



Day 1 - Tuesday 14th November 2023

Time	Programme	
11:00-12:00	Registration and Refreshments Level 2 and Level 3 Foyer Areas	
12:00-12:15	Welcome and Overview AUD B&C Prof Alastair Florence, University of Strathclyde	
12:15-12:25	CMAC Industry Tier 1 Perspective AUD B&C Dr Ivan Marziano, Pfizer R&D UK Limited	
12:25-13:30	<p>QUALITY BY DIGITAL DESIGN AND DIGITAL WORKFLOWS AUD B&C Chaired by: Prof Alastair Florence, University of Strathclyde</p> <p>Dr Cameron Brown, University of Strathclyde Quality by Digital Design (QbDD) Informed by Efficacy, Manufacturability, and Sustainability</p> <p>Dr Wei Li, Loughborough University Systematic Optimal Design and Operation of Multistage Continuous Antisolvent Crystallizers</p> <p>Dr Michael Devlin, University of Strathclyde DDMAP WP1: Structure and Stability Prediction of Amorphous Pharmaceuticals</p> <p>Flash Presentations: Dr Murray Robertson, University of Strathclyde BPMN Process Automation for QbDD Workflows</p> <p>Musab Osman, University of Strathclyde Enhancing Virtual Tablet Formulation Design</p> <p>Dr Ettore Settanni, University of Cambridge Pharmaceutical Supply Chain Reconfiguration Options Enabled by MicroFactory Technologies</p> <p>Prof Hannah Batchelor, University of Strathclyde GIBio: Advanced Dissolution Apparatus to Predict Product Performance</p>	
13:30-14:30	Networking Lunch with Exhibition Review and Poster Session – odd numbers Level 2 and Level 3 Foyer Areas	
14:30-16:00	<p>Showcase Session #1 - Quality by Digital Design and Digital Workflows, Data and Digital Twins AUD A, LEVEL 2</p> <p>Visit the Showcase Session to meet and talk to CMAC Researchers about their cutting-edge work showcasing Quality by Digital Design and Digital Workflows, and Data and Digital Twins.</p>	<p>DM² Demonstrators</p> <p>CONFERENCE ROOMS 4 & 5, LEVEL 3</p> <p>Join the researchers from the Made Smarter Innovation – Digital Medicines Manufacturing (DM²) research centre in this immersive and interactive showcase of the integrated industrial digital technologies they have been developing to date. Explore examples of AI, Machine Learning, Robotics, Digital Design Tools, Augmented Reality and much more.</p>
16:00-16:30	Networking Break with Exhibition Review and Poster Session - even numbers Level 2 and Level 3 Foyer Areas	
16:30-17:15	Keynote Presentation AUD B&C Dr Andy Maloney, CCDC How far will a crystal take you? Transforming pharmaceutical development through structured collaborations	



17:15-17:30	Wrap-up Day 1 AUD B&C Prof Alastair Florence, University of Strathclyde
17:30- 19:00	Poster Session with Drinks Reception Level 3 Foyer Odd numbers 17:30-18:15 Even numbers 18:15-19:00
19:15 - 00:00	Informal Dinner and Drinks at Radisson Blu Hotel, Glasgow

Day 2 – Wednesday 15th November 2023

Time	Programme
08:00-09:00	PRIVATE SESSION, BY INVITATION ONLY Tier 1, Tier 2 Engagement Breakfast Session Level 2 Foyer Area
08:15-09:00	Registration and Refreshments Level 2 and Level 3 Foyer Areas
09:00-09:20	Welcome and Overview AUD B&C Prof Alastair Florence, University of Strathclyde
09:20-10:25	DATA FACTORIES AND MODEL-DRIVEN EXPERIMENTS AUD B&C Session Chair: Prof Alison Nordon, University of Strathclyde Prof Claire Adjiman, Imperial College London Digital Solvent Design for Accelerated Process Development Dr Chantal Mustoe, University of Strathclyde An Autonomous DataFactory for the Small-Batch Cooling Crystallisation of Active Pharmaceutical Ingredients Dr Faisal Abbas, University of Strathclyde Tablet Manufacturing DataFactory for High-Throughput Experimentation Flash Presentations: Amal Osman, University of Strathclyde Sources of Uncertainty and Error Propagation in the Small-scale Crystallisation DataFactory Dr Mohammad Salehian, University of Strathclyde System Model Driven Optimisation of Directly Compressed Tablets Development Process Hannah Jesney, University of Strathclyde Developing a Next Generation Multi-modal Dissolution Testing System for Pharmaceutical Tablets Lewis Ross, University of Strathclyde Structure and Stability Prediction of Amorphous Pharmaceuticals Daniel Powell, University of Strathclyde Resolving Drug Release Mechanisms of Amorphous Solid Dispersions during Dissolution



10:25-10:55	Networking Break with Exhibition Review and Poster Session - odd numbers Level 2 and Level 3 Foyer Areas	
10:55-12:25	Showcase Session #2 - DataFactories and Model-driven Experiments, Translation to Industry AUD A, LEVEL 2 Visit the Showcase Session to meet and talk to CMAC Researchers about their cutting-edge work showcasing DataFactories and Model-driven Experiments, and Translation to Industry.	DM² Demonstrators CONFERENCE ROOMS 4 & 5, LEVEL 3 Join the researchers from the Made Smarter Innovation – Digital Medicines Manufacturing (DM ²) research centre in this immersive and interactive showcase of the integrated industrial digital technologies they have been developing to date. Explore examples of AI, Machine Learning, Robotics, Digital Design Tools, Augmented Reality and much more.
12:25-13:25	Networking Lunch with Exhibition Review and Poster Session – even numbers Level 2 and Level 3 Foyer Areas	
13:25-14:30	MICROFACTORIES AND ADVANCED PROCESS TECHNOLOGY AUD B&C Session Chair: Prof Chris Rielly, Loughborough University Dr Elke Prasad, University of Strathclyde 3D Printing MicroFactory Dr Ian Houson, University of Strathclyde A Digital-First Approach to Design and Deliver Mefenamic Acid Particle Attributes Dr Magdalene Chong, University of Strathclyde Adopting a Structured Approach to Implementation of Advanced Preprocessing Techniques Flash Presentations: Patrycja Bartkowiak, University of Strathclyde Accelerating Drug Release of FDM 3D Printed Tablets through Model-based Structure Optimisation Suruthi Gnanenthiran, The University of Sheffield A Mechanistic Approach to Understanding the Relationship between Agitation and Agglomeration in an Agitated Filter Dryer	
14:30-14:50	Networking Break with Exhibition Review and Poster Session – ALL Level 2 and Level 3 Foyer Areas	
14:50-16:30	CMAC LAB TOURS MEET AT REGISTRATION DESK ON LEVEL 2 [Refreshments will be available for those waiting on lab tours]	
16:30-17:15	Keynote Presentation AUD B&C Dr Stephen Ward, Cell and Gene Therapy Catapult Manufacturing Centre Are the productivity challenges that different across medicine modalities? A UK Opportunity	



17:15-18:20	<p>DATA AND DIGITAL TWINS AUD B&C Session Chair: Prof Blair Johnston, University of Strathclyde</p> <p>Dr Rachel Smith, The University of Sheffield Linking Drug Product Microstructure and Performance: Mechanistic Modelling and Experimental Validation</p> <p>Dr Tabbasum Naz, University of Strathclyde Data Digitalisation in Medicine Manufacturing</p> <p>Dr Hikaru Jolliffe, University of Strathclyde Development of Process Models for Continuous Direct Compression</p> <p>Flash Presentations: Theo Tait, University of Strathclyde Advanced Formulation Mixture Rule Optimisation for Enhancing Predictability of Tablet Compressibility and Compactibility</p> <p>Diego Alvarado, University of Strathclyde Deep Generative Models for Pharmaceutical Manufacturing Process Design</p> <p>Irene Moreno, University of Strathclyde Understanding Solvent-induced Mass Transformations Driven by Anomalous Mass Transfer</p> <p>Dr John Armstrong, University of Strathclyde An End-to-end Machine Learning Framework for the Characterisation of Tablet Disintegration in Real-time</p> <p>Dr Martin Prostedny, University of Strathclyde Characterisation of a Semi-continuous Mini-blender for Use in Continuous Direct Compression</p>
18:20-18:30	<p>Wrap-Up Day 2 AUD B&C Prof Alastair Florence, University of Strathclyde</p>
19:00-00:00	<p>Conference Dinner BARONY HALL Drinks reception from 19:00 Dinner served at 19:45</p>



Day 3 - Thursday 16th November 2023

Time	Programme
08:00-09:15	PRIVATE SESSION, BY INVITATION ONLY Tier 1, Tier 2 Engagement Breakfast Session Level 2 Foyer Area
08:30-09:15	Registration and Refreshments Level 2 and Level 3 Foyer Areas
09:15-09:40	Welcome & Industry Overview AUD B&C Massimo Bresciani, University of Strathclyde
09:40-10:10	Keynote Presentation AUD B&C Dr Jérôme Mantanus, UCB Pharma Building Sustainability into Drug Product Manufacturing – the Impact of Particle Engineering
10:10-11:15	TRANSLATION TO INDUSTRY AUD B&C Chaired by: Massimo Bresciani, University of Strathclyde John Mack, Applied Materials Machine Learning Techniques for Process Monitoring, Control and Optimisation; a "semi intelligent" view Jyoti Yadav, Technobis Crystallization Systems Unlocking the Power of Solvent Selection: Solubility, Nucleation and Role of AI in Crystallization Sean Bermingham, Siemens Going beyond Digital Product and Process Twins: Covering other parts of the drug lifecycle with Digital Plant Twins and Digital Automation Twins
11:15-11:45	Networking Break with Exhibition Review and Poster Session – odd numbers Level 2 and Level 3 Foyer Areas
11:45-12:50	PANEL ON LAB AND WORKFORCE OF THE FUTURE AUD B&C Chaired by: Dr Daniel Markl, University of Strathclyde Panel members: Prof Richard Bourne, University of Leeds Prof Paul Chapman, Glasgow School of Art Dr Catriona Clark, University of Strathclyde Prof Linda Newnes, University of Bath Dr Amy Robertson, AstraZeneca
12:50-13:50	Networking Lunch with Exhibition Review and Poster Session – even numbers Level 2 and Level 3 Foyer Areas
13:50-14:05	Prof Sir Jim McDonald, Principal, University of Strathclyde
14:05-14:40	PRIZE GIVING AND CLOSING REMARKS AUD B&C Prof Alastair Florence, University of Strathclyde
14:40-15:00	Networking Break with Refreshments Level 2 & Level 3 Foyer Areas
15:00-16:30	CMAC LAB TOURS MEET AT REGISTRATION DESK ON LEVEL 2 [Refreshments will be available for those waiting on lab tours]