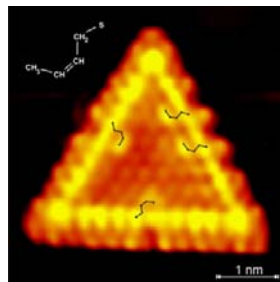


Postdoctoral Researcher in Scanning Probe Microscopy of Nanocatalysts

Interdisciplinary Nanoscience Center (iNANO), Aarhus University, Denmark

Applications are invited for a postdoctoral associate position. The position is 1-3 years and is funded by the European Research Council (ERC) in a project headed by Associate Prof. Jeppe V. Lauritsen at the Interdisciplinary Nanoscience Center, Aarhus University, Denmark.

The successful candidate will be joining a small team seeking to understand some of the cluster-support synergies and **size-effects** which have been revealed in **catalytic systems**, e.g. for transition metals on some metal oxides. A particular challenge and advance of the project is the application of **non-contact Atomic Force Microscopy (nc-AFM)** to atomically characterize relevant metal oxide surfaces and model catalysts based on real metal oxides or sulfides used in heterogeneous catalysis. In parallel, the project will be devoted to actual screening methods of the activity and selectivity of the well-characterized catalyst samples both under well-controlled vacuum condition and real high- pressure working conditions (high-pressure reaction cell). Collaboration with an industrial partner manufacturing catalysts is also part of the project. See more: <http://inano.au.dk/organization/research-groups/nanocatalysis-lab-lauritsen/>



Selected recent publications from the group:

M.K. Rasmussen, *et al.* Phys. Rev. Lett. 107, 036102 (2011)

J. V. Lauritsen, *et al.* ACS Nano 5, 5987–5994 (2011)

A. Tuxen, *et al.* ACS Nano 4, 4677-4682 (2010)

J.V Lauritsen *et al.*, Phys. Rev. Lett. 103 076103 (2009).

G.H., Enevoldsen, Phys. Rev. Lett. 102 136103 (2009).

The position is available from **October 2011 or soon after**.

Applicants should have previous experience in surface science and/or scanning probe microscopy and a **PhD degree in either experimental physics, materials science, chemistry** or equivalent disciplines with a successful and documented scientific record. Experience in construction/handling of ultra-high vacuum equipment is an advantage.

The successful applicant will be based at the Interdisciplinary Nanoscience Research Center (iNANO). The iNANO Center (www.inano.au.dk) is a major research and education center hosting 60 skilled senior scientists, ~100 post docs and ~120 PhD students. The center combines expertise and faculty from physics, chemistry, molecular biology and medicine to carry out world-class interdisciplinary research. iNANO offers a dynamic, interdisciplinary research environment with many industrial, national and international collaborators.

For further information, please contact Associate Prof., **Jeppe V. Lauritsen** (jvang@inano.au.dk). Potential candidates are kindly asked to send their CV, full publication list, and a short description of qualifications to jvang@inano.au.dk.