

## **PhD-opportunity in a highly interdisciplinary research environment**

The **Johannes Kepler University Linz (Austria)** has established a graduate college for carrying out frontier scientific research projects on the nano-analytics of cellular systems (DK NanoCell).

Within the framework of this graduate school, we are currently searching for an excellent candidate for a doctoral thesis.

### **“Scaffolds for proteins and cells written by STED lithography“.**

The major goal of this project is to develop two and three dimensional scaffolds for targeted adhesion of proteins at specific areas in space. The group of Prof. Klar is currently developing techniques such as STED –Lithography (a close relative to STED Microscopy for which the 2014 Nobel prize has been awarded to Stefan Hell) to deliberately construct such scaffolds for proteins or whole cells. The scaffolds will then be applied to problems in cell physiology in some of the partner groups within DK Nano Cell, for example in the groups of Gerhard Schütz (Membrane protein organization, TU Vienna), Michael Sixt (Immunology, IST Austria), or Carl-Philipp Heisenberg (Morphogenesis, IST Austria).

The successful candidate should have a strong background in optics, preferably in microscopy and/or in lithography. They should be highly motivated to be working in an interdisciplinary research area at the crossroads of optics and life sciences. Employment will be for 3 years with a contract that includes social benefits. The students will also be encouraged to spend one semester abroad joining other collaborating laboratories. All selection procedures, training activities, and communication will be in English.

For further information about the DK and application form see:

**<http://www.jku.at/biophysics/nanocell>**

**Please hand in your applications until: December 15th, 2014.**

Applications and further questions should be addressed as soon as possible to: [nanocell@jku.at](mailto:nanocell@jku.at)