

## V Jornada del Capítulo Español de InterPore

Valencia, 18 de noviembre de 2024.

**10:00 – 10:30 Inauguración.**

**10:30 – 12:30 Programa científico. Bloque 1.**

10:30 – 11:00 Nuevos tratamientos para proteger nuestro Patrimonio Cultural: probióticos y antibióticos naturales. *Pilar Bosch Roig*. (Conferencia invitada.)

11:00 – 11:15 A deterministic description of mixing in Lagrangian form. *Daniel Domínguez-Fuentes*.

11:15 – 11:30 Advances in dam monitoring using distributed fiber optic sensors. *Douglas Moser*.

11:30 – 12:30 Porous anodic alumina development and structural engineering. *Lluís Marsal*. (Conferencia invitada.)

**12:30 – 14:00 Sesión de pósters & almuerzo.**

**14:00 – 15:00 Programa científico. Bloque 2.**

14:00 – 14:30 Fluids, fingers, fractures and fractals: Patterns in porous media. *Rubén Juanes*. Kimberley-Clark Distinguished Lecturer 2024.

14:30 – 14:45 Time-resolved 2D and 3D imaging of two-phase Hydrogen and brine injection into porous Clashach sandstone. *Eike Thaysen*.

14:45 – 15:00 Dispersion in non-linear flow through heterogeneous networks. *Marco Dentz*.

15:00 – 15:15 DAT4GM - Un módulo en Python para implementar modelos de transporte reactivo en COMSOL Multiphysics. *Adrián López*.

**15:30 – 16:00 Asamblea general.**

- Informe sobre el estado del capítulo
- VI Jornada
- Planificación actividades futuras
- Ruegos y preguntas

**16:00 – 18:00 Sesión de pósters & networking.**

**Sesión de pósteres.**

- Thermo-hydro-mechanical modeling of lower-dimensional fractures in porous media. *Sandro Andrés*.
- The role of geomechanical heterogeneity in determining reservoir's friction coefficients. *José Bastias*

- 
- Simulation of unsaturated flow and transport in soils using FENICS. *Yajaira Castillo Gonzales.*
  - Simulación de flujos multifase en medios porosos mediante las ecuaciones isotermas de Navier-Stokes-Korteweg utilizando ecuaciones de estado que preservan la tensión superficial correcta. *Javier Fernández-Fidalgo.*
  - Spreading and mixing of hydrogen in heterogeneous porous media. *Alejandro Fernández Visentini.*
  - Hydro-Chemo-Mechanical simulations of an engineered concrete barrier in a deep geological repository for nuclear waste. *Sebastián González Fuentes.*
  - Stochastic modeling of bacterial transport and retention in porous media. *Juan J. Hidalgo*
  - Upscaling the migration of a dissolving CO<sub>2</sub> gravity current in horizontally stratified porous media. *Albert Jiménez-Ramos.*
  - How miscible viscous fingering occurs in a dead-end porous structure: A pore-scale perspective. *Mamta Jotkar.*
  - Sustainable water storage and distribution in the Mediterranean (OurMED). *Rafael Magnabosco.*
  - Direct numerical simulations of karst conduits. *Ismail El Mellas.*
  - Pressure-saturation hysteresis in porous media. *Animesh Nepal.*
  - Diffusion-limited reactions in fractured media. *Eugenio Pescimoro.*
  - An improved scheme for the finite difference approximation of the advective term in the heat or solute transport equations. *Jordi Petchame.*