



Linköping University, Linköping, Sweden

PhD Nanobioreactors

Start date: April 2012

Supervisors: Professor Anthony PF Turner and Dr. Ashutosh Tiwari

Intelligent nanobioreactors for auto-switchable bio-catalysis

Applications are invited for a 4-year salaried PhD position to study the design and development of novel auto-switchable nanobioreactors to produce positively responding nano-surfaces by creating unique “zipper” nanoarchitectures. The zipper consists of a polymeric donor branch and a polymeric receptor branch, which will be rationally assembled based on a stoichiometric donor-receptor interaction. Model reactions, with applications in both analysis (e.g. biosensors) and energy production, (e.g. biological fuel cells) will be studied as proof-of-principle platforms in the areas of bioanalysis and biocatalysis.

The position is sponsored by the Swedish Research Council, the principal research funding agency in Sweden, and will be carried out in the *Biosensors and Bioelectronics Centre*, which is a division within the Department of Physics, Chemistry and Biology at Linköping University, Sweden URL: www.ifm.liu.se/biosensors

Informal enquiries should be directed to Dr. Ashutosh Tiwari (+46 (0) 13 282395; ashutosh.tiwari@liu.se) or Prof. Anthony PF Turner, anthony.turner@liu.se.

See also <https://www.ifm.liu.se/applphys/biosensors-and-bioelectro/>

This studentship is available from April 2012, and provides full support for tuition fees in addition to a salary (about Euro 30,000 pa before 30% Tax). Applicants should have master degree in Biotechnology/ Chemistry/ Biochemistry/ Physics or a related discipline.

Closing date: 6 January 2012