Geological storage of high level nuclear waste

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- Jin-Seop Kim (1) Email author (kverity@kaeri.re.kr)
- Sang-Ki Kwon (1)
- Marcelo Sanchez (2)
- Gye-Chun Cho (3)

1. Radioactive Waste Technology Development Division, Korea Atomic Energy Research Institute (KAERI), , Daejeon, Korea
2. Zachry Dept. of Civil Engineering, Texas A&M University, , College Station, USA
3. Dept. of Civil and Environmental Engineering, Korea Advanced Institute of Science and Technology (KAIST), , Daejeon, Korea

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Abstract

The quantity of radioactive waste will grow significantly with an increasing interest and use of nuclear-generated energy. There will always be inevitable radioactive waste residues that require disposal, even using an advanced nuclear fuel cycle in the future. Deep geological disposal, one of the most promising final disposal methods, should be validated for its long-term performance and safety assessment. Geotechnical issues related to the deep geological disposal are critical for the sustainable development of

focus on the state of the art in-situ validation experiments, and additionally presents a numerical modeling of the coupled THMG process in the repository near field, which is one of the major factors concerning the fuel canisters.

Keywords

coupled THMG modeling deep geological disposal excavation-damaged zone
gas migration self-sealing/healing spent nuclear fuel

Preview

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