

**Report on the activities of A. Patrykiewicz during his visit to  
the Institute of Condensed Matter of Ukrainian Academy of Sciences in Lviv.**

**The visit took place between 23 May and 22 June of 2011.**

1. On June 9 I gave a seminar on the melting and low temperature structures of mixed monolayers on the graphite surface.
2. I attended the workshop organized by the Institute for young scientists from the Ukraine as well as the seminar given by M. Borówko.
3. Over the entire period of the visit I discussed several problems connected with the project with the members of the host Institute. In particular the discussions have been devoted to the following topics: mechanism of melt transition in two- and three-dimensional systems, the free volume problem in statistical mechanics and the implementation of dissipative particle dynamics method to nonuniform systems involving polymers.
4. During the visit I also worked on the mechanism of capillary condensation in pores modified with chains forming pillars and discussed some aspects of that work with the members of the host Institute.