REGIONAL CENTRE
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AND MATERIALS
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REGIONAL CENTRE OF ADVANCED TECHNOLOGIES AND MATERIALS

LECTURES

Monday, April 24, 2017, 1:00 pm
Seminar room of RCPTM (room No. 314), Šlechtitelů 27, Olomouc

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FZÚ

HABILITATION LECTURE

Perspective of scanning probe microscopy for chemistry and physics

Annotation:
The invention of Scanning probe microscopy was a key step initiating the epoch of nanotechnology in the late nineties. The recent progress in Atomic Force Microscopy (AFM) and Scanning Tunneling Microscopy (STM) with functionalized tips provided unprecedented submolecular resolution of single organic molecules on surfaces [1,2,3]. This breakthrough opens among others completely new perspectives for detailed understanding of chemical reactions on solid states surfaces. In this talk, we will briefly discuss basics of AFM/STM and recent results as well as possible the perspectives in the field of on-surface chemistry and solid state physics.

[1] L. Gross et al., Science 325,1110 (2009).
[2] C. Weiss et al., Phys.Rev.Lett. 105, 086103 (2010).
[3] P. Hapala et al., Phys. Rev. B 90, 085421 (2014).