

SELECTBIO

March 25-26, 2024

Hilton Rotterdam
Rotterdam, The Netherlands

Innovations in Microfluidics & 3D-Printing
Europe 2024

Flow Chemistry European Summit 2024

Organized by SelectBIO Conferences

selectbio.com

selectbioconferences.com

Flow Chemistry European Summit – Monday, 25 March 2024 [Day 1]

08:00 Conference Registration and Materials Pick-Up + Coffee in the Exhibit Hall

Session Title: Conference Opening Session - Flow Chemistry 2024

09:00 Conference Chair

Welcome and Introduction by Conference Chairperson and Vision of Continuous Flow - Local API Manufacturing

Paul Watts, Distinguished Professor and Research Chair, Nelson Mandela University, South Africa

09:45 Keynote Presentation

Enantioselective Organocatalysis in Flow Mode

C. Oliver Kappe, Professor and Scientific Director, Center for Continuous Flow Synthesis and Processing, University of Graz, Austria

10:30 Mid-Morning Coffee Break and Networking in the Exhibit Hall

11:00 Keynote Presentation

Selective Thermal Deprotection of N-Boc Protected Amines in Continuous Flow

Anita Maguire, Professor of Pharmaceutical Chemistry, University College Cork, Ireland

11:30 *Generation and Use of Reactive Species Under Continuous Flow Conditions*

Julio Cezar Pastre, Associate Professor, University of Campinas – UNICAMP, Brazil

12:00 Keynote Presentation

Supramolecular Chemistry in Flow: Challenges and Opportunities

Anna Slater, Professor of Chemistry and Royal Society University Research Fellow, University of Liverpool, United Kingdom

12:30 Networking Buffet Lunch in the Exhibit Hall -- Networking with Colleagues, Engage with Exhibitors

Session Title: Emerging Methods and Approaches in the Flow Chemistry Field

14:00 *Continuous Photocatalytic C-X Couplings in Polymer-Based Microreactors*

Gianvito Vilé, Associate Professor in Chemical Engineering, Politecnico di Milano, Italy

14:30 *Flow-based Methods for Chemical Peptide and Protein Synthesis*

Nina Hartrampf, Assistant Professor, University of Zurich, Switzerland

15:00 Keynote Presentation
Enhancing Optimization on a Robotic-Flow Platform: Integrating Statistical Filtering with Bayesian Methods
François-Xavier Felpin, Professor, University of Nantes, France

15:30 Mid-Afternoon Coffee Break and Networking in the Exhibit Hall

16:00 Keynote Presentation
Exploring the Synergy Between a priori Computational Intelligence and Flow Process Development
Jean-Christophe Monbaliu, Professor of Organic Chemistry, Center for Integrated Technology and Organic Synthesis (CiTOS), University of Liège, Belgium

16:30 Technology Spotlight Presentation
Compound Library Generation using Flow Chemistry
Andrew Mansfield, Flow Chemistry Leader, Syrris, United Kingdom



17:00 Technology Spotlight Presentation
Advances in Continuous Flow: Reactor Technology, Pump Capabilities and Solid-Phase Synthesis
Manuel Nuño, Chief Scientific Officer, Vapourtec Ltd., United Kingdom



17:30 Keynote Presentation
Opportunities for Iodine Reagents in Flow Synthesis
Thomas Wirth, Professor, Cardiff University, United Kingdom

18:00 Networking Reception with Dutch Beer in the JAG Bar - Network and Engage with Colleagues in a Social Setting

19:00 Close of Day 1 Conference Programming

Innovations in Microfluidics and 3D-Printing Europe 2024
Monday, 25 March 2024 [Day 1]

08:00 Conference Registration and Materials Pick-Up + Coffee in the Exhibit Hall

09:00 Conference Chair

Welcome and Introduction by Conference Chairperson -- Scope of the Conference and Topics Covered + Primer on 3D-Printing in Microfluidics

Noah Malmstadt, Professor, Mork Family Dept. of Chemical Engineering & Materials Science, University of Southern California, United States of America

09:30 Keynote Presentation

Exploring the Potential of Microfluidics for Lab Automation

Burcu Gumuscu, Assistant Professor Biosensors and Devices Lab, Eindhoven University of Technology, The Netherlands

10:00 *Computer Simulations of Microfluidics – What Can We Learn, and How Can They Help Us?*

Timm Krüger, Professor of Fluid and Suspension Dynamics, The University of Edinburgh, United Kingdom

10:30 Mid-Morning Coffee Break and Networking in the Exhibit Hall

11:00 *Ultrasound – A New Tool for Biofabrication*

Kai Melde, Group Leader, Heidelberg University, Germany

11:30 Keynote Presentation

Prototyping of Microphysiologic Cell Culture Systems That Mimic Key Aspects of the Human Body

Mandy Esch, Project Leader, National Institute of Standards and Technology (NIST), United States of America

12:00 Keynote Presentation

3D Printing – Implementation and Integration of 3D Printing in the Development of Microreactors and their Applications

Stephen Hilton, Associate Professor, University College London School of Pharmacy, United Kingdom

12:30 Networking Buffet Lunch in the Exhibit Hall -- Networking with Colleagues, Engage with Exhibitors and View Posters

14:00 *SOIL-ON-A-CHIP: Deciphering the Secret Life of Soil Microbes Using Novel Microfluidic Platforms*

Claire Stanley, Senior Lecturer in Bioengineering, Imperial College London, United Kingdom

14:30 *Engineering Synthetic Cells from the Bottom-Up*
Tom Robinson, Lecturer in Chemical Engineering, University of Edinburgh, United Kingdom

15:00 *A Microfluidics-based Approach to Tackle Bone Tumors: Towards New Materials for Bone Metastases*
Gabriela Graziani, Assistant Professor, Politecnico di Milano, Italy

15:30 Mid-Afternoon Coffee Break and Networking in the Exhibit Hall

16:00 Open Discussion: Emerging Themes in Microfluidics and Areas Warranting Increased Studies
Moderated by Professor Noah Malmstadt

18:00 Networking Reception with Dutch Beer in the JAG Bar - Network and Engage with Colleagues in a Social Setting

19:00 Close of Day 1 Conference Programming

Flow Chemistry European Summit – Day 2
Innovations in Microfluidics and 3D-Printing – Day 2

Joint Session
Tuesday, 26 March 2024

08:00 Morning Coffee and Networking in the Exhibit Hall

Session Title: 3D-Printing and Microfluidics -- Joint Session of the Two Tracks

Session Chairperson: Professor Noah Malmstadt, University of Southern California

08:30 *3D-Printing in Microfluidics*

Noah Malmstadt, Professor, Mork Family Dept. of Chemical Engineering & Materials Science, University of Southern California, United States of America

09:00 Keynote Presentation

Microfluidic Approaches for the Controlled Synthesis of Particles

Simon Kuhn, Professor, Department of Chemical Engineering, KU Leuven Belgium

09:30 Technology Spotlight Presentation

Dilase 3D: Combining Very High Resolution and Large Size Fabrication Capability

Pierre Blanchet, R&D Equipment Manager, Kloé, France



10:00 *The Development and Use of 3D Printed Reactors in Flow and Photoflow Chemistry and the Collaborative Photoflow System – the Proteus Aether*

Stephen Hilton, Associate Professor, University College London School of Pharmacy, United Kingdom

10:30 Mid-Morning Coffee Break and Networking in the Exhibit Hall

11:00 *In-Flow Screening of Immobilized Photocatalysts in 3D Printed Microreactors*

Anca Roibu, Postdoctoral Fellow, Transilvania University of Brasov, Romania

11:30 Technology Spotlight Presentation

ASIGA Advancing 3D Printed Microfluidics

Stephan Weiß, Global Technology Manager, ASIGA, Germany



12:00 Technology Spotlight Presentation

Can Microfluidics be Truly User-Friendly?

Camila Betterelli Giuliano, Microfluidics Innovation Specialist, Microfluidics Innovation Center, France



Microfluidics
Innovation
Center

13:00 Networking Buffet Lunch in the Exhibit Hall -- Networking with Colleagues, Engage with Exhibitors, View Posters

Session Chair: Professor Paul Watts, Nelson Mandela University

14:00 *Copper-Catalyzed Continuous-Flow Transfer Hydrogenation In Ethylene Glycol*
Katia Martina, Associate Professor of Organic Chemistry, Università degli Studi di Torino, Italy

14:30 *From Improving Known Reactions to the Discovery of New Reactivity Exploiting Flow*
Marcus Baumann, Assistant Professor, School of Chemistry, University College Dublin, Ireland

15:00 *Flow Biocatalysis for the Synthesis of Natural Compounds*
Martina Letizia Contente, Tenure-Track Assistant Professor, University of Milan, Italy

15:30 Mid-Afternoon Coffee Break and Networking in the Exhibit Hall

16:00 *Flow Chemistry and Biomass Valorization - An Emerging Green Technology*
Christophe Len, Professor, Chimie ParisTech, CNRS, France

16:30 *Pragmatic Continuous Flow Solutions for Larger Scale Synthesis Reactions*
Floris Rutjes, Professor, Institute for Molecules and Materials, Radboud University, The Netherlands

17:00 *Automated Cu(II) Monitoring over a Wide Concentration Range with Microflow Injection Analysis System Employing Modular 3D-Printed Platforms*
David Ricart Fort, PhD Student, Escola Politècnica Superior d'Enginyeria de Manresa (EPSEM), Spain

17:30 *Photoredox Catalytic Reactions in Continuous Flow Reactors*
Maurizio Benaglia, Full Professor of Organic Chemistry, Dipartimento di Chimica, Università degli Studi di Milano, Italy

18:00 *Combining (photo)Biocatalysis with Continuous Flow: Efficient Biotransformations in 3D Printed Reactors*
Heidrun Gruber-Wölfler, Associate Professor, Graz University of Technology, Austria

18:30 *Flow Enabled Synthesis of Multiresistant Drug Clofazimine*
Rajat Pandey, Postdoctoral Fellow, Nelson Mandela University, South Africa

19:00 Close of Conference