

## Delegation tour to France

### Objects of cooperation



V. Bakul Institute for Superhard Materials of the National Academy of Sciences of Ukraine is engaged in the development of processes for production and application of synthetic diamond, cubic boron nitride and other superhard materials, high-density high-tech ceramics, cemented carbides, superconducting ceramics, structural products and tools of the above materials (<http://www.ism.kiev.ua>).



Laboratory of Sciences of Processes and Materials (LSPM) is a unit of CNRS at University of Paris North (Villetaneuse, France). The Laboratory has many years' experience in cooperation with Institute for Superhard Materials in the area of high pressure equipment development and superhard materials researches.

Laboratory of Crystallography and material Science (CRISMAT) (Caen, France) is a part of CNRS structure, works within the area of synthesis, superconducting materials properties and structure research, as well as development of tools of the above materials.

The Laboratory of Materials Physics (PHYMAT) is a part of the Physics and Mechanics faculty of University P' (Poitiers, France) and is included to the CNRS structure. The Laboratory has many years' experience in cooperation with Institute for Superhard Materials in the area of synthesis, research of structure and characteristics of nano laminated materials (ternary carbide, nitrides and borides) for new perspective application.

### The scope of cooperation

The aim of the visit of authorities as well as some leading and young scientists of the Institute for Superhard Materials was to build a future strategy of cooperation between the Institute and European research centers, getting acquainted with their infrastructure and technical basis.



### The obtained results

Opportunities of joint scientific researches conduction, young experts' internships, as well as application of bilateral Ukrainian-French projects, including projects within HORIZON 2020 program, were agreed between representatives of V. Bakul Institute for Superhard Materials of the National Academy of Sciences of Ukraine and French research laboratories

### Process of achieving results

The plan of conduction of joint researches and internships of young scientists from Institute for Superhard Materials and PHYMAT laboratory for 2012-2012 was developed in order to achieve the formulated tasks with the support of START project 7 Framework Programme. Two joint Ukrainian-French projects together with PHYMAT and LSPM laboratories were submitted within the Program «Dnepr» for 2013-2014.

### Plans for future

Promotion of the Institute for Superhard Materials, as well as its scientific-research achievements, at the European level, development of cooperation and communication channels with scientific centers of European Union.