

## **Postdoctoral Position in Surface Science**

What we can provide: A one-year postdoctoral appointment in the first instance. Salary according to experience. A young interdisciplinary team of warmhearted Ph.D. students and undergraduate coworkers on a green/white (~seven/five months, see address below) campus looking forward to exciting projects.

Techniques: We mostly apply the molecular beam scattering technique to study the dynamics/kinetics of

adsorption processes and surface reactions on nanostructured catalysts. Several joint projects with research centers (NASA, PNNL, Argonne, and Berkeley – Molecular Foundry) are active as well as collaborations with nanofabrication groups in the US, Europe, and Israel.

**Current systems:** We will work on a variety of different systems focusing on nanostructured catalysts such as metal clusters on supports (obtained by electron beam lithography), carbon nanotubes, inorganic nanotubes, nanoparticles, etc..

What we expect: The ability to handle independently complex ultra-high vacuum equipment including standard analytic tools, i.e., prior knowledge about surface science techniques is expected. Experience in nanofabrication if related to current projects would be a plus. Good communication skills in English and the ability of competent and friendly advising of students. Applications of outstanding graduates/postdocs with solid knowledge in (kinetic) Monte Carlo Simulation techniques or quantum chemical calculations, applied to surface science problems, will be considered as well.



**North Dakota State University:** ~14,000 students; 40 Ph.D. programs on campus, 20 faculty members at the chemistry department.



Kinetics / HREELS system

**Fargo/Moorhead** is a 130,000 population community twin city at the

border to Minnesota; 30 min drive to the lakes; 2.5 h to Minneapolis or Winnipeg, low living costs, family friendly environment, very cold winters and hot summers. If you get depressed when watching snow for more that four weeks a year, then do not apply.

As always, the job offer is based upon continuation of the current funding. However, most of our grants (DoE-EPSCoR, NSF CAREER, DoE) just started.

**Interested:** Send brief application including CV, publication list, one page summary of your past research experience, preferred starting date, and contact information for eventual letter of reference requests via E-mail (pdf) to: Dr. Uwe Burghaus, Department of Chemistry, 1231 Albrecht Blvd., P.O. Box 5516 Fargo, North Dakota 58105-5516, USA Email Uwe.Burghaus@ndsu.edu (preferred) URL http://www.uweburghaus.de http://www.chem.ndsu.nodak.edu