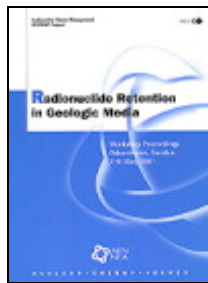


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Radioactive Waste Management Radionuclide Retention in Geologic Media

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GEOTRAP is the OECD/NEA Project on Radionuclide Migration in Geologic, Heterogeneous Media carried out in the context of site evaluation and safety assessment of deep repository systems for long-lived radioactive waste.

Retention of radionuclides within the geosphere for prolonged periods is an important safety function of deep geologic disposal concepts for radioactive waste. The extent to which retention processes can be relied upon in repository performance assessment depends upon the existence of well-established theoretical bases for the processes. It also depends on support for the operation of specific retention processes, and models for their quantitative evaluation, from a wide range of laboratory and field experiments and observations from nature. The fifth GEOTRAP workshop, "Geological Evidence and Theoretical Bases for Radionuclide-retention Processes in Heterogeneous Media" held in May 2001, looked at radionuclide-retention processes and their consideration and representation in performance assessments. Current approaches to characterising and modelling retention processes, and suggestions for future improvements, were presented and discussed.

In addition to the material presented during the workshop, this publication includes a technical synthesis reflecting the discussions that took place as well as the conclusions and recommendations made, notably during the working group sessions.

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