



DPS presents: [Geothermal petrophysics](#)
[March 8, 15.30](#), [KIVI Den Haag](#),
[Email info@dps-nl.org \(click to RSVP\)](mailto:info@dps-nl.org)

Laboratory research efforts on geothermal engineering at TU Delft
Richard Bakker, TU Delft, The Netherlands

Responding to an increased demand for clean, green, carbon-neutral energy, the Dutch ministry of economic affairs signed a “Green Deal”, aimed to extract geothermal heat at depths below 4000 m which brings with it some new geotechnical challenges. A number of examples of current laboratory research at TU Delft will be shown including a deep porous sandstone and fractured reservoirs. In addition, research on Radial Jet Drilling (RJD) is presented. This technique is likely to provide better control on enhanced flow paths in geothermal settings. It requires less fluids compared to conventional hydraulic stimulation techniques, thereby reducing the risk of induced seismicity .

Petrophysics in geothermal exploration in The Netherlands
Bart van Kempen, TNO, The Netherlands

Reservoir evaluation plays a major role in the exploration of geothermal reservoirs. The chance of success of a hydrocarbon prospect is dependent on the water saturation, while the most critical parameter in geothermal exploration is the transmissivity. In conventional reservoirs the net thickness is usually relatively easy to determine and the uncertainty will often be quite narrow. Reservoir permeability on the other side is one of the properties hardest to predict. Part of our work at TNO-AGE concerns calculating the expected geothermal power at various scales (national to local). As permeability and net reservoir thickness are the most critical factors in these calculations, we combine and compare all available data to improve estimates and reduce uncertainty. Multiple data sources and scales implies a certain complexity which will be highlighted and discussed in this presentation.

Free entrance, pls subscribe by e-mail: info@dps-nl.org