Special Issue to be published in Tunneling and Underground Space Technology
Coupled Processes in Fractured Geological Media: Nuclear Waste Disposal

Aims and Scopes

The scope of this Special Issue is to summarize recent advances in research on coupled THMC processes in fractured geological media, with a specific focus on these processes and associated challenges in the geologic disposal of nuclear waste. Selected authors will be invited to submit papers to this Special Issue based on the contributions to CouFrac 2022, the **3rd International Conference on Coupled Processes in Fractured Geological Media: Observation, Modeling, and Application,** which will be held in Berkeley, California on November 14-16 of 2022. The planned topics of the Special Issue will include:

- Coupled THMC processes associated with geologic disposal of nuclear waste in various host rocks (e.g. crystalline, clay, and salt);
- Laboratory and field measurements of coupled processes in fractured/fracturing media, including underground research laboratories;
- Development of excavation disturbed zones under THMC conditions;
- Short-term vs. long-term effects;
- Interaction between coupled processes, geological settings, and heterogeneities;
- Impact of coupled processes on the performance assessment of nuclear waste disposal systems.

Instructions for Authors

Authors should follow *Tunneling and Underground Space Technology* manuscript requirements: https://www.elsevier.com/journals/tunnelling-and-underground-space-technology/0886-7798/guide-for-authors

Acceptance Criteria

Submitted manuscripts will be reviewed by 2-3 reviewers, with stringent quality control by the Guest Editors.

Editors for Volume

Jonny Rutqvist, Lawrence Berkeley National Laboratory, Berkeley, USA
Pengzhi Pan, Institute of Rock and Soil Mechanics, Chinese Academy of Sciences, Wuhan, China
Ki-Bok Min, Seoul National University, Seoul, South Korea.

Special Issue Timeline

Submission of manuscripts: June 1, 2023
Return of reviews: September 1, 2023
Revised manuscripts due: November 1, 2023
Publication: April 1, 2024