1st EXECUTIVE PROGRAMME FOR SCIENTIFIC AND TECHNOLOGICAL COOPERATION BETWEEN THE ITALIAN REPUBLIC (REPRESENTED BY THE MINISTRY OF FOREIGN AFFAIRS AND INTERNATIONAL COOPERATION) AND THE FEDERATIVE REPUBLIC OF BRAZIL (REPRESENTED BY THE BRAZILIAN NATIONAL COUNCIL OF STATE FUNDING AGENCIES) FOR THE YEARS 2022 - 2024

Within the framework of Agreement on Scientific and Technological Cooperation between the Government of the Italian Republic and the Federative Republic of Brazil, signed in Rome on February 12th, 1997, and entered into force on December 15th, 1998, and of the Memorandum of Understanding between the Ministry of Foreign Affairs and International Cooperation (MAECI) of the Italian Republic and the Brazilian National Council of State Funding Agencies (CONFAP) of the Federative Republic of Brazil on Scientific and Technological Cooperation, signed in Brasília on July 30th, 2019, the 3rd Meeting of the Joint Commission was held in Brasília on 19 November 2021 to examine the present state and further development of the scientific and technological cooperation between the two Countries, and to define the details of the first Executive Programme for the years 2022-2024.

The Italian delegation was headed by H.E. Francesco Azzarello, Italian Ambassador to Brazil.

The Brazilian delegation was headed by Odir Antônio Dellagostin, President of Brazilian National Council of State Funding Agencies

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

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

Italian Party: Ministry of Foreign Affairs and International Cooperation, Directorate General for Cultural and Economic Promotion and Innovation – Office IX.

Brazilian Party: Brazilian National Council of State Funding Agencies (CONFAP)

The following agenda was adopted by the Parties:

- 1. Review of Scientific and Technological Cooperation between the two Countries
- 2. Executive Program for the years 2022-2024
- 3. Final provisions.

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. Considering the good relationship between the two Countries, both Parties stressed the need to develop and to promote bilateral cooperation in the field of science and technology. Both sides expressed their satisfaction with the current state of the bilateral cooperation between the two countries in the field of science, technology and innovation, which led to the Memorandum of Understanding between the Italian Ministry of Foreign Affairs and International Cooperation (MAECI) and the Brazilian National Council of State Funding Agencies (CONFAP), which was signed in Brasilia on July 30, 2019 with the aim of increasing the level of collaboration between scientists of the two Countries.

Executive Programme for the years 2022-2024

In the period between 25 November 2019 and 6 February 2020 a call for proposals was launched in both countries to collect joint project proposals in the following priority research areas:

- 1. Artificial Intelligence
- 2. Basic Sciences
- 3. Communicable diseases
- 4. Distributed power generation from renewable sources
- 5. Nutrition and metabolic diseases



- 6. Precision Agriculture
- 7. Space science
- 8. Sustainable production and use of strategic minerals

The two Parties agreed that the joint projects selected for funding by the Joint Commission at the end of the review process, will be financed by MAECI for the Italian side, and by CONFAP, through the involved State Funding Agencies (FAPs), for the Brazilian side.

The criteria adopted in selecting the joint research projects were:

- Scientific relevance
- Methodology and documentation
- Qualification of the applicants
- Added value of the bilateral cooperation
- Involvement of early career researchers in the research teams
- Budget adequacy with respect to methods and expected results

Based on the common acknowledgment of the excellence of the projects, of the research areas, both Parties have reached consensus on 9 (nine) bilateral joint research projects, which may receive financial support from both Parties. The list of the nine selected projects is given in Annex II.

Funding for the selected projects will be granted yearly on the basis of the financial resources available to both Parties.

Midterm review of project activities. To monitor the advancement of the proposed research and the degree of interaction between partners from the two countries, both Parties agreed that Principal Investigators of the projects selected for funding should present their results in a midterm report, to be submitted within the first 6 months of the second year of project activities. Satisfactory evaluation of such reports by the JC is to be considered mandatory for continuation of financial support to the project.

3. Final provisions

The Parties agreed to hold the next meeting of the Joint Commission in Brazil in the year 2023, including the midterm review of the joint research projects listed in the Executive Program. Further details on the JC meeting will be agreed upon through diplomatic channels.

Signed in Brasilia on 19 November 2021, in two identical copies written in English language.

For the Italian Party

H.E. Francesco Azzarello Ambassador

Embassy of Italy to Brazil

President

National Council of State Funding Agencies

Annex I

Members of the two Delegations

For the Italian side:

Francesco Azzarello, Ambassador, Embassy of Italy to Brazil

Fernando Pallini Oneto di San Lorenzo, Minister Counselor, Embassy of Italy to Brazil

Fabio Naro, Scientific Attaché, Embassy of Italy to Brazil

For the Brazilian side:

Odir Antônio Dellagostin, President of the Brazilian National Council of State Funding Agencies

Elisa Natola, Advisor for International Cooperation, Brazilian National Council of State Funding Agencies



Annex II

Joint research projects selected for funding in the years 2022-2024

PRIORITY THEME	TITLE	ITALIAN PI	ITALIAN INSTITUTION	ΒΡΑΖΙΙΙΔΝ ΡΙ		BRAZILIAN INSTITUTION
AI	Distributed Optimization for Cooperative Machine Learning in Complex Networks	NOTARSTEFANO GIUSEPPE	Università di Bologna	Camponogara	Eduardo	Universidade Federal de Santa Catarina (UFSC)
BS	Environmental friendly and sustainable polychromic materials for Organic Electronics	Tuneval, all in the above and above.	CNR-ISOF Bologna	CREMONA	MARCO	PUC-Rio
CD	Low-cost vaccines for communicable diseases. (Acronym COCODI)	VENUTI ALDO	IRCCS Regina Elena IRE/IFO Roma	De freitas	Antonio Carlos	Federal University of Pernambuco
CD	Nanoencapsulation of compounds active against arboviral infection (NANOARBO)		CNR-IÝCB Pozzuoli (NA)	Soares Pontes	Gemilson	INPA - National Institute of Amazonian Research - Coordenação Sociedade, Ambiente e Saúde, Laboratório de Virologia e Imunologia
DisPowGen	Solid Oxide Fuel Cell fed with Biofuel as an Electric Flexible Provider in a Distributed Grid (FlexPower)	LO FARO MASSIMILIANO	CNR-DIITET Messina	Ticianelli	Edson Antonio	Institute of Chemistry of São Carlos, University of São Paulo (IQSC/USP)

NMD	Effetti del consumo di KOMBUCHA di tè verde e tè nero sul microbiota intestinale e cambiamenti metabolici su persone obese e normopeso	ALESSIO	UniPD DAFNAE Padova	Barros	Frederico	Universidade Federal de Vicosa - Food Technology Department
PA	Deep Learning for Precision Farming Mapping			Marcato Junior	José	Fundação Universidade Federal de Mato Grosso do Sul
Space	SPLASH — Self- DePloyable FLexible AeroSHell for de-Orbiting and Space Re-entry	DIMINO IGNAZIO	CIRA, Centro Italiano Ricerche Aerospaziali Srl, Capua	Vendittozzi	Cristian	Universidade de Brasília
StratMin	Sustainable mining: Recovery of critical raw materials from batteries using environmentally friendly technologies	VACCARI MENTORE	Università degli Studi di Brescia	Soares Tenório	Jorge Alberto	University of São Paulo

