

CMAC Open Days 2022: Hub and ARTICULAR Showcase
DAY 1 – Monday 16th May 2022

Time	Programme
09:30-10:30	Registration & Refreshments
10:30-10:45	Welcome and Overview Prof Alastair Florence, University of Strathclyde Prof Jon-Paul Sherlock, AZ
10:45-10:55	Overview of ARTICULAR Showcase Prof Blair Johnston, University of Strathclyde
10:55-12:30	DIGITALISATION IN MEDICINES DEVELOPMENT Session Chair: Prof Blair Johnston, University of Strathclyde Prof Jonathan Hirst, University of Nottingham "Machine Learning and Data-driven Approaches in Drug Discovery" Dr Sophie Bailes, AZ "Unlocking the Power of Data for Innovative Pharmaceutical Development" Prof Marion Bennie, University of Strathclyde "NHS Scotland Medicines Intelligence: using real world data to inform policy and drive improvements in patient care, enabled through electronic prescribing"
12:30-13:30	Poster Session, Interactive Demos and Exhibition Review with Lunch
13:30-15:00	DATA AND VISUALISATION Session Chair: Prof Chris Rielly, Loughborough University Tiffany Lai, Pfizer "Data Structuring and Enabling Data Science in Formulation Development" Dr Tabbasum Naz, University of Strathclyde "ETL for Pharmaceutical Manufacturing" Victor Portela, Glasgow School of Art "Virtual Reality Immersive Training for an EasyMax Synthesis Workstation"
15:00-15:30	Poster Session, Interactive Demos and Exhibition Review with Refreshments
15:30-16:15	KEYNOTE SPEAKER: Maxine Kennedy, NVIDIA "Big AI' in Healthcare"
16:15-17:15	APPLICATION OF AI IN DEVELOPMENT AND MANUFACTURING Session Chair: Dr Brahim Benyahia, Loughborough University Dr Brahim Benyahia, Loughborough University "Robust Control of a Crystallisation Process using Advanced Reinforcement Learning Strategies – Bridging the Gap between MPC and Artificial Intelligence" Dr Tony Vassileiou, University of Strathclyde "A ML Framework for Cross-Solvent Solubility Prediction" Dr Vijay Srirambhatla, University of Strathclyde "Machine Learning Models to Predict Mechanical Properties of Organic Compounds"
17:15-17:30	WRAP-UP: FUTURE OUTLOOK Prof Blair Johnston, University of Strathclyde
18:30	Drinks & Informal Dinner – Drygate

CMAC Open Days 2022: Hub and ARTICULAR Showcase
DAY 2 – Tuesday 17th May 2022

Time	Programme
08:00-09:00	PRIVATE SESSION, BY INVITATION ONLY Tier 1, Tier 2 Engagement Breakfast Session
08:30-09:15	Registration & Refreshments
09:15-09:30	Welcome & Overview Prof Alastair Florence, University of Strathclyde
09:30-10:45	DIGITAL DESIGN AND PREDICTIVE TOOLS Session Chair: Prof Alastair Florence, University of Strathclyde Dr Bilal Ahmed, The University of Sheffield "Exploring Spherical Agglomeration with Mechanistic Understanding: Analysis of an Immersion-Driven Mechanism through Population Balance Modelling" Dr Cameron Brown, University of Strathclyde "Applications of Hybrid Digital Design in Process Development" Dr Chantal Mustoe, University of Strathclyde "CMAC's Automated Crystallisation DataFactory" Dr Murray Robertson, University of Strathclyde "The CMAC Data Lifecycle and Digital Twinning"
10:45-11:15	Poster Session, Interactive Demos and Exhibition Review with Refreshments
11:15-12:30	CONTINUOUS PROCESSING MICROFACTORIES Session Chair: Prof Alison Nordon, University of Strathclyde Dr Sara Ottoboni, University of Strathclyde "Isolation Digital Design for Mefenamic Acid using Mechanistic Modelling" Dr Wei Li, Loughborough University "Model Driven Crystallisation Design and Development for Mefenamic Acid" Dr Magdalene Chong, University of Strathclyde "MicroFactories: Measurement and Control" Dr Jag Srari, University of Cambridge "Reconfiguring Supply Chains for Resilience – Opportunities Enabled by MicroFactories"
12:30-13:45	Poster Session, Interactive Demos and Exhibition Review with Lunch
13:45-15:00	MEASUREMENT AND CHARACTERISATION Session Chair: Prof Sven Schroeder, University of Leeds Dr Anu Pallipurath, University of Leeds "Understanding the Solutions You Crystallise from: The Molecular Basis of Co-solvency and Conformational Changes by X-ray Pair Distribution Function Measurements and Modelling" Prof Gavin Reynolds, AZ "Accelerating Establishment of Continuous Direct Compression Processes Using Digital Twins" Dr Parmesh Gajjar, University of Manchester "Advanced XCT Characterisation of Pharmaceutical Materials"



	Dr Elke Prasad, University of Strathclyde "The CMAC Future Manufacturing Research Hub: A Novel Hot-Melt-Extrusion – 3D Printing MicroFactory"
15:00-15:45	KEYNOTE SPEAKERS: Dr Gabriella Pizzuto & Dr Hatem Fakhruldeen, University of Liverpool "The New Era of Robotics for Material Discovery"
15:45-15:55	WRAP-UP Prof Alastair Florence, University of Strathclyde
16:00-17:15	CMAC Lab Tours
17:15-18:30	Poster Session with Drinks Reception (in TIC) TIC, Level 3 Foyer
19:00	Drinks Reception & Conference Dinner Grand Central Hotel Glasgow

DAY 3 – Wednesday 18th May 2022

Time	Programme
08:00-09:00	PRIVATE SESSION, BY INVITATION ONLY Tier 1, Tier 2 and SCOUT Engagement Breakfast Session
08:30-09:00	Registration & Refreshments
09:00-09:20	Welcome & Industry Overview Massimo Bresciani, University of Strathclyde
09:20-10:00	KEYNOTE SPEAKER: Clare Porter, Department for Business, Energy and Industrial Strategy "Manufacturing the Future: A Policy Response"
10:00-11:00	INNOVATION THROUGH COLLABORATION Session Chair: Massimo Bresciani, University of Strathclyde Dr Bhavik Mehta, Siemens Process Systems Engineering Ltd "Development of an Advanced Modelling System for Active Ingredient End-to-End Manufacturing Processes – A KTP Overview" Rob Innes, Wyoming Interactive "Succeeding at Collaboration: SME Perspective" Prof Thomas De Beer, Ghent University "An Academic's Journey to Spin-out – Commercialization of a New Manufacturing Technology: Continuous Pharmaceutical lyophilisation"
11:00-11:30	Poster Session, Interactive Demos and Exhibition Review with Refreshments
11:30-12:15	KEYNOTE SPEAKER: Dr Mark Buswell, GSK "Exploiting Technology to Reimagine CMC Outcomes"
12:15-13:15	Poster Session, Interactive Demos and Exhibition Review with Lunch
13:15-14:30	DM² LAUNCH Session Chair: Prof Alastair Florence, University of Strathclyde Chris Courtney, UKRI "Delivering the Future we want for Manufacturing in the UK through Digitalisation" Dr Jürgen Harter, CCDC "Digital Medicines – A CCDC Perspective" Panel Session Digital Medicines Manufacturing: Delivering Value from DM²
14:30-15:00	PRIZE GIVING AND CLOSING REMARKS Prof Alastair Florence, University of Strathclyde
15:00-15:15	Quick Break
15:15-17:15	CMAC Lab Tours