



NUS
National University
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Postdoctoral Research Fellow position in the area of Computational Chemistry is available at the Department of Chemical and Biomolecular Engineering at the National University of Singapore (#11 in QS World University Rankings). The position is open for 1 year with a flexible starting date and could be extended upon mutual agreement.

The applicant will work with Prof. Sergey Kozlov in the Computational Nanocatalysis group, which focuses on the simulations of physical and chemical interactions in emerging classes of nanostructured materials. The applicant will use periodic density functional (DFT) simulations and the atomic simulation environment (ASE) to characterize the structure and catalytic activity of nanocomposite catalysts. The research will focus on the structure of interfaces between transition metal nanoparticles and oxide supports and their unique catalytic properties. A significant part of the investigations will be performed in collaboration with experimental groups participating in the Green Energy Flagship Program of the National University of Singapore (<http://greenenergy.nus.edu.sg/>) and international experimental collaborators.

Qualifications:

- Ph.D. in Chemical Engineering, Chemistry or Material Science
- Experience in DFT studies of nanostructured materials, heterogeneous catalysts, or electrochemistry using VASP
- The ability to creatively contribute to collaborations with experimental colleagues.
- Excellent writing skills and fluency in English.
- Knowledge of shell scripting and Python.

The applications should be sent to sergey.kozlov@nus.edu.sg and contain the following documents combined in one pdf file:

- Cover Letter
- Curriculum Vitae
- Publication List
- Contact details of references willing to provide recommendation letters.

Additional documents will be requested from short-listed candidates.