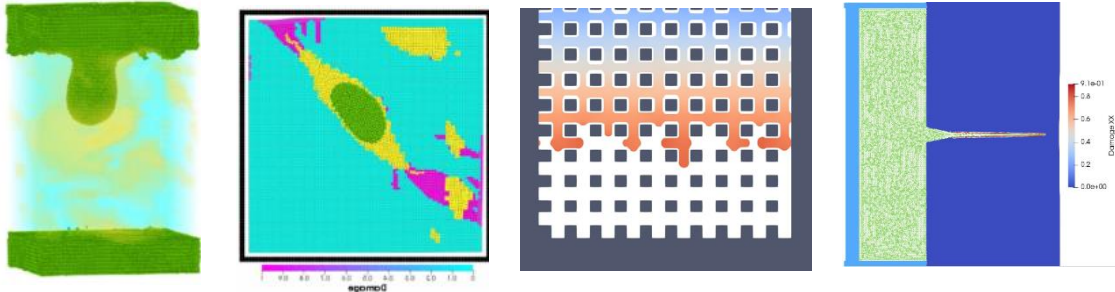




Post-doc Position

Pore-scale Modeling of THMgas Couplings



Institution: ASNR, Paris region, France 🏢 (with GeoRessources, Univ. Lorraine, France)

Project: EURAD-2 (2024–2028) 🌐 | HERMES WP

Duration: 18 months (prolongation possible) ⌚ **application deadline 1 December 2025**

😬 **Are you enthusiastic about...**

- Understanding **gas migration** in clay-rich host rocks
- Simulating **two-phase flow on pore-scale with deformation of the solid matrix**
- Implementing **heat transfer coupling (T)** in advanced numerical codes
- Using **SPH & LBM DNS approaches** ⚙️ and **GPU computing** 💻 to bridge pore to continuum scales
- Developing **upscaling strategies**, benchmarking with simplified models & exploring **PINNs** 🤖?

If yes, join us to push the frontiers of science and strengthen knowledge for safe deep geological disposal of radioactive waste. More information [here](#).



Candidate Profile

🎓 PhD in numerical fluid/solid mechanics

💡 Skills: porous media flow, poromechanics, THM coupling, SPH/LBM, upscaling, PINNs

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