



INVITATION

for a

VERA - SEMINAR

with

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**Radionuclide migration in crystalline host rock:
insights from the Grimsel Test Site (CH)**

Crystalline rock, together with rock salt and claystone, is under consideration as suitable host rock for a high-level radioactive waste repository in Germany. Under the reducing conditions expected in a deep geological repository, the geochemistry of actinides and certain fission products, like ^{99}Tc , is characterized by low solubility and strong sorption to mineral surfaces and colloids. This results in very low radionuclide concentrations in samples arising from laboratory and in-situ tracer tests tackling the retention capability of repository barriers. I will report on the outcomes of our twenty-year investigation on radionuclide migration with in-situ tracer tests in collaboration with the Grimsel Test Site (Switzerland), NAGRA's (Nationale Genossenschaft für die Lagerung radioaktiver Abfälle) generic underground research laboratory located within the crystalline Aar Massif. I will discuss, in particular, the latest in-situ tests in which AMS analysis was applied, showing how the sensitivity of AMS strongly extends the time-scale over which radionuclide behavior can be investigated.

Thursday, 16.01.2025, 16:30 o'clock

**1090 Wien, Währinger Str. 17, "Kavalierstrakt",
1. Stock, Victor-Franz-Hess Hörsaal**