>> *A conference with and for international experts from research & development, science, and industry – providing exclusive insights into latest methods, developments and enhancements, and their application in industrial practice.* <<

DEM | MBD | CFD | FEM | Multiphysics | System Simulation | Virtual Prototyping | Simulation-Driven Design | Digital Design & Process Optimisation | Data Processing | Virtual Analysis | Digital Twin | AI/ML

Join Us Where CAE Innovation Awaits

Delve into the forefront of computer-aided engineering (CAE) in the world of raw material processing and particulate media industries, bridging academic insights with practical industrial applications. This summit offers the chance to witness and engage in the transformative fusion of state-of-the-art CAE tools, techniques, and methodologies focusing on the intricacies of processing granular materials and bulk solids – material setups characterized by a large number of particles.

Engage with international peers, discover cutting-edge trends, and foster collaboration in an atmosphere committed to progress and knowledge exchange. Be part of our community bound by passion and shared pursuits. This event warmly welcomes experts from all horizons to partake in illuminating sessions and lively discussions, all dedicated to the advancing realm of digital particle engineering.
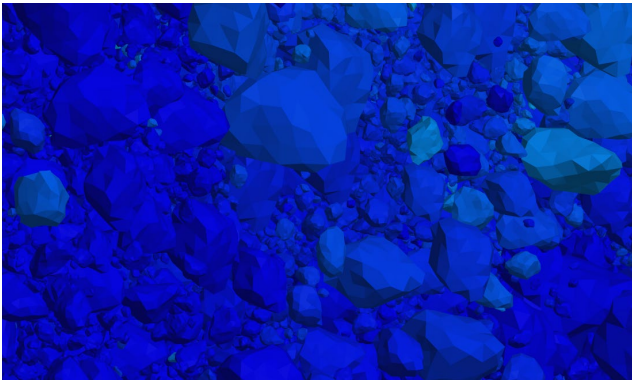
COMPUTER-AIDED ENGINEERING IN RAW MATERIAL PROCESSING AND PARTICULATE MEDIA INDUSTRIES

January 25, 2024
Montanuniversität Leoben, Austria

Registration and more details on:
cae.unileoben.ac.at ⬈
and on LinkedIn:
CAE in Raw Material Processing and Particulate Media Industries ⬈

The conference fee is 90 Euro.
Students are exempt from the conference fee.

Contact:
Dr. Eric Fimbinger
eric.fimbinger@unileoben.ac.at
+43 664 80898 1814

MONTAN UNIVERSITÄT LEOBEN

BVÖ
Bergmännischer Verband Österreichs

- 09:00 - Registration

- 09:30 - Welcome & Opening

- 09:50 -

Keynote on Milling Processes and Mixing Simulations

*Prof. Nicolin **Govender***

Research Center Pharmaceutical Engineering GmbH, Graz, Austria
CERN, Meyrin, Switzerland
University of Johannesburg, South Africa

- 10:20 -

Getting Started with DEM: MOOCs and Methods

*Prof. Stefan **Radl***

TU Graz (Institute of Process and Particle Engineering), Austria

- 10:50 - Coffee Break

- 11:10 -

Multiphysics Simulation of Selected Comminution Machines in Matlab®/Simulink®

*DI Peter **Eitz**, Dr. Thomas **Zinke**, Prof. Holger Lieberwirth*

TU Bergakademie Freiberg (Institute of Processing Machines and Recycling Systems Technology), Germany

- 11:40 -

Virtual Prototyping of the RM Active Grid®: A DEM-MBD Simulation Study

*DI Philipp **Falkner***

Rubble Master HMH GmbH, Linz, Austria

- 12:10 -

Virtual Testing of Hydromechanical Excavator Designs with Realistic Soil Loads

*Steve **Miller***

The MathWorks GmbH, Munich, Germany

- 12:40 - Lunch Break

- 13:50 -

Railway Ballast Modelling and Its Role in Turnout Optimisation

*DI Paul Pircher, Dr. Klaus **Six***

Virtual Vehicle Research GmbH, Graz, Austria

- 14:20 -

phasicFlow: Open-source DEM meets Scalability

*Dr. Bahram **Haddadi**, Prof. Hamid Reza Norouzi*, Dr. Christian Jordan, Prof. Michael Harasek*

TU Wien (Institute of Chemical, Environmental and Bioscience Engineering), Vienna, Austria

*Amirkabir University of Technology (Center of Engineering and Multiscale Modeling of Fluid Flow), Tehran, Iran

- 14:50 -

ON-DEM: The Open Network on DEM Simulations

*Dr. Daniel **Barreto***

Edinburgh Napier University (School of Computing, Engineering and the Built Environment), Scotland, United Kingdom

- 15:20 - Coffee Break

- 15:50 -

Simulation-Based Participatory Technology Development for Rural Enterprises

*Dr. Marcelo **Precoppe***

University of Greenwich (Natural Resources Institute), United Kingdom

- 16:20 -

A New Paradigm for Lunar Regolith Simulants to Aid in the Development of Lunar Bulk Materials Handling Technologies – DEM Simulation of Lunar Regolith Self-Weight and Bulk Material Flow

*DI Marko **Pratnekar**, Prof. David Cullen*

Cranfield University (Space Group), United Kingdom

- 16:50 - Closing

- 17:00 - End & Evening Event