



TECHNISCHE UNIVERSITÄT WIEN
INSTITUT FÜR ANGEWANDTE PHYSIK
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Invitation

Institute of Applied Physics – TU Wien

Prof. Dr.

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Smart interfaces in biophysics: From functional molecules to biomimetics

Abstract:

Smart interfaces are essential to many biomedical applications, as they can provide functional cellular environments by a variety of mechanisms, including chemical and physical stimuli. I will present results on how cells can be controlled, investigated and mimicked by such smart interfaces. These include, for example, biocompatible photoresponsive interfaces for dynamically controlling cell adhesion with molecular precision, as well as surface-integrated force sensors for quantifying cellular mechanotransduction. In addition, I will introduce a biomimetic concept for transferring cellular functions into novel adaptive interfaces.

Date:

Friday, **21.10.2016**, 09:00

Venue:

Lecture hall – University Library
TU Wien
Resselgasse 4, 5th floor