EXECUTIVE PROGRAMME FOR SCIENTIFIC AND TECHNOLOGICAL COOPERATION BETWEEN THE ITALIAN REPUBLIC AND THE PEOPLE'S REPUBLIC OF CHINA FOR THE YEARS 2013 - 2015

Within the framework of the Agreement on Scientific and Technological Cooperation between the Government of the Italian Republic and the Government of the People's Republic of China, signed in Beijing on June 9th, 1998 and come into force in 2007,

the Italian Ministry of Foreign Affairs, Directorate General for the Country Promotion (Economy, Culture and Science) and

the Chinese Ministry of Science and Technology, Department of International Cooperation, hereinafter referred as to the "Parties",

have agreed to further develop scientific and technological cooperation between the two Countries and to define a new Executive Programme for the years 2013-2015.

To this end, the Parties launched a joint call for proposals in the period between July 10th and September 30th, 2012, to collect proposals both for Exchange of Researchers and for Projects of Particular Relevance, in the following priority areas:

- Applied Basic Sciences (Chemistry, Mathematics and Physics)
- Biotechnology and Medicine
- Energy & Environment
- Information Communication Technology
- Nañotechnology and Advanced Materials
- Space and Aeronautics
- Technology Applied to Cultural Heritage

The criteria adopted by the Parties in selecting the joint research projects were:

- Scientific relevance of the project
- Methodology and documentation
- Qualification of the applicants
- Added value of the bilateral cooperation
- Social and developmental added value
- Use and dissemination of results.



1. Projects for the Exchange of Researchers

Based upon the above mentioned criteria, 10 projects were selected by the Parties for financial support by the Italian Party for the exchange of researchers and by the Chinese Party through its key International S&T Cooperation Programme (ISTCP) according to its procedure.

The list of the selected projects is reported in Annex I

2. Joint Research Projects of Particular Relevance

In addition to the bilateral projects listed in Annex I, both Parties may consider granting respectively a financial contribution following their own procedures to significant bilateral research projects, which are 11 projects for applying the Chinese funding and 10 projects for the Italian funding, listed separately in **Annex II and Annex III**.

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

For the Chinese Party, funding will be provided according to the regulations of International S&T Cooperation Programme.

Financial support may be granted on a national basis upon evaluation of applications to be submitted according to the guidelines of the relevant authorities of the two Countries.

The projects listed in Annex II and III have been selected by the Parties pursuant to the criteria above referred.

3. Financial Provisions

General administrative and financial provisions for the implementation of the Programme are reported in **Annex IV**.

4. Final Provisions

This Executive Programme for the period January 1st, 2013 - December 31st 2015 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 authorised by the competent Ministries in both Countries and has to be carried out through diplomatic channels.

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

Annexes I, II, III and IV are attached hereto and are integral parts of the present document.

Signed in Beijing on January 16, 2013 in two originals in the English language, each text being equally authoritative.

For the Chinese Party

Mr. Chen Linhao
Deputy Director-General
Department International
Cooperation
Ministry of Science and
Technology

Annex I

Projects selected for financial support

by the Italian Party for the Exchange of Researchers and

eligible for funding application by the Chinese Party through its key international S&T Cooperation Programme according to its procedure

within the frame of the Executive Programme for Scientific and Jechnological Cooperation
between Italy and China for the years 2013-2015

Research Area	Project title	Chinese partner	Chinese Institute	Italian partner	Italian Institute
纳米技术和先进 材料/ Nanotech- nology and Ad- vanced Materials	照明用大面积柔性白光有机电致发光器件 Flexible Transparent White Organic Light Emitting Device (FT_WOLED)	段羽 DUAN Yu	吉林大学 Jilin University	朱寒佩.占 利 Guiseppe Gigli	意大利国家纳米技术实验室 Istituto Nanoscienze - Na- tional Nanotechnol- ogy Laboratories (NNL) Italy
能源和环境 /Energy and En- vironment	基于基因芯片优化粗甘油产氢产乙醇生物 转化 Optimized bioconversion of crude glycerol into hydrogen and ethanol using Geo-Chip and coupling with MEC	王爱杰 WANG Aijle	哈尔滨工业大学 Harbin Institute of Technology	Cristiano Varrone	ENEA- Ital- Ian National Age ncy for New Te chnol- ogy, Energy and Sustain- able Development
生物技术和医药 /Biotechnology & Medicine	超声治疗乳腺癌监控影像融合技术研发及 应用 R & D and Application of imaging- fu- sion technology in the guidance of HIFU treatment for breast cancer	张炼 ZHANG Lian	重庆海扶医疗科技股份 有限公司 Chongqing Halfu Medical Technology Co., Ltd.	Prof. Franco Orsi/Dr Paolo Arnone	欧洲胂翰研究所 European Institute of Oncology, IEO
生物技术和医药 /Biotechnology & Medicine	与人类健康相关病原细菌的抗菌药物耐药基因组研究 The genomics of antimicrobial resistance in bacterial pathogens of relevance for human health	宗志明 ZONG Zhi- yong	四川大学 Sichuan University	ALESSAN- DRA CARATTOLI	意大利高级卫生研究院抗越染、资生 虫和免疫研究所 ISTITUTO SUPERIORE DI SANITA'- MIPI
生物技术和医药 /Biotechnology & Medicine	基于化学蛋白组学反向虚拟筛选技术的海洋天然活性物质新靶标发现 Inverse virtual screening and chemical proteomics applied to the identification of novel biological targets for bioactive natural compounds isolated from Chinese marine organisms	张文 ZHANG Wen	中国人民解放军第二军 医大学 Second Military Medical University	Raffaele Riccio	意大利萨勒诺大学 Universita'di Salerno, Italy
信息通信技术 /ICT	面向智能城市的行动不便人群移动系统研究 Smart Personal Mobility Systems for Human Disabilities in Future Smart Cities	李文锋 LI Wenfeng	武汉理王大学 Wuhan University of Technology	古安卡 洛 法特 罗 Giancarlo Fortino	卡拉布里亚大学 University of Calabria
应用科学(包括 物理、化学、数 学等)/Applied sciences	强相互作用与电磁相互作用之间相角的实验研究 Experimental study of the phase between strong and electromagnetic interactions	王平 WANG Ping	中国科学院高能物理研究所 Institute of High Energy Physics	Marco Maggiora	意大利原子核研究 院 Istituto Nazionale di Fisica Nucleare

应川科学(包括 物理、化学、数 学等)/Applied sciences	星系团限定暗物质和暗能量的研究 Constraints on Dark Energy and Dark Matter from Clusters of Galaxies	王俊贤 WANG Junxian	中国科学技术大学 /University of Science and Technology of China	Lozzi Paolo	意大利国家 天体物 理研究院 INAL
生物技术和医药 /Blotechnology & Medicine	新型多靶点抗阿尔茨海默氏病药物的开发 Development of Novel Multi-targeted Anti- Alzheimer's Disease Drug	皮染标 PI Rongbiao	中山大学 Sun Yat-Sen University	Marco Macchia	比處大学 The University of Pisa
信息通信技术 /ICT	不平衡医学数据流的分类及其免疫识别应 用 Classifying Medical Data Streams with Skewed Distributions: Applications to Indi- rect ImmunoFluorescence Image Analysis	账记: ZHANG Chong- sheng	河南大学 Henan Univer- sity	Paolo SODA	罗马生物医学自由 大学 Università Campus Bio-Medico of Rome, Italy

Annex II

Significant research projects that are eligible for applying for the annual financial contribution of the Chinese funding within the frame of the Executive Programme for Scientific and Technological Cooperation between Italy and China for the years 2013-2015

Research Area	Project title	Chinese partner	Chinese Institute	Italian partner	Italian Institute
纳米技术和先进 材料 /Nanotechnology and Advanced Materials	农业纳米传感器及其先进材料合作研究 Smart sensor for agriculture based on Nanotechnology and Advanced Materials	李道亮 LI Daoliang	中国农业大学 China Ag- ricultural University	尼古 拉 相约 图 Nicola Donato	英西拿大学 University of Messina
纳米技术和先进 材料 /Nanotechnology and Advanced Materials	复合纺粘纺丝、水刺超细长纤非织造材料 关键技术联合研发 Joint Research and De- velopment on the Key Technologies of Bi- component Spunbond Spunlaced Nonwov- ens with Microfilaments	韩建 HAN Jian	浙江理工大学 Zhejlang Sci-Tech University	Solitario Nesti	Next technology Tecnotessile
纳米技术和先进 材料 /Nanotechnology and Advanced Materials	工业金属表面复合陶瓷涂料联合研发 Sino-Italy Co-research on INDUSTRIAL WET DEPOSITION PROCESS OF COMPOSITE CERAMIC FILMS ON METAL SURFACES	焦亚小 JIAO Yaping	河北漆麟涂料股份有限 公司 He Bel QiLin Paint Co., Ltd	Paolo Gronchi	米兰理工大学,化 学材料工程系 Dept. Of Chemist ry, Mate- rial and Engineer ing Chemistry
能源和环境 /Energy and En- vironment	煤基过程工业的基于数据的智能优化控制 技术 Data-based modeling, control and op- timization of Complex Industrial Processes: the coal plant case	赵冬斌 ZHAO Dongbin	中国科学院自动化研究 所 Institute of Automa- tion, Chinese Academy of Sciences	Ce- sare ALIP PI	米兰理工大学 Politecnico Di Milano
能源和环境 /Energy and En- vironment	供水管网漏失控制与节能技术研究与应用 Energy saving and leakage control in water distribution networks: development of a decision support system	刘书明 Shuming Liu	消华大学 Tsinghua University	Orazio Giustolisi	Technical University of Bari
生物技术和医药 /Biotechnology & Medicine	应用现代生物技术提升中国谷物酯品质与产率的合作研究 Cooperative Research on Improving Quality and Quantity of Chinese Cereal Vinegars by Modern Biological Biology	陈福生 CHEN Fu- sheng	华中农业大学 Huazhong Agricultural University	Paolo Giudici	摩德纳•勒佐内艾米 利亚大学 University of Modena and Reg- gio Emilia

生物技术和医药 /Biotechnology & Medicine	基于脑/肌电的中风康复及其神经预测系统 Rehabilitation and neural predictor for stroke patients by using advanced EEG and EMG technologies.	孔刀川 KONG Wanzeng	杭州电子科技大学 Hangzhou Dianzi Univer- sity	Fabio Babiloni	要り大学 University of Rome Saplenza
生物技术和医药 /Blotechnology & Medicine	中意微小型关节置换机器人系统合作研究 Cooperative Research of Minimized Joint Replacement Robotic System between China and Italian	初為 HU Lei	北京天智航医疗科技股份有限公司 / Beijing TINAVI Me dical Tech. Co.Ltd	Maurilio Marcacci	Rizzoli 十科研究所 Istituto Ortopedico Rizzoli
文化遗产保护应 川技术 /Technologies Applied to Cul- tural Heritage	中意合作历史建筑修复技术信息平台研究 China-Italy cooperative Research on the in- formation platform for restoration of his- torical buildings	张顺 ZHANG Qi	天津大学建筑学院 The School of Architecture, Tianjin University	Mauri- zio Nicole Ila	Department of Ur- ban and Regional Planning , University of Naples
伯息通信技术 /ICT	基于非人灵长类动物的双向脑机接口及智能机械手闭环控制 Closed-looped Control of Dexterous Artificial Hand Using Bidirectional Brain-Machine Interfaces on Non-human Primates	吳朝暉 WU Zhaohui	浙江大学 Zhejiang University	CAR- ROZZA, M arla Chiara	圣安娜高等研究大学 Scuola Superlore Sant'Anna (SSSA)
信息通信技术 /ICT	面向智慧区域和地理决策的知识云平台开发与应用 Knowledge cloud for smart territories and geographical decision: development and applications	陈录成 CHEN Chong- cheng	福州大学福建省空间信息工程研究中心 Spatial Information Research Centre of Fulian, Fuzhou University	多米尼哥. 泰勒 Domenico Talia	意大利卡拉布UN 大学电子, 信息与 系统系 Department of Electronics, in- formatics and Sys- tems (DEIS), Univer- sity of Calabria

Annex III

Significant research projects that are eligible for applying for the financial contribution given by the Italian Party within the frame of the Executive Programme for Scientific and Technological Cooperation between Italy and China for the years 2013-2015

Research Area	Project title	Chinese partner	Chinese Institute	Italian partner	Italian Institute
应用科学(包括 物理、化学、数 学等)/Applied sciences	用于带电粒子径迹探测的模拟读出网筒 GEM 探测器模型的建造 Construction of a cylindrical-shaped prototype of charged track detector employing the GEM technique with analog readout	欧阳群 OUYANG Qun	中国科学院高能物理研究所 Institute of high energy physics, Chinese Academy of Sciences	Alessan- dro Calca terra	意大利国家核物理研究院 (INFN) Frascati 国家实验室 Frascati National Laborato- ries of the INFN (National Institute for Nuclear Physics)
生物技术和医药 /Biotechnology & Medicine	基于脑/肌电的中风康复及其神经预测系统 Rehabilitation and neural predictor for stroke patients by using advanced EEG and EMG technologies.	孔万增 KONG Wanzeng	杭州电子科技大学 Hangzhou Dianzl Univer- sity	Fabio Babiloni	罗马大学 University of Rome Saplenza
生物技术和医药 /Biotechnology & Medicine	药物非晶化途径与稳定性研究 Studies of amorphization and stability of pharmaceuti- cal materials	王利民 WANG Limin	燕山大学 Yanshan Uni- versity	Simone C apaccioli	比萨大学 Pisa Uni- versity
能源和环境 /Energy and En- vironment	芦竹抗早基因的转录变异研究 Transcrip- tional variation of Drought resistanc e genes in Arundinaceae (TraDA)	梁艳春 Liang Yan- chun	吉林大学 Jilin University	Claudio Va- rotto	Ed- mund Mach Fou ndation
信息通信技术 /ICT	基于多小区协作 MIMO 系统的干扰协调 技术 Interfer- ence Coordination Techniques for M ulti-cell Cooperative MIMO Systems	葛晓虎 GE Xiaohu	华中科大 Huazhong University of Science and Tech nology	Profes- sor Miche le Zorzi	Univer- sity of Padova
纳米技术和先进 材料 /Nanotechnology	轻质结构先进三明治材料 Advanced sandwich materials for lightweight struc- tures	吳承伟 WU Chengwei	大连理工大学 Dalian University of Technology	Vin- cenzo CR UPI	密四纳大学 University of Messina

纳米技术和先进 材料 /Nanotechnology	去除废水中重金属离子新型纳米材料的研究 Innovative nanostructured materials for heavy metals removal from wastewater	朱什尔 ZHU Wei- dong	新江 <u>斯</u> 諾大学 Zhejiang Normal University	弗朗西斯 科 佩佩 Fran c es c o Pepe	藤尾輿 大学 Universitd del San- nio
空间和航天 /Space and Aeronautics	电磁卫星电场及高能粒子探测技术合作研究 The Technical cooperation on EFD and HEPD of CSES Project	注:"纯料 WANG Lanwei	中国地震海地震液力研 窄所 Insti- tute of Crustal and dynamics, CEA	罗伯托• 巴蒂伊通 Roberto Battiston	佩鲁男大学 University of Perugia
空间和航天 /Space and Aeronautics	基于表面等离子体激元的光学滤波技术研究 Plasmonics for optical filtering	易葵 YI Kui	上海光学精密机械研究 所 Shanghal Institute of Optics and Fine Mechan- ics	安娜·萨耳 科娃 Anna. Sytchkova	巨優村長東紀朝 9건년 (本) C.E.R. Cassacia
文化遗产保护应 用技术 /Technologies Applied to Cul- tural Heritage	基于对地观测的中意文化遗产地智能管理 与试点应用研究 Smart management of cultural heritage sites in Italy and China: Earth Observation and pilot pro- jects	隊常龙 CHEN Fu- long	中国科学院对地观测与 数字地球科学中心 Centre for Earth Observa- tion and Digital Earth, Chinese Academy of Sci- ences	NI- cola Masi ni	考占和占建筑研究 所,意大利国家研 究委员会 CNR-IBAM (National research Council, Institute for Archaeological and Architectural Heri- tage)

ANNEX IV

GENERAL ADMINISTRATIVE AND FINANCIAL PROVISIONS

All projects which may be financed, namely the projects for Exchange of Researchers and the projects of Particular Relevance, within the present Programme are listed respectively in Annex I to III.

All initiatives foreseen in this Executive Programme will be carried out within the limits of the budgets and according to the rules prevailing in each Country. The general administrative and financial provisions of each Country are listed below:

FINANCIAL PROVISIONS OF THE ITALIAN SIDE:

PROJECTS UNDER ARTICLE 2.1 - PROJECTS FOR THE EXCHANGE OF RESEARCHERS

For each project for Exchange of Researchers selected and listed in Annex II, 1 short-term stay (up to 10 days) or 1 long-term stay (30 days) in Italy and 1 short-term stay (up to 10 days) or 1 long-term stay (30 days) in China may be financed yearly within the limits of the available annual resources of each Party.

The researchers will be entitled to the exchange only if they hold the Italian nationality (or any EU nationality and resident in Italy) for those who travel to China, and the Chinese nationality for those who travel to Italy.

The costs of accommodation and living shall be covered by the receiving Party, while the costs of international travel up to the host institution shall be covered by the sending Party.

The receiving Party shall provide medical insurance coverage, on the basis of the rules in force in each Country, against work accidents and illnesses, excluding already existing and chronic diseases.

At the end of each year, within 31st January, the Italian coordinator has to submit a report on the progress of his/her project to the Ministry of Foreign Affairs. The report must be sent in pdf. format and signed both by the Italian and the Chinese coordinators. Funding for the next year will not be granted if the coordinator fail to submit the progress report. The Italian coordinator has to submit the reports to the Italian Ministry of Foreign Affairs: DGSP.UST2@esteri.it

Within 15 days after finishing their visit, the Chinese researchers have to submit the report to MoST. The report must be signed by both the Italian and the Chinese visiting researcher and the hosting project-coordinator involved in the joint research project.

VISIT OF CHINESE RESEARCHERS TRAVELLING TO ITALY

International travel expenses to researchers holding Chinese nationality shall be settled according to financial provisions of the Chinese side, as elaborated below.

The supplied tickets will be the most economical ones available for the trip, economy class (2nd class) flight/train/ride. Any additional cost shall be borne by the researchers.

STAY OF CHINESE RESEARCHERS IN ITALY

The date of the visit (both for long and short terms) should be agreed between the visiting researchers and the host Italian coordinator.

Chinese researchers may obtain the authorization for the visit from the Italian Ministry of Foreign Affairs (MAE) only by submitting application form online at this url:

http://web.esteri.it/ricercatori/default.asp .

An invitation letter from the host Italian Institution, signed by the Italian Coordinator, must be uploaded to the online application. The Italian Ministry of Foreign Affairs, after checking the application for accuracy, if covering funds are available, will authorize the visit and pay for the visit allowance; the Italian Ministry of Foreign Affairs will inform the Italian Embassy in Beijing, the Chinese researcher and the Italian project coordinator. The application must be submitted at least two months before the scheduled date of the visit. The letter of grant from the Italian Ministry of Foreign Affairs can be used for obtaining the Italian visa.

Details of the above mentioned rules and the online application are available on the web site of the Ministry of Foreign Affairs:

http://www.esteri.it/MAE/EN/Politica_Estera/CooperScientificaTecnologica/ProgrammiEsecutivi/MobilitaRicercatori/MobilitRicercatoriStranieri.htm?LANG=EN

Any cancellation of the visit by the researcher, unless due to serious and valid reasons, might prevent the hosting Party from accepting further applications for subsequent missions.

The Italian Party will finance, yearly, for each project listed in Annex II, 1 short-term stay (up to 10 days) or 1 long-term stay (30 days).

The Italian Party shall provide 1300,00 Euro per month for long-term stays (30 days) and 93,00 Euro per day for short-term stays (up to 10 days). The above-mentioned amounts shall be paid to the Chinese researchers entirely in one instalment at their arrival in Italy.

Chinese researchers will receive their grants at the nearest Provincial Treasury (local branch of the Banca d'Italia).

VISIT OF ITALIAN RESEARCHERS TRAVELLING TO CHINA

Italian researchers travelling to China for a research stay are required to submit the online application to the Unit for Scientific and Technological Cooperation – Directorate General for Country Promotion (Economy, Culture and Science) of the Italian Ministry of Foreign Affairs at this url: http://web.esteri.it/ricercatori/ricercatori/taliani/Start.asp.

Applications must be submitted to the Italian Ministry of Foreign Affairs no later than two months before the foreseen date of departure. Details of the above mentioned rules and the online application are available on the web site of the Ministry of Foreign Affairs:

http://www.esteri.it/MAE/IT/Politica Estera/CooperScientificaTecnologica/ProgrammiEsecutivi/MobilitaRicercatori/MobilitaRicercatoriltaliani.htm .

The Italian Party will pay the international travel expenses to researchers holding Italian nationality (or any EU nationality and resident in Italy).

The supplied tickets will be the most economical ones available for the trip. Any additional cost shall be borne by the researcher.

STAY OF ITALIAN RESEARCHERS IN CHINA

Annual finance for each project of exchange of researchers, 1 short-term stay (up to 10 days) or 1 long-term stay (30 days), shall be settled according to financial provisions of the Chinese side, as elaborated below.

PROJECTS UNDER ARTICLE 2.2 - JOINT RESEARCH PROJECTS OF PARTICULAR RELEVANCE

The Joint Research Projects of Particular Relevance selected and listed in Annex III constitute a short-list of projects entitled to apply for funding in accordance with the specific call for proposals annually issued by the Unit for Scientific and Technological Cooperation, Directorate General for Country Promotion (Economy, Culture and Science) of the Italian Ministry of Foreign Affairs. The call for proposals is annually published for the relative financial year. Details on the call for proposals (in compliance with Law 401/90) will be available, in due time, at the following link: http://www.esteri.it/mae/it/politica estera/CooperScientificaTecnologica/AvvisiIncaricoBandi.htm

FINANCIAL PROVISIONS OF THE CHINESE SIDE:

PROJECTS UNDER ARTICLE 2.1 - PROJECTS FOR THE EXCHANGE OF RESEARCHERS

All projects listed in Annex I shall be short-listed for the application of funding from the Chinese International Science and Technology Cooperation Programme (ISTCP), which is the national funding source of International S&T cooperation. According to the regulations of ISTCP, in order to support personnel exchanges, joint researches extended from personnel exchanges are necessary component for the Chinese applications. This shall be made clear to all Chinese applicants.

For successful project applications, funding of ISTCP would cover both exchanges of researchers and joint researches.

PROJECTS UNDER ARTICLE 2.2 - JOINT RESEARCH PROJECTS OF PARTICULAR RELEVANCE

All projects listed in Annex II shall be short-listed for the application of funding from the Chinese International Science and Technology Cooperation Programme (ISTCP).

REPORTS ON THE PROJECT

15B Fuxing Road, Beijing China

The Chinese coordinators have to submit the reports to the European Division, Ministry of Science and Technology, according to the requirements of ISTCP.

The European Division

Department of International Cooperation

Ministry of Science and Technology