Seminář odd. 26
Tenkých vrstev a nanostruktur

Fyzikální ústav AVČR, Cukrovarnická 10, Praha 6

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TÉMA

Graphene moires on platinum &
Probing the paths towards RNA synthesis

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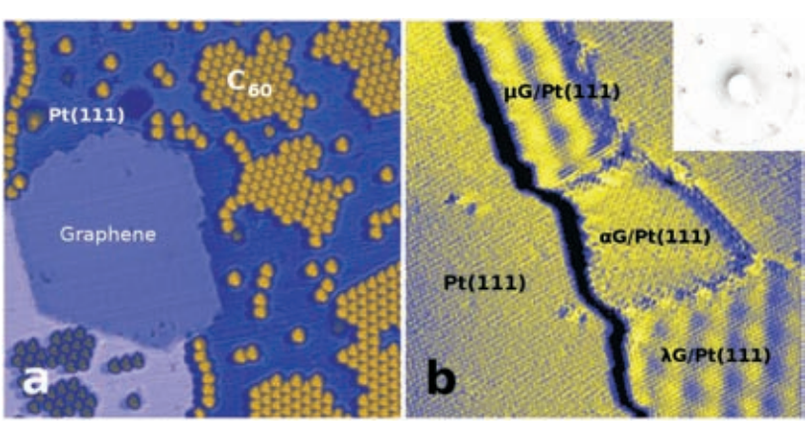
Two of current surface-science topics will be outlined. First, we will see a study of graphene formed on Pt(111) surfaces by thermal decomposition of fullerene molecules. STM images reveal a variety of moire superstructures that are successfully explained by a simple geometric model. The study also sheds some light on the role of the preparation conditions and precursor on the resulting structures.

Second, we report a proof-of-concept experiment performed on Cytidine/Cu(110) system. The main idea of this experiment is to take the first steps towards an alternative synthesis of RNA from basic components. Although this experiment is preliminary, our goal is to use catalytic properties of a crystalline surface in order to enhance the efficiency of oligomerization.



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