

# 15<sup>th</sup> Annual International Conference on Porous Media





22 - 25 May 2023 Edinburgh, Scotland

**Satellite Short Courses** 21 & 26 May

### **Interdisciplinary Porous Media Topics**

The scientific program ranges from pore-scale modeling, pore-scale imaging, to experimental and numerical methods on larger scales, including sensitivity and uncertainty analysis. Stay abreast of the latest porous media research on trending topics such as energy storage, biotechnics and nature-based agriculture. Presentations are structured across 24 minisymposia on a wide variety of porous media processes in highly diverse applications, including: transport phenomena, soil mechanics, fuel cells, filters, foams, membranes and more.

Find collaborative industrial and application-oriented institutional partners.

# **Plenary Speakers**



Adrian Bejan - Duke University
Vascular Design: Freedom, Evolution, Hierarchy



**J. Carlos Santamarina** - *KAUST* Multi-Physics Repetitive Loads



Nathalie Tufenkji - McGill University
Porous Graphene Oxide Macrostructures for Water
Treatment Applications



**Eugene Vorobiev** - *Université de Technologie de Compiègne* Electroporation of cellular membranes for the enhancement of mass transfer in biological media: mechanism and technological applications

### **Conference Location**

InterPore2023 will be held at the Edinburgh International Conference Centre (EICC) in the heart of Edinburgh, Scotland. Home to three UNESCO Heritage Sites, four Universities and named the UK's "Greenest City", Edinburgh is full of history, culture and places waiting to be explored. The EICC is easily accessible by public transportation and is only 10km away from Edinburgh International Airport, which offers over 300 flights a day to more than 130 UK and worldwide destinations.

In order to accommodate those who, for various reasons, may be unable to join in the physical meeting, InterPore2023 will offer the **option to participate and present online**. Please visit our website for more details.



www.interpore.org/2023

### **Networking Events**

### **Publishing Opportunities**

Workshops

#### **Exhibition Hall**

#### **Student Poster Awards**

#### **Conference Grants**

#### **Online Access**

# **Invited Speakers**

**Shervin Bagheri** - KTH Royal Institute of Technology Stability and functionality of immobilised liquid-liquid interfaces in periodic structured media

**Bruce Balcom** - *University of New Brunswick*Magnetic Resonance Measurements of Fluids in Shale

Rouhi Farajzadeh - TU Delft

Thermodynamic efficiency/limit of subsurface energy production/storage systems

**Lidietta Giorno** - *Institute on Membrane Technology (CNR-ITM)*Porous biohybrid multifunctional membranes for biosensors and bioremediation

**Behnam Jafarpour** - *University of Southern California*Deep Learning for Parameterization and Calibration of
Subsurface Flow Models

Raffaella Ocone - Heriot-Watt University
The Rheology of Granular Media: from Engineering to
Geological Applications

Adriana Paluszny - Imperial College London

Finite element modelling of the growth and flow properties of multiple-scale three-dimensional fracture networks

Gerard Vignoles - University of Bordeaux

How the Chemical Vapor Infiltration process can be optimized for the production of advanced composite and porous ceramics

## **Program Committee**

Chair: Patrick Jenny - ETH Zürich

Vice-Chair: Sridhar Ranganathan - Kimberly-Clark Corporation

# **Local Organizing Committee**

School of Energy, Geoscience, Infrastructure and Society

Heriot Watt University

Co-Chairs: Andreas Busch, Florian Doster, Kamaljit Singh

Members: Julien Maes, Hannah Menke

Student Members: Nick Harpers, Laith Jaghman, Zaid Jangda,

Nengi Karibi-Botoye, Ming Wen