

## Session Program

May 19 - 22, 2025



**InterPore2025**

17<sup>th</sup> Annual Meeting  
& Conference Courses

19 - 22 May 2025  
Albuquerque, New Mexico, USA  
Conference Courses 18 & 23 May

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## InterPore2025

### MS05

# Tue, May 20

11:35 AM

## MS05: 2.2

Session

11:35 - 11:50 AM

**Biofilm Growth in Porous Media: A Radial-Flow Microfluidic Study**

**Speaker**

Xuanyi Chen

11:50 AM - 12:05 PM

**Hydraulic boundary conditions control feedbacks between fluid flow, biofilm growth, and dissolved oxygen in groundwater**

**Speaker**

Hamidreza Ahadiyan

12:05 - 12:20 PM

**Study of biofilm in porous media in low-temperature geothermal energy context: development and remediation by biocide injection**

**Speaker**

Alexis Vindret

12:20 - 12:35 PM

**Extracting microplastics from water using biofilms grown on pervious concrete**

**Speaker**

Kayla Bedey

1:05 PM

# Wed, May 21

9:05 AM

## MS05: 3.1

Session

9:05 – 9:20 AM

**Pore-scale bio-geochemical reactions and their impact on reservoir properties in underground hydrogen storage**

**Speaker**

Dr Chaojie Cheng

9:20 – 9:35 AM

**Biogeochemical Reactions in Hydrogen Storage Salt Caverns: Sulfate Reduction in the Salado Formation**

**Speaker**

Atefeh Esfandiari

9:35 – 9:50 AM

**Impact of hydrodynamics on microbial transport and growth in porous-reservoir hydrogen storage**

**Speaker**

Dr David Landa Marbán

9:50 – 10:05 AM

**Experimental study of microbial hydrogen consumption rates by *Oleidesulfovibrio alaskensis* in porous media**

**Speaker**

Raymond Mushabe

10:05 AM

2:05 PM

## MS05: 3.3

Session

2:05 – 2:20 PM

**Microfluidic analysis of N<sub>2</sub>O cycling in karst aquatic systems: Linking hydrological, geochemical and microbiological processes**

**Speaker**

Madison Flint

2:20 – 2:35 PM

**A comprehensive study of bacterial cells reactive transport in porous media and some applications in civil and environmental engineering.**

**Speaker**

Dr Jean M.F. MARTINS

2:35 – 2:50 PM

**Unraveling the Role of Bacterial Motility and Chemotaxis in Heterogenous Concentration Fields within Porous Media**

**Speaker**

Prof. Joaquin Jimenez-Martinez

2:50 - 3:05 PM

**Application of Packed Bed Reactors and Microfluidic Devices to Simulate Multiscale Bacterial Transport Through a Contaminated Aquifer**

**Speaker**

James Marquis

3:05 PM