# 13<sup>th</sup> EXECUTIVE PROGRAMME FOR SCIENTIFIC AND TECHNOLOGICAL COOPERATION BETWEEN THE REPUBLIC OF ITALY AND THE REPUBLIC OF KOREA FOR THE YEARS 2023-2025

# XIII Italy- Korea Executive Programme Joint Research Commission 26<sup>th</sup> Oct 2022

Within the framework of the Agreement on Scientific and Technological Cooperation between the Government of the Italian Republic and the Government of the Republic of Korea, signed in Rome on February 16, 2007 and entered into force on September 18, 2019, the meeting of the Italy – Korea Executive Programme Joint Research Commission was held virtually on 26<sup>th</sup> Oct 2022 to examine the present state and further developments of the scientific and technological cooperation between the two Countries and to define the details of the 13<sup>th</sup> Executive Programme for the years 2023 – 2025.

The Italian delegation was headed by the Ambassador to the Republic of Korea, H. E. Federico Failla. The Korean delegation was headed by Mr Kim Seong-gyu, Director General for International Cooperation Bureau at the Ministry of Science and ICT (MSIT).

The members of the two delegations are listed in Annex I.

The institutions in charge of the coordination of the present Executive Programme, hereinafter referred to as the "Parties", are:

**Italian Party:** Ministry of Foreign Affairs and International Cooperation, Directorate General for Country Promotion – Office IX.

Korean Party: Ministry of Science and ICT

The following agenda was adopted by the Parties:

- 1. Review of Scientific and Technological Cooperation between the two Countries
- 2. Executive Programme for the years 2023-2025
- 3. Italy-Korea S&T Forum
- 4. Final provisions.

#### 1. Review of Scientific and Technological Cooperation between the two Countries

The Parties recognized the growing importance of science and technology for the economic, social and cultural relations between the two Countries. Both sides, considering the good relationship between the two Countries, stressed the need to further promote bilateral cooperation in the field of science and technology and further increase the level of collaboration between scientists of the two Countries.

#### 2. New Executive Programme: Joint Research Projects of Particular Relevance

In the period February 25<sup>th</sup> -April 27<sup>th</sup> 2022, a joint call for proposals was launched in both countries to collect joint project proposals within the following priority research areas:

Environmental sciences and energy transition

- Agrifood for biotech and biopharma applications
- Physics and astrophysics
- Advanced materials and nanotechnologies
- Biomedicine, and technologies to face new infectious diseases
- Prevention of natural disasters, including Vulcanology
- S&T applied to cultural heritage
- Marine Resources for biotechnologies

The criteria that were adopted to select the joint research projects to be funded in the years 2023-2025 were:

- Scientific relevance of the proposed research
- Methodology and documentation
- Qualification and expertise of the research teams
- Added value of the bilateral cooperation
- Contribution of the project in addressing societal challenges
- Involvement of early career scientists
- Exploitation and dissemination of the results
- Budget adequacy

On the basis of the above criteria, the Parties jointly selected 8 research projects, which were considered eligible for financial support and are listed in **Annex II**. Funding for these projects may be granted on a national basis upon evaluation of the financial requests to be submitted by the corresponding Principal Investigators, according to the guidelines defined by the relevant authorities in the two Countries.

#### 3. Italy-Korea S&T Forum

In light of the successful outcome of the 7<sup>th</sup> edition of the Italy-Korea Science Technology and Innovation Forum that was hosted by the National Research Foundation on June 20-22, 2022, as well as of the positive discussion which occurred in that occasion between H.E. Federico Failla, Ambassador of the Italian Republic, and Mr. Kim Seong-gyu, Director General of the International Cooperation Bureau at the Ministry of Science and ICT, the Parties jointly agreed on the following: the Italy-Korea S&T Forum represents an important event fostering integration of basic, applied and industrial research, as well as technology transfer, and should be held every two years, hosted alternatively in the Republic of Korea and in Italy. This event could be instrumental to carefully select in advance the most promising areas of bilateral cooperation, with significant impact on industrial high tech collaborations in both countries. The next edition of the Forum hosted by the Italian Party will be held in 2024, with further details, including date and venue, to be further agreed upon through diplomatic channels.

#### 4. Final provisions

The Parties agreed to hold the next session of the Executive Programme Joint Research Commission in the year 2024, for the mid-term review of the ongoing projects and to initiate the negotiations for the following EP. Further details such as date and agenda, will be agreed upon through diplomatic channels.

The present Executive Programme will be in force between January 1<sup>st</sup>, 2023 and December 31<sup>st</sup> 2025, and will remain valid until the coming into force of the next Executive Programme, but no longer than one year after its expiration.

Any amendment to the text of this Executive Programme has to be discussed through diplomatic channels and authorised by the competent Ministries in both Countries.

All initiatives foreseen in this Executive Programme will be carried out within budget limits and according to the rules prevailing in each Country.

Annex II, containing the list of selected bilateral projects, is attached hereto and represents an integral part of the present document.

Signed virtually on 26<sup>th</sup> Oct 2022, in two originals written in English language, each text being equally authoritative.

For the Italian P

H. E. Federico Failla

Ambassador of Italy in the Republic of Korea

For the Korean Party

Mr. Kim Seong-gyu

Director General

MSIT International Cooperation Bureau

## Annex I

## Members of the two delegations

ITALIAN DELEGATION	KOREAN DELEGATION  MR. KIM SEONG-GYU		
H.E. FEDERICO FAILLA			
Ambassador, Embassy of Italy to the Republic of	Director General of the International		
Korea	Cooperation Bureau at the Ministry of Science and ICT		
First Secretary Chiara RATZENBERGER	MR. SUNG CHANGWON		
Head of S&T Office, Embassy of Italy to the	Deputy Director of Europe & Africa		
Republic of Korea	Cooperation Division at the Ministry of		
	Science and ICT		
	MS. KIM JIEUN		
	Interpreter of Europe & Africa Cooperation		
	Division at the Ministry of Science and ICT		

#### Annex II

Joint research projects selected within the frame of the Executive Programme of Scientific and Technological Cooperation between the Italian Republic and the Korean Republic for the years 2023-2025

RESEARCH AREA	TITLE	KOREAN COORDINATOR	ITALIAN COORDINATOR
Advanced materials and nanotechnologies	Cascaded second-order processes in centrosymmetric plasmonic systems	Junsuk Rho (POSTECH)	Cristian Ciracì (Fondazione Istituto Italiano di Tecnologia)
Advanced materials and nanotechnologies	Development of a gas sensor fabrication method for the integration of a highly selective sensing material and low power-consuming heater	Jun-Bo Yoon (KAIST)	Elisabetta Comini (Università di Brescia)
Agrifood for biotech and biopharma applications	EV-C@p: Plant-derived Extracellular Vesicles as novel biotechnological platform for biopharma applications	Kwang-Pyo Kim (Kyunghee University- Global Campus)	Pocsfalvi Gabriella (CNR-IBBR)
Biomedicine, and technologies to face new infectious diseases	From macro to micro 3D high- content screening platform for anti-cancer drug testing using multicellular spheroids	Jae-Chul Pyun (Yonsei University)	Filippo Piccinini (Università di Bologna)
Environmental sciences and energy transition	Electrochemical Membrane Bioreactors for Water Reuse with Hydrogen Fuel	Kwang-Ho Choo (Kyungpook National University)	Vincenzo Naddeo (Università di Salerno)
Physics and astrophysics	Magnetism and metallicity in the Mott insulator Ca2RuO4: a Platform for quantum phases driven by strain and doping (MAP)	Yeong kwan Kim (KAIST)	Rosalba Fittipaldi (CNR-SPIN)
S&T applied to cultural heritage	Conservation of Textile and Wooden Artifacts Through Selective Gel Cleaning Applications Including Innovative Gel	Yong-Jae Chung (Korea National University of Cultural Heritage)	Marco Malagodi (Università di Pavia)
Prevention of natural disasters, including Vulcanology	Understanding Holocene to historical volcanic eruptions and related hazards in Korea: Lessons from active volcanoes of Italy	Young-Kwan Sohn (Gyeongsang National University)	Gianluca Groppelli (CNR-IGAG)