

**EXECUTIVE PROGRAMME OF SCIENTIFIC AND
TECHNOLOGICAL COOPERATION BETWEEN
ITALY AND CHINA
FOR THE YEARS 2019-2021**

Within the framework of the Scientific and Technological Agreement between the Italian Republic and the People's Republic of China, which was signed in Beijing on June 9th, 1998, the 16th Session of the Italian-Chinese Joint Committee was held in Rome on March 1st 2019 in order to examine the present state and further development of scientific and technological cooperation between the two Countries and define the new Programme for the years 2019-2021.

The institutions in charge of the co-ordination and the realisation of the present Programme are:

for the Italian Party: Ministry of Foreign Affairs and International Cooperation, Directorate General for Economic and Cultural Promotion and Innovation

for the Chinese Party: Ministry of Science and Technology (MOST) of the People's Republic of China, Department of International Cooperation (DIC).

The Italian delegation was led by the **Min. Plen. Fabrizio Nicoletti**, Principal Director for Innovation and Research, Directorate General for Cultural and Economic Promotion and Innovation, MAECI .

The Chinese delegation was led by **Mr. Ye Dongbai**, Director General for Department of International Cooperation(DIC), MOST

The composition of the two delegations is reported in **Annex 1**.

The following agenda was adopted:

- 1) Present state of the scientific and technological cooperation between the two Countries;
- 2) New cooperation Programme;
- 3) Final provisions.

1. Present state of scientific and technological cooperation

The two Parties acknowledged the growing importance of science and technology for the economic, social and cultural development of the two Countries.

The two Parties, considering the good relations between the two Countries, stressed the need to develop and strengthen cooperation in the fields of science and technology.

The two Parties also agreed to explore significant opportunities to extend their cooperation in international and European R&D multilateral programmes.

2. New cooperation Programme.

A joint call for proposals was published in Italy and in China, which was closed on December 12, 2018, to collect bilateral research projects of Particular Relevance, in the following priority areas:

- Artificial Intelligence (Brain-inspired Artificial Intelligence, Intelligent City) [AI]
- Technologies related to astrophysics [ASTRO]
- Innovative processes for biomass conversion into energy and other added value products [BIOMASS]
- Innovative biomedical devices (medical robots, tissue engineering, new therapeutics, neurodegenerative diseases and personalized medicine) [BIOMED]

The general criteria, adopted by both Parties, in evaluating and selecting the joint research projects were the following:

- Scientific relevance
- Methodology and documentation
- Competence and expertise of the research teams
- Added value of the bilateral cooperation
- Involvement of early career researchers
- Appropriateness of the budget requested with respect to methods and expected results.

Beside that, preference was given to:

- Projects involving more than one national public/private research organization
- Initiatives having a potential industrial impacts and/or involving industrial partners
- Structured mobility programmes, with staying periods of up to 3 months, to the benefit of

The list of projects is given in **Annex 2**.

For the Italian Party, the financial contributions are intended to partly cover the expenses of research activities within the projects on the Italian side. Financial support will be granted to the Italian Coordinators on a yearly basis and upon evaluation of annual applications to be submitted according to the indications that will be given by the Italian Party.

For the Chinese Party, the financial contributions are intended to partly cover the expenses of research activities within the projects on the Chinese side. Financial support will be granted to the Chinese Coordinators upon evaluation of the applications to be submitted according to the indications that will be given by the Chinese Party.

3. Final provision

The two Parties have agreed that the next session of the Joint Committee will be held in China, at a date to be agreed upon through diplomatic channels.

The present Executive Programme for the years 2019-2021 will remain valid until the signature of the next one.

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

Annexes 1 and 2 are integral part of the present document.

Signed in Beijing on August 2019 in the English language in two originals, both being equally authentic.

For the Chinese Party
Director General, Department of
International Cooperation, MOST
Ye Dongbai



For the Italian Party
Italy Ambassador to China
Ettore Sequi



Date:

2019. 8. 23

Date:

2019. 8. 28

Annex 1

MEMBERS OF THE TWO DELEGATIONS

Italian Delegation

Chinese Delegation

Italian Delegation:

Min. Plen. Fabrizio Nicoletti, Principal Director for Innovation and Research, Directorate General for Cultural and Economic Promotion and Innovation, MAECI.

Cons. Alessandra Pastorelli, Head of Office IX, Bilateral policies and activities for the internationalization of scientific and technological research and innovation, Directorate General for Cultural and Economic Promotion and Innovation, MAECI.

Cons. Gabriele De Stefano, Deputy Head of Office VIII, Directorate General for Global Affairs, MAECI

Ing. Marco Santoro, Scientific Expert, Office IX, Bilateral policies and activities for the internationalization of scientific and technological research and innovation, Directorate General for Cultural and Economic Promotion and Innovation, MAECI

Dott. Gaetano Guglielmi, Deputy Director, Directorate General for research and innovation in health, Ministry of Health

Dott. Paolo Branchini, representative of MIUR.

Ing. Angela Fiore, representative of the Ministry of Environment

Chinese Delegation:

Mr. Ye Dongbai, Director General, Department of International Cooperation (DIC), MOST

Ms. Shi Ling, Director, European Affairs Division, DIC, MOST

Ms. Wang Yingshi, Sub-Consultant, DIC MOST

Mr. Sun Chengyong, Scientific Counsellor, Chinese Embassy

Mr. Yao Liangjun, First Secretary, Chinese Embassy

Annex 2

**PROJECTS OF PARTICULAR RELEVANCE SELECTED WITHIN THE FRAME OF THE
EXECUTIVE PROGRAMME OF SCIENTIFIC AND TECHNOLOGICAL COOPERATION BETWEEN
THE ITALIAN REPUBLIC AND THE PEOPLE'S REPUBLIC OF CHINA
FOR THE YEARS 2019 - 2021**

| Priority Area | Acronym | Project title | Italian PI | Affiliation of Italian PI | Chinese PI | Affiliation of Chinese PI |
|--|----------------|--|-----------------|---------------------------|----------------|--|
| <i>ARTIFICIAL INTELLIGENCE</i> | <i>AI</i> | TALENT: joint uAv and surveillance vidEo coNtent analysis and mining for smart city | Niculae Sebe | Università di Trento | Zhang Shiliang | Peking University |
| | | MIND: Memristive brain-inspired neuromorphic devices | Daniele Ielmini | Politecnico di Milano | Yichun Liu | Northeast Normal University |
| <i>TECHNOLOGIES RELATED TO ASTROPHYSICS</i> | <i>ASTRO</i> | ASTRA: Astrometric Science and Technology Roadmap for Astrophysics | Gai Mario | INAF | Qi Zhaoxiang | Shanghai Astronomical Observatory, CAS |
| | | Effect of space environment on optical and electronic devices for astrophysical space missions (AstroOptElect) | Sytchkova Anna | ENEA | Hongbo He | Shanghai Institute of Optics and Fine Mechanics, CAS |
| <i>INNOVATIVE PROCESSES FOR BIOMASS CONVERSION</i> | <i>BIOMASS</i> | | | | | |

*INTO ENERGY
AND OTHERS*

| | | | | |
|--|-------------------|---------------------------|------------|--------------------------------------|
| Photocatalyzed Selective Transformation of Lignocellulose with Hydrogen Production | Fornasiero Paolo | Università di Trieste | Feng Wang | Dalian Institute of Chemical Physics |
| Biowaste to Chemicals and Liquid Fuels | Giordano Girolamo | Università della Calabria | Zifeng Yan | China University of Petroleum |

INNOVATIVE BIOMEDICAL DEVICES *BIOMED*

| | | | | |
|--|------------------------|------------------------------|---------------|--|
| Acustofluidic DNA Diagnosis Chip (ADD-Health) | Caputo Domenico | Università La Sapienza, Roma | Xuexin Duan | Tianjin University |
| Glioma surgery navigation system based on surface enhanced Raman scattering (SERS) technology | Aime Silvio | Università di Torino | Cong Li | Fudan University |
| Early prediction and dynamics evaluation of AD by a novel digital PET techniques-based imaging and analytical models (TAU-digiPET) | Luigi Frati | IRCCS NEUROMED | Min Zhang | Tongji Hospital Huazhong University of S&T |
| Preclinical evaluation of a PGM3 inhibitor as innovative therapeutic approach for pancreatic ductal adenocarcinoma (PANCREA) | Chiaradonna Ferdinando | Università Milano, Bicocca | Taiping Zhang | Peking Union Medical College Hospital |
