

# Catalysis in the nanoreactor

## Background:

Establishing a correlation between the atomic structure and activity of nanoparticles is at the heart of catalysis research. We have recently developed a novel micro-electro-mechanical system device – the so-called nanoreactor - that allows atomic-resolution electron microscopy of catalysts at ambient pressure level to be combined with simultaneous activity measurements. The nanoreactor represents a true paradigm shift in the research of catalytic reactions.

## The Project:

This project will focus on monitoring the dynamic formation of MoS<sub>2</sub> structures in our hydrotreating catalysts during their activation by exposure to ambient pressures of hydrogen and hydrogen sulfide.

## Your Topsøe supervisor:

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