

VII EXECUTIVE PROGRAM OF COOPERATION IN THE FIELDS OF SCIENCE AND TECHNOLOGY
BETWEEN THE GOVERNMENT OF ITALY AND THE GOVERNMENT OF JAPAN FOR THE PERIOD FROM
2002 TO 2006

Materials and Nanotechnology	A
Earth Sciences	B
Information and Communication Technology	C
Robotics and Production Technology	D
Space	E
Life Science (Physics, Chemistry, Health Sciences, Agriculture, Biotechnology)	F

Area	Title of Project	Italian Partner	Japanese Partner
A Materials and Nanotechnology			
2A2	Surface analysis and nano-characterization of innovative materials by scanning probe microscopy techniques.	ALLEGRI Maria Dept. of Physics, University of Pisa, maria.allegri@df.unipi.it	MICHELETTO Ruggero Dept. of Material Chemistry, Kyoto University ruggero@mc.kyoto-u.ac.jp
4A4	Bond-slip relationship of fiber reinforcement in concrete	CHIAIA Bernardino M. Dept. of Structural and Geotechnical Engineering, Polytechnic of Turin, chiaia@polito.it	MIHASHI Hirozo Dept. of Architecture and Building Science, School of Engineering, Tohoku University mihashi@timos.str.archi.tohoku.ac.jp
5A5	Laser pump and x-ray probe to study the advanced materials with novel electronic properties: case of complex oxides with interplay of charge, lattice and spin degrees of freedom	BIANCONI Antonio INFN- Dept. of Physics, University of Rome "La Sapienza" antonio.bianconi@roma1.infn.it	OYANAGI Hiroyuki National Institute of Advanced Industrial Science and Technology (AIST) h.oyanagi@aist.go.jp
6A6	Development of TiO ₂ -based nanocomposite photocatalysts for hydrogen generation and environmental protection.	COLUCCIA Salvatore Dept. of Inorganic, Physical and Material Chemistry, University of Turin, salvatore.coluccia@unito.it	ANPO Masakazu Dept. of Applied Chemistry, Graduate School of Engineering, Osaka Prefecture University anpo@chem.osakafu-u.ac.jp
7A7	Control of the Microstructure of Aluminum alloys through severe plastic deformation	EVANGELISTA Enrico INFN Research Unit of Ancona, c/o Dept. of Mechanics, University of Ancona, e.evangelista@unian.it	HORITA Zenji Dept. of Materials Science and Engineering, Engineering Faculty, Kyushu University horita@zaiko.kyushu-a.ac.jp
9A9	Rapid Sintering of NANOstructured Powder Materials	Giovanni Maizza Dept. of Materials Science, Polytechnic of Turin, maizza@polito.it	NODA Tetsuji Nanomaterials Laboratory, National Institute for Materials Science (NIMS) noda.tetsuji@nims.go.jp
10A10	Development of tools for the design of advanced structured polymeric materials with enhanced mass transport properties.	SARTI Giulio C. Dept. of Chemical Engineering and Environmental Technology, University of Bologna, giulio.sarti@mail.ing.unibo.it	TSUJITA Yoshiharu Dept. of Material Science and Engineering, Nagoya Institute of Technology tsujita@mse.nitech.ac.jp
11A11	Crystal optical fibers for laser and frequency-conversion applications	TONELLI Mauro INFN – Dept. of Physics University of Pisa tonelli@df.unipi.it	FUKUDA Tsuguo Institute of Multidisciplinary Research for Advanced Materials (IMRAM), Tohoku University t-fukuda@tagen.tohoku.ac.jp
B Earth Sciences			
12B1	Disturbances in vlf-lf radio signals related to seismic activity	BIAGI Pier Francesco Dept. of Physics, University of Bari, biagi@fisica.uniba.it	HAYAKAWA Masashi Dept. of Electronic Engineering, The University of Electro- Communications hayakawa@whistler.ee.uec.ac.jp

13B2	Seismic design methods for bridge foundations.	PAOLUCCI Roberto Dept. of Structural Engineering, Polytecnic of Milan, paolucci@stru.polimi.it	FUKUI Jiro Foundation Engineering Team, Public Works Research Institute fukui@pwri.go.jp matsui44@pwri.go.jp
14B3	Ground-based and satellite geophysical monitoring and modelling of seismotectonic structures.	LA PENNA Vincenzo Institute of Methodologies for Environmental Analysis, CNR, lapenna@imaa.cnr.it; lapenna@unibas.it	HAYAKAWA Masashi Dept. of Electronic Engineering, The University of Electro- Communications hayakawa@whistler.ee.uec.ac.jp
C Information and Communication Technology			
15C1	Quantum Information and Computation	PASCAZIO Saverio Dept. of Physics, University of Bari, saverio.pascasio@ba.infn.it	OHBA Ichiro Dept. of Physics Waseda University ohba@waseda.jp
16C2	Pattern Matching Methods and Tools for Discovery Science	APOSTOLICO Alberto Dept. of Electronics and Informatics, University of Padova, axa@dei.unipd.it	ARIKAWA Setsuo Dept. of Informatics, Kyushu University arikawa@i.kyushu-u.ac.jp
18C4	Gallium Nitride devices for applications in high-power high-frequency high-temperature telecommunication systems and for high efficiency lighting systems	ZANONI Enrico Dept. of Computer Science, University of Padova, zanoni@dei.unipd.it	UEDA Osamu Nano-electronic Material Research and Engineering Laboratory, FUJITSU LABORATORIES oueda@flab.fujitsu.co.jp
D Robotics and Production Technology			
E Space			
19E1	Magnetic field dynamics and particle acceleration in space plasmas	CALIFANO Francesco INFN- Dept. of Physics, University of Pisa, califano@arcetri.astro.it	SAKAI Jun-ichi Laboratory for Plasma Astrophysics, Faculty of Engineering, Toyama University sakaijun@eng.toyama-u.ac.jp
F Life Science (Physics, Chemistry, Health Sciences, Agriculture, Biotechnology)			
20F1	Anatomical and functional characteristics of the trapezium metacarpal joint. new staging concepts and importance of treatment for an effective prevention, functional improvement and return to the social-economic background.	PAJARDI Giorgio Plastic Surgery Institute, University of Milan, segreteria1.mano@multimedica.it	TOH Satoshi Dept. of Orthopaedic, Hirosaki University School of Medicine toh@cc.hirosaki-u.ac.jp
22F3	Strawberry fruit quality: genetic and physiological background	NERI Davide Dept. of Energetics, University of Ancona, Neri@unian.it	SUGIYAMA Nobuo Graduate School of Agricultural and Life Sciences, University of Tokyo anobuo@mail.ecc.u- tokyo.ac.jp
23F4	Study of the neuroendocrine mechanism that control the ovarian follicular development in bitch.	DE RENSIS Fabio Dept. of Animals Health, University of Parma, fderensi@ipruniv.cce.unipr.it	KAWAKAMI Eiichi Dept. of Reproduction, Nippon Veterinary and Animal Science reprod@annie.ne.jp
24F5	Co-operative research on the bioactivity of food components by means of a genomic approach with the mouse model: use of the complete cDNA library of the RIKEN to study changes in gene expression in cell cultures as effect of pure compounds and natural extracts and exploitation for toxico-genomics studies.	POLTRONIERI Palmiro CNR- ISPA- Lecce, palmiro.poltronieri@irba.le.cnr.it	CARNINCI Piero Genome Exploration Research Group, RIKEN Genomic Sciences Center carninci@postman.riken.go.jp
26F7 arrivato ritardo	Optimisation of automation technologies for dairy farming and development of innovative systems (biosensors) for monitoring the physiological and health conditions of the cows and the quality of the milk.	CATTANEO Marco Dept. of Veterinary Science and Technology for Food Safety University of Milan m.cattaneo@unimi.it	KOMIYA Michio Faculty of Dairy Science, Rakuno Gakuen University komiya@rakuno.ac.jp
27F8	Molecular mechanisms of plasticity of the cerebral cortex	PIZZORUSSO Tommaso Scuola Normale Superiore, Laboratorio di Neurobiologia, Pisa pizzorusso@in.pi.cnr.it	HENSCH Takao K. Laboratory for neuronal circuit development, RIKEN Brain Science Institute hensch@postman.riken.go.jp