

Announcing the 2nd International DECOVALEX Symposium on Coupled Processes in Radioactive Waste Disposal and Subsurface Engineering Applications

Troyes, France. 14-16 November 2023

Like the first DECOVALEX Symposium in 2019 (<http://decovalex-coupled-processes-symposium.org/>), the event will bring together up to 200 participants discussing aspects of coupled thermo-hydro-mechanical-chemical (THMC) processes in geological systems. The focus is on new and exciting advances in areas of coupled processes associated with a broad range of subsurface engineering, starting with radioactive waste disposal and extending to geothermal exploration, geological carbon sequestration, subsurface energy storage, etc. The symposium will also provide insights from the current phase of the international DECOVALEX project (<https://decovalex.org/>), an international collaboration for advancing the understanding of coupled THMC processes in geological systems. Symposium sponsors are the French National Radioactive Waste Management Agency Andra, the DECOVALEX Project, and Lawrence Berkeley National Laboratory.

The symposium will comprise two days of presentations, posters, and social interaction in the Troyes Centre de Congrès de l'Aube, followed by a field trip on the third day. Abstract submissions will be invited in the following subject areas:

- Coupled processes in clay rock
- Coupled processes in crystalline rock
- Coupled processes in salt
- Engineered barrier systems and engineered-natural material interactions
- Fundamental microscale processes
- Emerging experimental and computational methods
- Incorporation of coupled processes in performance assessment
- Cross-cutting coupled processes analysis in various geo-applications

Regarding the field trip, two alternative offerings will be provided by Andra:

- A visit to the nearby Bure Underground Research Laboratory (URL), which enables scientific and technological research for deep geological disposal in the Callovo-Oxfordian clay in a >2,000 m network of tunnels. Participants will also visit the nearby Environmental Specimen Bank (Ecothèque) and the Technological Exhibition Facility (ETe).
- A visit to two nearby surface facilities for radioactive waste. With a footprint of 95 hectares, the CSA is a surface disposal facility licensed for the disposal of 1 million cubic metres of low- and intermediate-level, short-lived waste packages. A few kilometres away is another Andra facility, CIRES, which is for very-low level waste.

The city of Troyes is part of the Champagne region in eastern France, an area well known for its premier sparkling wine production. The city is conveniently located about 1:30 hours from Paris by high-speed train.

Jens Birkholzer, LBNL, USA
Symposium Co-Chair and Chairman of the DECOVALEX Project

On behalf of the Core Organizing Committee:

- Gilles Armand (Co-Chair), Andra, France
- Alex Bond, Quintessa, United Kingdom
- Carlos Plua, Andra, France
- Marie-Anne Bruneaux, Andra, France
- Lizz Mahoney, LBNL, USA