VIETNAM - KOREA JOINT RESEARCH PROGRAM

Call for Proposals of scientific and technological research projects 2020

Deadline: 17:00, 25/6/2020 (Vietnamese side) 18:00, 25/6/2020 (Korean side)

1. OBJECTIVES

Within the framework of Agreement on scientific and technological cooperation between Vietnam and Korea signed in 1995, the Ministry of Science and ICT of Korea (MSIT) and the Ministry of Science and Technology of Vietnam (MOST) - hereinafter refers to as the Parties launch the Joint Research Program in the 2020-2023 period.

In order to encourage scientific and technological research cooperation between Vietnam and Korea, the Parties announce the call inviting scientists and research organizations from both countries to submit joint project proposals.

2. FIELD OF RESEARCH

Joint project proposals must be within one of the following 4 (four) research fields, proposals for research in other fields will not be considered:

- Information Technology: Priorities will be given to projects in following research and application areas: (1) integrated circuit (IC) and integrated circuit design; (2) artificial intelligence; (3) big data and big data processing; (4) cyber security assurance and information security; (5) virtualization and cloud computing; (6) modules, software device solution for IoT system integration; (7) consulting services for design, integration, administration and system security in information technology; (8) development of digital content industry and services, e-commerce.
- Biotechnology: Priorities will be given to projects in following research and application areas: (1) Breeding on plant, animal and fishery (molecular biology, molecular markers, gene editing, gene transferring, crossing, mutation...); (2) Reproduction in plant, animal and fishery (cloning, stem cell, embryo culture and transfer, technology of somatic embryo, technology of artificial seed, genetic material conservation...); (3) Diagnostics, assessment, prevention and cure in human, animal and fishery and plant protection; (4) Production of bio-products for plant protection, prevention and cure in animal, fishery, bio-products to improve the productivity in plant, animal, and fishery

(the drug to antibiotic, recombination vaccine, recombination protein, stem cell, bio microorganism products, bio-sensor, bio-chip...); (5) Targeted therapy of some deadly diseases in human, and the diseases that is infected from animal to human.

- Climate technology: Priorities will be given to projects in following research and application areas: (1) towards risk reduction and resilience to coastal hazards under the context of climate change: A big data analytics approach; (2) research and forecast of flash flood and landslide under the context of climate change using AI and new technologies on surveying and monitoring; (3) study on countermeasures for beach erosion in Vietnam based on comprehensive sediment management from upstream to reef under the context of climate change; (4) assessing the impact of climate change on monthly and seasonal streamflow for drought and salinity intrusion forecasting in Mekong River Delta or Red River Delta, Vietnam; (5) establishing a framework of urban flood early warning - FRMIS (Flood Risk Management Information System) for the Mekong Delta, specialized for the downtown of Can Tho City; (6) assessing the change in between hydrological regime - social issues on water resources - food security, energy in the Mekong Delta by a modeling of socio-hydrology combined with simulation of Water - Energy -Food nexus; (7) study on the specialty of the limestone ecosystems of Vietnam and climate change at the region: implications from ecology, diversity and taxonomy of plants and insects (8) impact of climate change on the marine organisms having medicinal potentials in coastal areas of Vietnam; (9) the solutions for implementing of Paris Agreement in Vietnam in term of Science and technology: (i) reviewing of the Technology Need Assessment in Vietnam; (ii) setting up the monitoring system of technology transfer in Viet Nam; (iii) solutions for strengthening the cooperation with the Climate Technology Center and Network (CTCN).
- Nanotechnology: Priorities will be given to projects in following research and application areas: (1) nano materials and devices for electronic/optoelectronic applications; (2) nanomedicine; (3) nanosensor.

3. GENERAL REQUIREMENTS

All proposals are considered to be co-funded by both Parties.

Applicants are required to familiarize themselves with the standard terms before filing an application under this Call; filing an application constitutes a

declaration that the applicant has done so and agrees to be bound by the provisions thereof.

All proposals must be submitted to both competent authorities who coordinate the Joint Research Program in Korea and in Vietnam. Proposals submitted to only one side will not be considered.

For Korean side: This call is open for researchers as stipulated by Korean laws.

<u>For Vietnamese side:</u> This call is open for R&D related organizations and individuals as stipulated by Vietnam laws.

4. REQUIREMENTS FOR PROJECTS

For Korean side:

In principle, project duration is **3 years** with annual assessment to decide on the continuation of a project.

A party may ask to discontinue funding for the following year with reasonable reasons such as unsatisfactory research results or misuse of the research fund.

Reports and Evaluation Results:

Principle investigator of each Party must submit annual mid-term reports prior to the end of the annual project execution period and final reports after the end of the whole project.

Reports on cooperative projects will be evaluated by experts in relevant fields and serve as each Party's reference in future decision making and the use of the Joint Fund.

For Vietnamese side:

Each project can be implemented within 3 years with annual assessment to decide on the continuation funding of the project in the next years.

Specific requirements for projects

The Korea-Vietnam Joint Research Project should fully meet the criteria of national scientific and technological tasks according to the current regulations of the Ministry of Science and Technology, as well as meet the conditions under Circular No. 19/2019/TT-BKHCN of October 29, 2019 of the Minister of Science and Technology on the management of science and technology tasks

according to the protocol. Breakthrough proposals and advanced technologies will be prioritized. Priority will be given to tasks that the two partners have had close and effective cooperation.

Specific requirements for projects outcomes

The outcomes of the Korea-Vietnam Joint Research Project must be advanced results, including:

- Advanced technologies that could be potentially transferred to an industry.
- At least 01 scholarly paper published on Web of Science-indexed journals and 2 scholarly papers published on local journals. A project must have at least one master of science student graduated upon its completion or help train a doctoral student.

5. SUBMISSION OF RESEARCH PROPOSAL

SUBMISSION PERIOD: From April 27 to June 25, 2020

For Korean side:

Project proposals must be uploaded on the NRF website http://ernd.nrf.re.kr.

For Vietnamese side:

Project proposals regulations are under the Circular 10/2019/TT-BKHCN dated 29 October 2019 on Management of protocol-based joint research projects. Electronic project proposals must be uploaded on the MOST website: http://stm.most.gov.vn and original project proposals must be sent by post or handed directly to the Ministry of Science and Technology, 113 Tran Duy Hung, Ha Noi.

6. FUNDING FOR SELECTED PROJECTS

<u>Selected projects will be co-funded by the Parties based on the annual budget availability of each side.</u>

Korean side:

One project in each field (total of four projects) will be selected for the year **2020.** The budget of the Joint Fund for each joint project will be KRW 40,000,000 (approximately USD 40,000) per project per year.

Vietnamese side:

Upon receipt of the result, project investigators of selected projects must complete their applications and send to the Ministry of Science and Technology for financial appraisal - as regulated at Circular 10/2019/TT-BKHCN dated 29 October 2019 on Management of protocol-based joint research projects.

7. EVALUATION AND SELECTION

Upon the closing of this call, all project proposals will be checked for eligibility. Only projects that are considered eligible by both Parties will go to the evaluation stage.

If Vietnamese applicants have obtained a master's or doctoral degree in Korea, he/she will get bonus points in the evaluation.

Evaluation procedure will be conducted according to each side's regulation.

8. TIME SCHEDULE

The time schedule of 2020 Joint research program is as follows

- From 27th April to 26th June 2020, 18:00 (local time): Announcement of the call and submission
- By the early of July 2020: Exchange the submission list
- By the end of August 2020: Evaluation
- By the mid September 2020: Discussion/Final decision for selection
- By the end of September: Contract/Financial support at each side
- 1st October 2020: Commencement of the research projects

9. COTACT

For Vietnamese side:

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