

openSim 2025

Programme

Friday, 24 October 2025
Mintek, Room G4
Randburg

Theme: Fast, Cheap, and Slightly Wrong

09:00 -09:55	Registration & Coffee/Tea		
09:55 – 10:00	Welcome and Safety Briefing	Security and Venue Staff	Mintek
10:00 – 10:15	Opening Remarks: Why we need fast, cheap and slightly wrong	Dr Quinn Reynolds	Mintek
10:15 – 10:40	Consider a Spherical Human	Mr Carl Sandrock	Independent Consultant
10:40 – 11:05	Simulating Chromite Sintering – towards Good, Fast, and Cheap with Rust and AI	Dr Johan Zietsman, Dr Callie Marais, and Mr Thys Nortje	Ex Mente
11:05 – 11:25	Coffee/Tea		
11:25 – 11:50	Making OpenFOAM more Accessible: The FreeCAD CfdOF Workbench	Dr Oliver Oxtoby	Independent Consultant
11:50 – 12:15	Simplified Python and OpenFOAM Models of the Arc Region in an Electric Arc Furnace	Ms Suzanne Roberts	Engys
12:15 – 12:40	Reduced Order Plasma Arc Modelling with OpenFOAM	Mr Tumelo Makgoale	Ex Mente
12:40 – 13:40	Lunch		
13:40 – 14:05	A Furnace Operator Walks into a Phase Field...	Mr Markus Erwee	Samancor Chrome
14:05 – 14:30	Don't Slip on Orange Peels: Drag-and-drop Machine Learning to Guide Electrode Slipping	Dr Stefan Swanepoel	Samancor Chrome
14:30 – 14:50	Coffee/Tea		
14:50 – 15:15	Assessing Hydrometallurgical Circuit Capacity Using Plant Data	Mr Nicholas du Preez	CM Solutions
15:15 – 15:40	Small Volumes, Big Insights: A Minimal FVM Framework in Julia	Dr Alexey Cherkaev	Mintek
15:40 – 15:45	Summary and Closing	Dr Quinn Reynolds	Mintek
15:45	Depart for Post-event Discussions		