

## Fracking, seismics and spills: Environmental risk assessment of oil and gas exploration and production

**CHAIRS: Mathijs Smit, Pim Leonards**



Tuesday 13<sup>th</sup> May 2014, 17:20 – 18:30 (Poster Corner), room: Exhibition Hall

Over decades, many onshore and offshore areas in the world have been extensively explored by the oil and gas industry in their search for hydrocarbons. Nowadays most of the 'easy' reservoirs have been discovered and the industry is looking into the production of unconventional resources (e.g. shale gas and heavy oil). In addition activity levels in frontier areas like the deep sea and Arctic environments are increasing. These operations bring along new challenges both operational and environmental. Assessment of the potential environmental impacts and proper management of the environmental risks is crucial for the industry in order to gain a license to operate. Exploration and production of shale gas has created a great deal of controversy, largely because of its potential impacts on human health and the environment. The technique that is used to release the gas that is captured in the formation is called fracking. Fracking involves pumping water, sand and chemicals at high pressure into the ground to release oil and gas. Potential risks of fracking include contamination of water sources, impacts to biodiversity and the release of gases. This session will focus on practices for environmental effect assessment; environmental monitoring and risk assessment related to oil and gas exploration and production activities. Scientists are invited to present their latest achievements in the field of e.g. oil spill impact assessment, environmental effects modeling and monitoring. Especially abstracts on integrated assessments are welcomed focusing on fracking risks and operations in sensitive areas.

**SESSION TYPE:** Poster Corner