



**Tuesday, 2 July 2024**

**Opening of SANDLESS (8:45-9:00)**

Itai Einav

*The University of Sydney*

**Session 1 (9:00 - 10:30)**

**Clay deformation behavior from small to large strains under small to large confining pressures**

Kenichi Soga

*University of California, Berkeley*

**Micromechanics of clays**

Vanessa Magnanimo

*University of Twente*

**Clay below the micron**

Angela Casarella

*Chalmers University of Technology*

**Morning Tea (10:30 - 11:00)**

**Session 2 (11:00 - 12:30)**

**What is in common between mud pumping under rail tracks and sinking of cargo ships at sea?**

Daichao Sheng

*University of Technology Sydney*

**Desiccation cracking of clay soils: Observations, Mechanisms and Modelling**

Jayantha Kodikara

*Monash University*

**Partial saturation influences on the strength of silty tailings**

Adrian R. Russell

*University of New South Wales*

**Lunch (12:30 - 14:00)** at the Views Restaurant



# SANDLESS 2024

1-4 July 2024

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## Session 3 (14:00 - 15:30)

### Clay Insights: Bridging Experiments and Soil Models

Merita Tafili

*Ruhr-Universität Bochum*

### Anisotropic bounding surface model for clay under monotonic and cyclic loading conditions

Zhongxuan Yang

*Zhejiang University*

### Is lack of memory an intrinsic limitation of bounding surface plasticity?

Alexandros Petalas

*Durham University*

## Afternoon Tea (15:30 - 16:00)

## Session 4 (16:00 - 17:30)

### TBA

Manolis Veveakis

*Duke University*

### Friction angles in clayey soils

David Airey

*The University of Sydney*

### A simple hydrodynamic model for clay

Max Wiebicke

*The University of Sydney*

## Clayey Focus (18:00 - 19:00)

### Chairs:

Cino Viggiani

*Université Grenoble Alpes*

François Guillard

*The University of Sydney*

## BBQ Dinner and Poster Session (19:30 - 22:30) at the Boilerhouse



**Wednesday, 3 July 2024**

**Session 5 (9:00 - 10:30)**

**Peridynamic modeling of multi-physics problems in rock mechanics**

Jidong Zhao

*Hong Kong University of Science and Technology*

**On time and energy dissipation at the meso-scale of natural and 3D-printed rocks**

Giang D. Nguyen

*University of Adelaide*

**A hydrodynamic model for the chemo-mechanics of soft calcarenite**

Yanni Chen

*Zhejiang University*

**Morning Tea (10:30 - 11:00)**

**Session 6 (11:00 - 12:30)**

**Deformation and failure mechanisms of Lightweight Cemented Soils**

Cino Viggiani

*Université Grenoble Alpes*

**Cell Structure of Cohesive Granular Solid: Modelling and Simulation**

Takashi Matsushima

*University of Tsukuba*

**Experimental and numerical assessment of dynamic loading response of rocks with filled/unfilled flaws**

Arghya Das

*Indian Institute of Technology Kanpur*

**Lunch (12:30 - 14:00) at the Views Restaurant**

**Afternoon Tea (15:30 - 16:00)**



# SANDLESS 2024

1-4 July 2024

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## Session 7 (16:00 - 17:30)

**Unlocking the potential of broadband dielectric spectroscopy to enhance our understanding of geomaterial behaviour**

Alexander Scheuermann

*The University of Queensland*

**Cracks with constricted opening**

Elena Pasternak

*The University of Western Australia*

**Thermo-chemo-hydro-mechanical couplings in porous media revealed by multi-modal imaging**

Alessandro Tengattini

*Université Grenoble Alpes, Institut Laue-Langevin*

## Rocky Focus (18:00 - 19:00)

### Chairs:

Arcady Dyskin

*The University of Western Australia*

Adnan Sufian

*University of New South Wales*

**Dinner (19:30 - 22:30)** at the Governor Bourke Ballroom



**Thursday, 4 July 2024**

**Session 8 (9:00 - 10:30)**

**Thawing-triggered landslides: Constitutive model & multi-physics SPH framework**

Ha H. Bui

*Monash University*

**Modeling snow through its solid and liquid phase**

Lars Blatny

*ETH Zürich, Institute for Snow and Avalanche Research*

**Modelling compaction patterns in brittle porous media using FEM**

David Riley

*École Centrale de Nantes*

**Morning Tea (10:30 - 11:00)**

**Session 9 (11:00 - 12:30)**

**Frozen Soils**

Raul Fuentes

*Rheinisch-Westfälische Technische Hochschule Aachen*

**Modelling rheological transitions in a solid-fluid-granular and cold material: sea ice**

Veronique Dansereau

*Université Grenoble Alpes*

**Visco-Elastic Damage Model for Polycrystalline Ice in Permafrost**

Mehdi Pourgaha

*Carleton University*

**Lunch (12:30 - 13:30) at the Views Restaurant**

**Translational Focus (13:30 - 14:30)**

**Chairs:**

Pierre Rognon

Chin Leo

*The University of Sydney*

*Western Sydney University*