INVESTIGATION OF WORK FUNCTION OF DIFFERENT MATERIALS USING A SYNCHROTRON BEAMLINE

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Photoelectron spectroscopy in VUV range and soft X-ray radiation may be used in investigating electron structure of different materials [1,2]. In addition one can infer about material structure and about the electron work function [3].

During the meeting we want to discuss the possibility of building an experimental station including a vacuum monochromator and a suitable system for electron detection. Discussing a mounting system of various samples and data acquisition possibilities is of great importance. Our group is interested in participating in building of the station and its usage.

References:

- R. Mitsumoto *et al.*, "Electronic structure and chemical bonding of fluorinated fullerenes studied by nexafs, ups and vacuum-uv absorption spectroscopies", *J. Phys. Chem. A* **102** (1998) 552-560.
- [2] J. Ghijsen, R.L. Johnson, A. Elschner, N. Koch, "VUV photoemission using synchrotron light: A tool for characterizing surfaces and interfaces occurring in OLEDs", *J. Alloys Compods.* 382 (2004) 179-186.
- [3] E. Czerwosz, P. Dłużewski, M. Kozłowski, R. Nowakowski, T. Stacewicz, "Photoelectric work function determination for the nanostructural carbonaceous films", *Vacuum* 70 (2003) 237-241.