

Seminář odd. 26

Tenkých vrstev a nanostruktur

Fyzikální ústav AVČR, Cukrovarnická 10, Praha 6

datum: 26. 5. 2016 čtvrtek

čas: 15:00

mítnost: knihovna, budova A, 1.p.

TÉMA

Spectroscopic Characterisation of Organic Thin Film Deposition and Modification

Dietrich RT Zahn

Semiconductor Physics, Technische Universität Chemnitz, D-09107 Chemnitz

<https://www.tu-chemnitz.de/physik/HLP/>

After a brief introduction into the research activities of the Semiconductor Physics group in Chemnitz I will focus on the example of thin films of phthalocyanines (Pc). This group of organic semiconducting molecules is very versatile and finds manifold applications in organic (opto-) electronics as well as in spintronics. In the frame of the DFG Research Unit "Towards Molecular Spintronics" we intensively studied the film formation and their vibrational, optical, and electronic properties. Moreover, exposing such thin films of e.g. MnPc in vacuum to potassium has a dramatic effect on these properties and their evolution can be monitored by a combination of in situ techniques such as Raman spectroscopy, spectroscopic ellipsometry, and photoemission spectroscopy. Therefore this example is well suited to illustrate the approach of combining different spectroscopic techniques in order to obtain a comprehensive understanding of organic thin films.

odborný garant: *Hector Vazquez, Ph.D.*