



**Call for
abstracts
now open**

**Deadline: 19th
October**

GEOLOGY FOR RADIOACTIVE WASTE DISPOSAL – FROM GEOLOGICAL CHARACTERISATION TO LONG-TERM SAFETY

19-20 JANUARY 2027

The University of Manchester

The safe disposal of radioactive waste is one of the significant scientific and societal challenges of the twenty-first century. Many countries with radioactive waste have a policy of providing safe, long-term disposal of legacy and future higher activity radioactive wastes through deep burial in a geological disposal facility (GDF), as well as shallow burial of less active waste. The concept of geodisposal is one in which multiple engineered barriers, including vitrified and encapsulated waste forms, canisters, cement/clay backfill, and ultimately the natural barrier of host rock (the geosphere), operate in combination to provide isolation of the waste from the surface, and containment of radionuclides and non-radiological pollutants present in the disposal inventory. Different host rock types are being considered internationally, including clays, granitic rocks and evaporites. To satisfy the requirements for a geodisposal facility safety case, many near-field and far-field factors need to be taken into account, including, for instance, the likelihood that fluid and solutes could flow or diffuse from the waste into surrounding host-rock and impact the far-field (particularly receptors within the biosphere). Communicating the science to stakeholders and community groups potentially affected is of key importance.

This conference, hosted by the Geological Society, along with early career researchers from the NERC-funded GeoSAFE consortium is a follow-on to the initial successful 2024 Geological Society Energy Group event. It will seek to engender links between geoscience, geochemistry, material sciences, environmental sciences and engineering in the context of shallow and deep disposal of radioactive waste. Case histories, ongoing collaborative work and planned activities to enhance the state-of-the-art will be considered. Contributions addressing monitoring technologies, risk assessment, stakeholder engagement and lessons learned from international disposal programmes are also welcomed.

Abstract submissions are invited from researchers and practitioners working in all aspects of radioactive waste disposal and related geoscience disciplines. Whether you are presenting new scientific discoveries, innovative methodologies or practical case studies, we encourage you to share your work. Contributions from early career researchers are particularly encouraged.

For further information please contact
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