

## CO<sub>2</sub> Sequestration

In the near- and midterm future, CO<sub>2</sub> geo-sequestration, is going to play a significant role in the **reduction of atmospheric greenhouse gas**. Thanks to a vast body of research, much is known about **processes that affect permanent storage of CO<sub>2</sub>**. Also, it is generally agreed that oil and gas reservoirs are **ideal storage sites for CO<sub>2</sub>** because they have successfully held hydrocarbons for millions of years. Nevertheless, many open questions still exist. **At least three invited speakers** and a host of **other presenters in various minisymposia** address research questions that are (in)directly **related to CO<sub>2</sub> sequestration in geological formations**. Anyone who is currently active in **energy transition projects** in general, and in CO<sub>2</sub> sequestration in particular, will benefit from this rich **program of oral and poster presentations**.

### Invited Lectures



**Zuleima Karpyn**

*Pennsylvania State University*

**Experimental Investigation of Conditions Favoring Enhanced Gas Storage in Shales**



**Stephan Matthai**

*University of Melbourne*

**Modelling & Simulation of Multiphase Flow in Highly Heterogeneous Geologic Porous Media**



**Ruina Xu**

*Tsinghua University*

**Supercritical CO<sub>2</sub> flow and heat/mass transfer in micro/nano-porous structures in CO<sub>2</sub> geological utilization and storage**

**On-Site, Online & On-Demand**

**Networking Events**

**Physical & Virtual Exhibitions**

**Workshops & Lab Tours**

### Minisymposia Topics

- Porous Media for a Green World: Energy & Climate
- Physics of multiphase flow in diverse porous media
- Interfacial phenomena in multiphase systems
- Mixing, dispersion and reaction processes across scales in heterogeneous and fractured media
- Pore-scale modelling
- Advances in modeling and simulation of poromechanics
- Fluids in Nanoporous Media

