

# Engineering Simulation Conference - 2023



Date: 7 September 2023

Registration time: 08:00

Venue: Lord Charles Hotel

Address: C/o Broadway Boulevard and Main Rd, Somerset West

08:00 - 08:30		REGISTRATION	
08:30 - 08:40		Welcome (Larah van Niekerk, Qfinsoft)	
08:40 - 09:10		Ansys Corporate Vision and Update (Jim Chiamardas, Ansys)	
09:10 - 09:30		Evaluating Fatigue Safety Factors in Pump Shafts Using ANSYS Mechanical: A Practical Demonstration (Dirk Human, Sasol)	
09:30 - 09:50		Failure Analysis of Helmet Subject to Impact Testing using LS-Dyna (Jaco van Niekerk, Leatt & Jeanri van Tonder, Qfinsoft)	
09:50 - 10:10		Vibration and Shock Analysis of a PCB with Ansys Sherlock to Predict FPGA Reliability and Robustness (Shane Martin, NewSpace & Evan Smuts, Qfinsoft)	
10:10 - 10:40		BREAK	
10:40 - 11:00		Modelbased System Engineering with Ansys (Johan Koncilja , Ansys)	
11:00 - 11:20		Ansys Motor-CAD Multiphysics Simulation with Ansys Mechanical and Ansys Fluids (Evan Smuts, Qfinsoft)	
11:20 - 11:40		CFD Modelling of a Polybaffle using the Eulerian Wall Film Model (Joshua Thring, Sugarequip & Stephan Schmitt, Qfinsoft)	
11:40 - 12:00		Accelerating Innovation with Ansys Cloud (Anders Jonson, Ansys)	
12:00 - 12:20		Ansys Discovery to Study the Flow in the Osdrif Suction Manifold (Cornell Fourie, Agrico)	
12:20 - 12:40		Validating ROCKY-DEM: Evaluating Fluid-Particle Interactions in Rotating Drum Flows Using Two-Way DEM-SPH Coupling and PEPT (Taswald Moodley, University of KwaZulu-Natal)	
12:40 - 13:50		GROUP PHOTO + LUNCH	
		Fluids Track	Mechanical Track - 1
13:50 - 14:35		Ansys Fluids Update (Stephan Schmitt, Qfinsoft)	Ansys Mechanical Update (Jeanri van Tonder, Qfinsoft)
14:35 - 14:55		The use of Ansys CFD at Astratek Manufacturing Engineers (Helen van Rhyn, Astratek Manufacturing Engineers)	FE Analysis on Asymmetric Multi-Bolted Joint Connections of Pump Casings (Muvhuso Ravele, Sasol)
14:55 - 15:15		Natural Draft Direct Dry Cooling System Performance at Various Scales under Steady and Transient Conditions (Wian Strydom, Stellenbosch University)	Explosive Forming Simulation using Ansys Explicit (Evan Smuts, Qfinsoft)
15:15 - 15:45		BREAK	
		DEM Track	Mechanical Track - 2
15:45 - 16:30		Ansys Rocky Update (Evan Smuts, Qfinsoft)	Sub-Modelling of a Steam Manifold (Jeanri van Tonder, Qfinsoft)
16:30 - 16:50		The Effect of Mill Size and Ball Size on the Relative Strengths of Grinding Mechanisms in a Tumbling Mill (Sandile Nkwanana, University of KwaZulu-Natal)	Ansys ACP: Making Light Work of Composites (Evan Smuts, Qfinsoft)
16:50 - 17:10		Using DEM to Study Breakage Mechanisms in the Novel Crushing Device (Titus Nghipulile, University of KwaZulu-Natal)	Material Innovation with Granta Selector (Jeanri van Tonder, Qfinsoft)
17:10 - 17:30		System Simulation with Flownex and Ansys (Rahul Patel, Flownex)	
17:30 - 17:40		LUCKY DRAW /CLOSE DRINKS	

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