Two PhD Positions on DNA Nanotechnology and Atomic Force Microscopy

The Institute of Biophysics, Department of Applied Experimental Biophysics at the Johannes Kepler University (JKU) Linz is looking for two PhD students to generate DNA origami nanostructures and examine their biophysical properties with molecular recognition force microscopy to facilitate biotechnological applications.

The contract will be embedded in the project ‘Biomolecular recognition and selective transport within nanoscale confined space’ funded by the Austrian Science Foundation (FWF). PIs in this collaborative research project are Prof. Stefan Howorka (DNA Origami) and Prof. Peter Hinterdorfer (Atomic Force Microscopy).

Requirements:

- Degree and Master on any field of Physics, Biophysics or Engineering (PhD 1), or Chemistry or Biochemistry (PhD 2) (completed before the contract starting date)
- Multidisciplinary qualifications (Physics/Bio, Engineering/Bio etc.). Knowledge of Atomic Force Microscopy (PhD 1) or DNA Nanotechnology (PhD 2) will be a plus
- High level of English and good communication skills
- Ability to maintain accurate and up to date records
- Ability to organise and prioritise own work and organise research within the project schedule
- Computer literacy, analytical skills and effective team working

We offer:

- 3 years PhD contract. Competitive salary with all social benefits of a regular employment. Envisaged starting date: October 1st 2017
- Stimulating, interdisciplinary research and high quality international scientific environment

Interested applicants should send their CV, full academic sheet (including scientific background, training and expertise, research interest, motivation for joining the project), publication list, cover letter and two references to: s.howorka@ucl.ac.uk and peter.hinterdorfer@jku.at before September 1st 2017.

The Johannes Kepler University (JKU) Linz supports future-oriented academic degree programs, excellence in teaching and research, numerous partnerships in Austria and abroad, and a unique campus with park-like grounds. JKU has become a cutting-edge institution for science, academics, business and the community. Over 19,000 students are enrolled in over 60 modern, hands-on academic degree programs that have outstanding career prospects. The Institute for Biophysics at JKU (www.jku.at/biophysics/content) employs about 70 people with 7 permanent scientists. The research of the AFM group lead by Prof. Hinterdorfer is focused around nanoscopic techniques in life science, bio-nano technology, and medical diagnostics. The research activities of Prof. Howorka are within the field of bionanotechnology and aim on the rational design of biomimetic membrane-active nanostructures including nanopores for biotechnological applications (www.howorkalab.com)