

Bear PGR Conference 2024

Chemical Engineering, Building Y11

Day 1 – Tuesday 23rd April		
Time	Speaker	Title
09:30	Coffees, Networking and Posters (Atrium)	
10:00	Day 1 Welcome (G35)	
10:10	Carol Sandys Head of ARC	BEAR State of the Union
10:30	Keynote: Neil Ashton	How HPC, ML and Cloud Computing are helping to move towards a digital design process for the automotive and aerospace industries
11:10	Coffee Break (Atrium)	
Session 1: CFD Session (G35)		
11:30	Chandan Bose	CFD User Group
11:50	Roberto Hart-Villamil	On the AI driven geometry optimisation of a stirred tank CFD model in laminar flow
12:10	Xue Lian	Coupled SPH-DEM method for simulating coarse food particles in a non-Newtonian conveying fluid
12:30	Lunch Time (Atrium) + Poster Session	
Session 2: Short Presentations (G35)		
13:30	Alan Turing Institute	Use of AI in Policy (Full title TBC)
14:00	Kamilla Kopec-Harding	R User Group
14:10		Research Data Science Group

14:20	Lu Hai	FEM / Abaqus User Group
14:30	Ullas Shivaprakash	Holistic data driven sensor monitoring system for a three-infrastructure system
14:40	Josephine Bates	Using data analytics to break down outcome measures in liaison psychiatry
14:50	William Peace	Investigation of high gas flow rates on hydrodynamics in two-phase gas-liquid stirred tanks using Positron Emission Particle Tracking (PEPT)
15:00	END	

Day 2

Time	Speaker	Title
09:30	Coffees, Networking and Posters (Atrium)	
10:00	Day 2 Welcome (G35)	
Session 3: DEM Session (G35)		
10:10	Keynote 3: Dr Kit Windows-Yule	AI-based optimisation of industrial processes and process equipment
10:50	Dominik Werner	Optimising Mixing Processes with DEM: From Problem Identification to Solution
11:40	Daniel Rhymer	A world of pure imagination? Understanding the dynamics of Vertical Stirred Mills within chocolate processing.
12:00	Lunch Time + Posters (Atrium)	
13:00	Keynote 4: Jack Sykes	EvoPhase – A University of Birmingham Spin-Out
Session 4: Biological Presentations (G35)		
13:40	Andrew Quinn	TBA
14:00	Kirsty McCready	Deconstructing the <i>Ceratopteris</i> genome
14:20	Margarita Saranti	In search of the big data benefit when predicting language outcome after stroke using machine learning
14:40	Coffee Break (Atrium)	
15:00	Katherine Jaynes-Cupper	mobileRNA: A new tool for efficient analysis of

		RNA expression in multiple genomes
15:20	Christopher Mahony	Runx1 Is A Key Transcription Factor That Drives Synovial Fibroblast Pathogenicity In Rheumatoid Arthritis
15:40	Awards and Wrap-Up	
16:00	END	