Memorandum of Understanding on

Collaboration

between

Department of Science and Technology of the Government of India

and

Russian Foundation for Basic Research

The Department of Science and Technology of the Government of India and the Russian Foundation for Basic Research (hereinafter referred to as the Parties)

RECALLING the Agreement between the Government of the India and Government of Russian Federation on cooperation in the field of science and technology, signed at Moscow on 30 the June 1994.

RECOGNIZING the importance of science and technology in the development of their national economies,

WISHING to strengthen and develop scientific and technological cooperation on the basis of equality and mutual benefit,

Have agreed as follows:

Article I

The Parties will, on the basis of equality and mutual benefit, promote and support scientific cooperation between highly qualified Russian and Indian scientists affiliated with universities or research institutes in the respective countries and engaged in any field of sciences excluding humanities and social sciences.

Article II

The collaboration shall include the following joint and coordinated activities on specific subjects with the participation of scientists from each country:

- a) bilateral research projects
- b) multilateral research projects and scientific events.
- c) Other joint activities as may be mutually agreed upon by the Parties.

Article III

The representatives of the Parties will meet alternately in India and Russia every year in order to consider the current situation of the collaboration and to discuss other positions of the joint activities.

Article IV

The number of bilateral research projects to be supported each year will depend on each party's budget appropriations.

Article V

Participating scientists shall observe the laws and regulations of the host country and the rules and regulations of the host institution.

Article V

It rests with each party to ensure the correct distribution of intellectual property resulting from the implementation of the collaboration program in accordance with the respective national legislations.

Article VI

Either party may at any time propose amendments or modifications to this Memorandum of Understanding, which will be placed into effect upon approval by the other Party.

Article VII

The implementation of this Memorandum of Understanding shall commence on the date of its signing and shall continue thereafter for five years. During the final year of operation, this Memorandum of Understanding will be subject to review. Either Party may terminate this Memorandum of Understanding effective at the end of any fiscal year by giving six months written notice to the other Party.

Article IX

This Memorandum of Understanding is made in duplicate in English, both having equal validity.

T Ramasami

Secretary to the Government of India Department of Science and Technology Signed at New Delhi on 12/10/2012 Academician V. Ya. Panchenko

Board Chairman

Russian Foundation for Basic Research

Signed at Moscow on

Addendum

to the

Memorandum of Understanding on Collaboration between

Department of Science and Technology of the Government of India and

Russian Foundation for Basic Research

In accordance with the provision of Article VI of the Memorandum of Understanding between the Department of Science and Technology of the Government of India and the Russian Foundation for Basic Research (hereinafter jointly referred to as the Parties, or DST and RFBR, respectively), the terms for implementation of the Memorandum of Understanding have been agreed upon as follows:

Bilateral research projects

The DST and the RFBR will launch on a regular basis calls for proposals aimed at conducting joint Indian-Russian research in the framework of the bilateral projects. In 2012 two separate joint calls will be announced by the Parties – a traditional one inviting proposals for the **initiative research projects**, and a pilot call inviting proposals for the **goal-oriented interdisciplinary research projects**. Bilateral projects will be carried out by research teams engaging investigators from both countries. The team leaders (principal investigators – PIs) must hold a full-time position at a university or research institute in their respective countries. The duration of each research project can be up to three years. After the completion of this period, an application for a new funding may be submitted in competition with new applications.

Bilateral initiative research projects can be carried out in the following areas of basic science:

- mathematics, informarion science and mechanics;
- physics and astronomy;
- chemistry and studies of materials;
- biology and medical sciences;
- Earth sciences;
- information technologies and computer systems;
- fundamentals of engineering sciences.

The bilateral **goal-oriented interdisciplinary research projects** can be carried out close to the themes (topics) jointly selected and approved by the Parties. It is agreed upon that for the pilot call 2012 following themes will be proposed:

- 1. Low-temperature nanostructures and devices based on them
- 2. Fundamentals of creating for new technologies and diagnostic systems in the terahertz range
- 3. Multifunctional smart nanomaterials with the cluster ordering
- 4. Fundamentals of biopharmaceuticals and regenerative biomedicine as a plarform for the medicine of the XX 1 century
- 5. Interdisciplinary basic research in the field of clinical epigenomics, transcriptomics and glycobiology
- 6. Investigation of the neurophysiological mechanisms of motion recovery in neurotrauma and cerebral vascular diseases with the use of multimodal stimulation, virtual stimulation, robotic motion learning and brain-computer interface (BCI)

Funding

The projects supported by both sides will be funded jointly by RFBR and DST on equivalent basis as follows:

RFBR will provide the Russsian scientists with the necessary funds to carry out their part of joint projects and to cover their research costs. According to the RFBR rules the funds provided by RFBR can be used to cover the following expenses:

- 1. Equipment and consumables
- 2. Salary of the Russian scientists;
- 3. Travel expenses for the business trips of the Russian scientists to carry out joint reseach investigation or connected with participation in international scientific events (travel expenses, per diem allowances and accommodation, health insurance and visa fee in accordance with the existing norms).

DST will provide the Indian scientists with the necessary funds to carry out their part of joint projects and to cover their research costs. According to the DST rules the funds provided by DST can be used to cover the following expenses:

- 1. Equipment and consumables
- 2. Salary of the Indian scientists;
- 3. Travel expenses for the business trips of the Indian scientists to carry out joint research investigation or connected with participation in international scientific events (travel expenses, per diem allowances and accommodation, health insurance and visa fee in accordance with the existing norms).

Each initiative research project will receive annual funding of up to 20 000 US Dollar from the DST and equivalent of this amount in RUR from the RFBR respectively whereas annual funding of each goal-oriented interdisciplinary

project will be up to 30 000 US Dollar from the DST and equivalent of this amount in RUR from the RFBR accordingly.

Procedures

The team leaders should submit an application to the DST (in case of Indians) and to the RFBR (in case of Russians), upon consultations, using the respective forms prescribed by DST and RFBR.

Applications submitted by one side only will not be accepted. The team leaders/co-organizers concerned should, therefore, be sure that their counterpart submits a matching application.

DST and RFBR will conduct parallel review of the applications respectively based on the agreed criteria. DST and RFBR will make joint decisions via correspondence based on the review results wherein only projects, which were positively evaluated by both DST and RFBR reviewers, will be considered.

The funding for the selected joint research projects will be provided in annual instalments. Every next instalment after the first one will be provided after evaluation of intermediate reports, submitted by Indian and Russian researchers respectively to DST and RFBR and only if both reports are evaluated positively.

Review Criteria

The following criteria will be taken into consideration.

- Scientific excellence of the projects
- Mutual advancement of research through the transfer of knowledge and expertise
- Participation of young researchers
- Ability of the teams to successfully complete the project

Number of projects

In 2012 DST and RFBR agree to support no less than 15 projects resulted from the call for proposals on the goal-oriented interdisciplinary research and no less than 15 projects resulted from the call for the initiative research proposals given that so many applications are reviewed positively. In the following years the number would be decided based on the amount of the submitted applications and the review results of the application competition for the year 2012.

Others

Amendments to this Addendum may be proposed by either DST and RFBR. Such amendments will become effective when DST and RFBR have mutually agreed upon them.

The validity of this Addendum corresponds with the effective period of the Memorandum of Understanding on Scientific Cooperation between DST and RFBR.

Concluded and signed in duplicate in English, both being equally authentic.

Date: 12th oct 2012

Date: 2012

On behalf of the Department of Science and Technology, Government of India On behalf of the Russian Foundation for Basic Research

T. Ramasami

Secretary to the Government of India

Department of Science and Technology

Academician V. Ya. Panchenko

Board Chairman

Russian Foundation for Basic Research

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