

The Institute of Geology at the University of Vienna, Austrian Geothermal Society (GTOE), Austrian Geophysical Society (AGS) and Austrian Geological Society (OEGG) would like to invite you to the talk:

GEOTHERMAL IN THE NETHERLANDS

An overview and the importance of geomechanics
and field measurements

By **Loes Buijze (TNO – Geological Survey of the Netherlands)**



Induced seismic events of magnitudes large enough to be felt or cause damage can be a concern for some subsurface activities. *Loes Buijze* works on understanding and mitigating such potential induced seismic events, from a multi-disciplinary angle. She has a background in rock mechanical experiments and in analytical and numerical modeling of rock deformation, creep, stress changes, fault reactivation, and earthquake rupture in the context of hydrocarbon production, storage, and geothermal energy production.

As lead scientist TNO's market theme Induced Seismicity, she also identifies key knowledge gaps and develops new research projects targeted towards seismic monitoring for process understanding, and aims to integrate lab, models and field observations.

In this talk, *Loes Buijze* will present an overview of geothermal energy production in the Netherlands, including the current status of geothermal energy production, recent developments, and the required licensing steps with an emphasis on mitigation of (seismic) hazards. In addition, she will present findings from research projects investigating geothermal flow and cooling and their effects on fault stability, through a combination of modeling, field measurements and monitoring. In one of these research projects, an extensive well logging suite as well as in-situ stress measurements were acquired in a replacement well drilled close to a former injection well. This provided a unique opportunity to probe the cooled reservoir and to assess the predictive power of flow and geomechanical models.

DATE

Friday, 13th June 2025

TIME

04:00pm (CT)

LOCATION

Eduard Suess-Saal (HS2)
(Geozentrum, UZA II)
University of Vienna
Josef-Holaubek-Platz 2
1090 Vienna



PARTICIPATION

Free of charge