START is a Support Action aiming at reinforcing the collaboration among research teams from the EU and Ukraine that are active in the domain of *High Pressure Physics and Technology* and its application spheres in the various thematic areas of FP7/HORIZON2020, with special focus on the field of *Superhard Materials*.

To do so, START will orient its activities in supporting the V.N. Bakul Institute for Superhard Materials (ISM) of the National Academy of Sciences of Ukraine (NASU) to:

- Analyse its research competencies and suggest actions to address the emerging scientific and socio-economic challenges
- Build long-term collaborations with leading EU research teams towards:
  - ...the design and initiation of joint research activities and
  - ...the exchange of scientific knowledge and good practices
- Enhance its capacity towards its participation in EU-funded collaborative research activities



#### http://www.start.ism.kiev.ua

Contract Number: 295003

Programme: FP7-Capacities, ERA-WIDE activities Project coordinator: V.N. Bakul Institute for Superhard Materials of the National Academy of Sciences

Contact person: Mr. Yuriy Nikitin Telephone: +380 67-500-62-47 Email: ynikitin@voliacable.com

Project start date: 1 November 2011

Duration: 30 months

# Coordinator



V.N. Bakul Institute for Superhard Materials of the National Academy of Sciences (ISM, Ukraine)

#### **Partners**



Pprime Institute: Research and Engineering in Materials, Mechanics and Energetics of the National Centre for Scientific Research (CNRS-PPRIME, France)



Institute of High Pressure Physics of the Polish Academy of Sciences (UNIPRESS)



International Environment and Quality
Services North Greece, Ltd
(Q-PLAN N.G., Greece)



# **Develop Research Strategy**

- Analyse ISM's research capacity, i.e.
  - ... fields of excellence
  - ... main achievements
  - ... research infrastructure
  - ... areas of interest
- Identify emerging opportunities, i.e.
- ... scientific/technological trends
- ... socio-economic challenges
- Suggest actions to strengthen ISM's international collaborations

# START Activities

#### Support collaborations Twinning activities

- Promotion campaign
  - ... to increase the visibility of ISM's research competencies
- Delegation tours and demonstrations
  - ... to facilitate direct discussions towards the design of joint R&D activities among ISM and leading EU research teams
- Scientific seminars
  - ... to enable knowledge transfer
- Research internships
  - ... to carry out joint R&D activities among ISM and EU leading research institutes

#### Stimulate and Inform

# Info-days / workshops

... to share insight into EU supported funded collaborative research activities

#### FP7 training activities

... to enhance the skills and experiences of ISM researchers towards their successful participation in future EUfunded projects

#### Dissemination conference

- ... to promote the EU-Ukraine collaboration potential
- ... to disseminate project outcomes

#### Review of ISM 'internal environment':

- · R&D competencies
- Resources
- · Areas of expertise
- Scientific interests

#### Review of ISM 'external environment':

- International scientific and technological landscape
- EU-Ukraine's research cooperation potential

# ISM Research Strategy

#### EU-funded R&D activities capacity building

- 2-days workshops
- 5-days intensive training courses
- · 1-month on-the-job training
- · Continue hands-on support

#### Twinning with international research centres

- Delegation Tours demonstrations
- · Scientific seminars for knowledge transfer
- Research internships
- Joint experiments



# **BOOSTING EU-UKRAINE COOPERATION** IN THE FIELD OF SUPERHARD MATERIALS

# **Project Identity**

Coordinator: V.N. Bakul Institute for Superhard Materials of the National Academy of Sciences (ISM, Ukraine, http://www.ism.kiev.ua/english)

Contact person: Mr. Yuriy Nikitin,

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Website: http://www.start.ism.kiev.ua

Start date: 01/11/2011 **Duration:** 30 months Contract Number: 295003

### **Project overview**

START aims at reinforcing the collaboration among research teams from the EU and Ukraine that are active in the domain of High Pressure Physics and Technology and its application areas in the various thematic areas of FP7/HORIZON2020, with special focus on the field of Superhard Materials. To do so, START will orient its activities in supporting the V.N. Bakul Institute for Superhard Materials (ISM) of the National Academy of Sciences of Ukraine (NASU) to increase its participation in EU-funded collaborative research activities and design joint R&D activities with EU leaders in the appropriate fields.

#### Main objectives

A wide range of activities will be implemented:

- Development of the Institute's medium-to-long term "Research Strategy" by assessing the research competencies and networking level of ISM, as well as the existing international collaboration framework between EU and Ukraine.
- Designing and organizing a number of well focused "FP7 training activities" in order to advance the Institute's competitiveness towards its participation in EU funded research activities under FP7 and HORIZON2020.
- Implementation of a set of twinning with EU research centres activities (networking, exchange of knowledge, best practices and scientific staff, etc) to increase the ISM's visibility among EU leading research actors, agree and set up joint experiments with EU actors and facilitate discussion on scientific developments and industrial application areas in the field of Superhard Materials.



# Consortium



V.N. Bakul Institute for Superhard Materials of the National Academy of Sciences (ISM, Ukraine)



Pprime Institute: Research and Engineering in Materials, Mechanics and Energetics of the National Centre For Scientific Research (CNRS-PPRIME, France)



Institute of High Pressure Physics of the Polish Academy Of Sciences (UNIPRESS, Poland)

4. O-PLAN International Environment and Quality Services North Greece, Ltd (Q-PLAN N.G., Greece)



