetics, polymorphism, etc.)                                                                                                                                              |
|                              | Helia                                                                                                                                                                                                                            | Panorama                                                                                                                                                                                                                  | Mercure                                                                                                                                                                                                                           |
|                              | Session chair: Katharina Edkins                                                                                                                                                                                                  | Session chair: Jaime Gómez Morales                                                                                                                                                                                        | Session chair: Zsófia Szalay                                                                                                                                                                                                      |
| 10:40-11:00                  | Keynote lecture / Muhammad Asfand Yar Awan (University of Strathclyde, United Kingdom): Digital design of pharmaceutical crystal habit: coupling bayesian-optimized high-throughput screening with physics-based modelling       | Keynote lecture / Muvhulawa Mulaudzi (University of Cape Town, South Africa): In-situ precipitation of M(OH)3 nanoparticles for removal of contaminants of emerging concern from potable water                            | Zhaopeng Wang (Delft University of Technology, Netherlands): Improving accuracy in polythermal solubility measurements: challenges, error sources, and practical remedies                                                         |
| 11:00-11:20                  | Lily M. Hunnisett (The Cambridge Crystallographic Data Centre, United Kingdom): A digital approach to assessing polymorphic risk using CSD informatics and energetics methods                                                    | Jiaqi Wang (Aalto University, Finland): Separation of Nb and Ni from dissolved NMC cathode active materials via hydroxide precipitation crystallisation                                                                   | Farha Kamaal (CMAC / University of Strathclyde, United Kingdom): Comparative analysis of antisolvent crystallisation routes: assessing the impact of thermal and solvent-addition pathways on solubility and kinetic measurements |
| 11:20-11:40                  | Zoé Delabaudière-Le Meur (Université de Rouen, France): Spherical agglomeration of benzoic acid using a taylor vortex flow for the maturation step                                                                               | Marco Mazzotti (ETH Zurich, Switzerland): Batch heterogeneity in lyophilization: the interplay between stochastic freezing and drying kinetics                                                                            | Jenna Johnston (University of Strathclyde, United Kingdom): The effect of PSD on dissolution rates and clear point detection for dynamic solubility measurements                                                                  |
| 11:40-12:00                  | Jiaxuan Zhu (Tianjin University, China): Engineering polymorphism through crystallization for predictable light-induced actuation in organic crystals                                                                            | Marietella Roberto (Politecnico di Torino, Italy): Design of crystalline oleogels using insect fats for food applications                                                                                                 | Lukas D. Shelton (Rowan University, United States): Pharmaceutical crystal growth in the presence of impurities: linking transport phenomena to composition anisotropy                                                            |
| 12:00-12:20                  | Yevhenii Vaksler (Janssen Pharmaceutical Companies of Johnson & Johnson, Belgium): Crystal habit modelling: from proof of concept to simulation methods                                                                          | Anna Jawor-Baczynska (AstraZeneca, United Kingdom): The deployment of 2D population balance modelling to optimise particle processability in pharmaceutical crystallisation processes                                     |                                                                                                                                                                                                                                   |
| 12:20-13:20                  | Lunch break / Episode restaurant                                                                                                                                                                                                 |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 13:20-14:50                  | Poster session 2 / Uranus                                                                                                                                                                                                        |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
|                              | 3. Developments in large-scale industrial crystallization                                                                                                                                                                        | 4. Crystallization for sustainability                                                                                                                                                                                     | 8. Advances in process monitoring                                                                                                                                                                                                 |
|                              | Helia                                                                                                                                                                                                                            | Panorama                                                                                                                                                                                                                  | Mercure                                                                                                                                                                                                                           |
|                              | Session chair: Christopher Burcham                                                                                                                                                                                               | Session chair: Montgomery Laký                                                                                                                                                                                            | Session chair: Ákos Borsos                                                                                                                                                                                                        |
| 14:50-15:10                  | Keynote lecture / Braham Benyahia (Loughborough University, United Kingdom): A systematic uncertainty-resolved framework for reliable process design in industrial crystallization                                               | Keynote lecture / H. Burak Eral (TU Delft, Netherlands): Engineering thermocavitation bubble interactions for nucleation control                                                                                          | Keynote lecture / Swathi Ganesh (Massachusetts Institute of Technology, United States): Soft sensor for particle size monitoring in LNP manufacturing                                                                             |
| 15:10-15:30                  | Andrea Adamo (Zaiput Flow Technologies, United States): Benchmark study of tower crystallizer – leveraging plug-flow characteristics                                                                                             | Xin Su (Tianjin University, China): Unlocking efficient spontaneous deracemization: a MOF-mediated heterogeneous system overcomes catalytic incompatibility in cocrystallization                                          | Hari Priya Ravindran (Paul Scherrer Institute, Switzerland): Investigation of additives in early-stage solid formation via in-situ monitoring – A potentiometric and optical approach                                             |
| 15:30-15:50                  | Zoran Bjeložbrk (DSM-Firmenich, Switzerland): Importance of understanding crystallization mechanisms for rational design of robust and efficient industrial crystallization processes                                            | Karina Oliyňyk (Max Planck Institute for Dynamics of Complex Technical Systems, Germany): Adapting a continuous chiral inversion process from L-/D-Asparagine to the diastereomeric L-/D-allo-Threonine system            | György N. Stöffán (Budapest University of Technology and Economics, Hungary): Development and application of a machine vision technology for the online monitoring and controlling of API polymorphism during crystallisation     |
| 15:50-16:10                  | Sophie Janbon (AstraZeneca, United Kingdom): From amorphous to manufacturable: precipitation and continuous processing                                                                                                           | Clément Lemonnier (IFP Energies Nouvelles, France): Impact of hydrodynamics on coprecipitation of precursors to lithium-ion batteries cathode active materials                                                            | Mauro Davanzo (University of Padova, Italy): Calibrating API crystallization models with limited industrial datasets: feasibility and impact                                                                                      |
| 16:10-16:15                  | Break                                                                                                                                                                                                                            |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
|                              | 1. Fundamentals of crystallization<br>(thermodynamics, kinetics, polymorphism, etc.)                                                                                                                                             | 6. Crystal engineering<br>(polymorphism prediction, crystal habit control)                                                                                                                                                | 4. Crystallization for sustainability                                                                                                                                                                                             |
|                              | Helia                                                                                                                                                                                                                            | Panorama                                                                                                                                                                                                                  | Mercure                                                                                                                                                                                                                           |
|                              | Session chair: Sarah L. Price                                                                                                                                                                                                    | Session chair: Cameron Brown                                                                                                                                                                                              | Session chair: Torsten Stelzer                                                                                                                                                                                                    |
| 16:15-16:35                  | Keynote lecture / Hui Yu (Tianjin University, China): Visualize the process of crystal nucleation and growth in solution through fluorescence changes                                                                            | Keynote lecture / Augustinus Rio Sunardi (University of Manchester, United Kingdom): Size and shape manipulation via antisolvent crystallisation: an experimental approach to transform elongated crystals to equant ones | Keynote lecture / Jaime Gómez Morales (Andalusian Institute of Earth Sciences, Spain): Sustainable low-temperature approach for nano-hydroxyapatite crystallization from clam and scallop shells waste                            |
| 16:35-16:55                  | Katharina Edkins (University of Strathclyde, United Kingdom): The influence of trace water on the solution aggregation of drug molecules towards crystallisation                                                                 | Huiqi Wang (Tianjin University, China): Controllable synthesis of spherical FePO4·2H2O: formation mechanisms and key influencing factors                                                                                  | Martina G. Baelli (Politecnico di Torino, Italy): Design and optimization of crystallization processes for well water purification                                                                                                |
| 16:55-17:15                  | Céline Huart (Aix-Marseille Université, France): Structured glycine aggregates in saturated solution as the source of “memory effect” in crystal nucleation: a microfluidic / LT-NMR study                                       | Dave F. Collins (University of Leeds, United Kingdom): Translating angle resolved polarised raman spectroscopy (ARPRS) to molecular orientation on individual facets of organic crystalline materials                     | Arulselvan Ponundurai (Max Planck Institute for Dynamics of Complex Technical Systems, Germany): Precipitation and fractionation of lignins from organic solvents and pulping liquors                                             |
| 17:15-17:35                  | Alexandre Courac (IMPMC - Sorbonne Université, France): Phase diagrams at high pressure for single crystal growth of elements: in situ XRD and CALPHAD simulation of Mg-C, Na-Si, B-C and B-Pt systems                           | Lessona Michele (Politecnico di Torino, Italy): A combined thermodynamic modelling and Bayesian Neural Networks approach for a rational formulation of triacylglycerols mixtures and design of fat-based products         | Gerard Capellades (Rowan University, United States): Crystallization archive (CryArc): an open access library for solubility and standardized kinetic constants                                                                   |
| 19:00-23:00                  | Dinner cruise / Europe boat                                                                                                                                                                                                      |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 9 September / Wednesday      |                                                                                                                                                                                                                                  |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 8:30                         | Conference office / Registration opens                                                                                                                                                                                           |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
|                              | Helia                                                                                                                                                                                                                            |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
|                              | Session chair: Daniele Marchisio                                                                                                                                                                                                 |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 08:45-09:30                  | Plenary lecture / Neda Nazemifard (Takeda Pharmaceuticals, United States): In silico first crystallization: coupling thermodynamics, kinetics, and population balance modeling in an agentic workflow                            |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 09:30-10:15                  | Plenary lecture / Jerry Heng (Imperial College London, United Kingdom): The peptide crystallisation paradox                                                                                                                      |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 10:15-10:40                  | EFCE Working Party award lecture                                                                                                                                                                                                 |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 10:40-11:10                  | Coffee break / Gallery                                                                                                                                                                                                           |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
|                              | 3. Developments in large-scale industrial crystallization                                                                                                                                                                        | 5. Integrated process design: crystallization in the industrial process chain (reaction – work-up – recycle)                                                                                                              | 7. Data-driven modeling, data science for design,<br>control and technology transfer                                                                                                                                              |
|                              | 5. Integrated process design: crystallization in the industrial process chain (reaction – work-up – recycle)                                                                                                                     |                                                                                                                                                                                                                           | 2. Crystallization in fine chemicals,<br>specialty & life-science industries                                                                                                                                                      |
|                              | Helia                                                                                                                                                                                                                            | Panorama                                                                                                                                                                                                                  | Mercure                                                                                                                                                                                                                           |
|                              | Session chair: Tariq Mahmud                                                                                                                                                                                                      | Session chair: Marco Rudolf von Rohr                                                                                                                                                                                      | Session chair: Jan Sefcik                                                                                                                                                                                                         |
| 11:10-11:30                  | Keynote lecture / Huaiyu Yang (Loughborough University, United Kingdom): Protein crystallisation with gas-bubble templates: scale-up and real-time PAT monitoring                                                                | Keynote lecture / Zsófia Szalay (Richter Gedeon Nyrt., Hungary): Integrated crystallization – wet milling approach for robust particle size and polymorph control                                                         | Keynote lecture / Vinay Kumar Reddy Cheemarla (APC Ltd., Ireland): SoluAI – AI-enabled solubility modelling for crystallisation process design                                                                                    |
| 11:30-11:50                  | Veronica Kras (AstraZeneca, United Kingdom): From molecule to manufacture: crystallisation process development to deliver optimal particles for downstream processing                                                            | Tyler J. Downard (Purdue University, United States): Integration of wet milling and batch crystallization for size control and physical property improvement of solid rocket propellant ingredient                        | Huitian Yu (Technical University of Munich, Germany): Robust inline growth-rate sensing for cascaded model-predictive control of crystallization processes                                                                        |
| 11:50-12:10                  | Subhrajit Swain (University of Limerick, Ireland): Enhancing nucleation in antisolvent crystallization using hydrodynamic cavitation: differences and similarities in paracetamol and carbamazepine systems                      | Nathaniel Michael (Purdue University, United States): Digital design and experimental validation of integrated crystallization and wet milling systems for crystal size control                                           | Josip Budimir Sacher (University of Zagreb, Croatia): External direct nucleation control with an industrially oriented apparatus: from laboratory concept to robust PLC-based implementation                                      |
| 12:10-12:30                  | Adam C. Keates (Syngenta, United Kingdom): A modern particle science workflow for industrial crystallisation: bridging fundamental science to final product                                                                      | Lutz Gerkenmeier (TU Dortmund University, Germany): The role of washing dynamics in the integrated process of suspension melt crystallization                                                                             | Ziyi Liu (Tianjin University, China): Crystal-engineered degradable MOFs as a dual-confinement platform for supersaturated oral drug delivery                                                                                     |
| 12:30-12:50                  | Torsten Stelzer (University of Puerto Rico, Puerto Rico): Bridging chemistry and crystallization science: an integrated process design for API synthesis and purification using bio-derived building blocks and solvents         | Marc P. Meier (HHU Düsseldorf, Germany): Flexible and reliable particle isolation for next-generation integrated continuous manufacturing                                                                                 | Anna Jawor-Baczynska (AstraZeneca, United Kingdom): The deployment of 2D population balance modelling to optimise particle processability in pharmaceutical crystallisation processes                                             |
|                              | Helia                                                                                                                                                                                                                            |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 12:50-13:10                  | Closing                                                                                                                                                                                                                          |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |
| 13:10                        | Lunch break                                                                                                                                                                                                                      |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                   |

\*The organizers reserve the right to make changes in the program!  
Last updated: 2026-09-02