

Department of Science & Technology
(International Cooperation Division)

Indo-Italian Projects selected under Indo-Italian POC in S&T 2008-2010- Announcement of Results on November 24,2008

List of the Joint Research Projects Selected in the framework of the Indo-Italian Programme of Scientific and Technological Co-operation for the years 2008-2010 by Department of Science & Technology (DST) ,Government of India & Ministry of Foreign Affairs (MAE),Government of Italy

PRIORITY RESEARCH AREAS	ABBREVIATIONS
Electronics, Telecommunications and Computer Sciences	ETCS
Health, Food and Biotechnology	HFB
Design Engineering and Technology	DET
Materials Science and Technology	MST
Physics, Technology and Application of Accelerated Particles	PhT
Transport Systems including Automotive Technologies	TS
Energy and Environment	EE
Cultural Heritage Conservation and Restoration Technologies	CHCRT

S. No	Research Area Code	Project Title	Italian Coordinator	Indian Coordinator
CHCRT - CULTURAL HERITAGE, CONSERVATION & RESTORATION TECHNOLOGIES (1)				
82	CHCRT 1	Microbiological analysis of biofilms on stone artefacts and their conservation by chemically and biologically synthesized nanomaterials	Piero BAGLIONI University of Florence CSGI-Department of Chemistry	Seema BHADAURIA Agra University Raja Balwant Singh College Department of Botany
DET - DESIGN ENGINEERING & TECHNOLOGIES (2)				
73	DET 1	Rock characterization for dimension stone cutting by diamond wire saw	Marilena CARDU Politecnico di Torino	V.M.S.R. MURTHY Indian School of Mines University Dhanbad
78	DET 2	Development of an efficient Parallel code for large-scale Radiation	Romano BORCHIPELLINI	Subhash C. MISHRA

		modelling (PARAD)	Politecnico di Torino Dipartimento di Energetica	Indian Institute of Technology Department of Mechanical Engineering Guwahati
EE - ENERGY & ENVIRONMENT (7)				
3	EE 1	Studies on doped ceria nanopowders for electrochemical energy applications	Paolo FORNASIERO University of Trieste Department of Chemistry	Gangavarapu RANGA RAO Indian Institute of Technology Department of Chemistry Chennai
4	EE 2	Effect of heavy metal pollution on soil functionality	Paolo NANNIPIERI Università di Firenze Dipartimento della Scienza del Suolo e Nutrizione della Pianta	Averti NAGARAJU S.V. University Department of Geology Tirupati
23	EE 3	Regional atmospheric environment and intercontinental transport of pollutants	Giovanna FINZI Università degli Studi di Brescia Facoltà di Ingegneria Dipartimento di Elettronica per l'Automazione	Gufran BEIG Indian Institute of Tropical Meteorology Pune
32	EE 4	Energy Planning using optimization methodology	Michele TROVATO Politecnico di Bari Department of Electrical and Electronic Engineering (DEE)	L. SUGANTHI Anna University Department of Management Studies Chennai
65	EE 5	Investigation on core annular flow-an energy efficient mode of transporting highly viscous oil	Pietro POESIO Università degli Studi di Brescia, Dipartimento di Ingegneria Meccanica	PrasantaKumar DAS Indian Institute of Technology Kharagpur
81	EE 6	Synthesis and characterization of hydrogenated nano-	Nicola PINTO University of Camerino	Sandesh R. JADKAR

		crystalline silicon (nc-Si:H) for solar cell fabrication	Department of Physics	University of Pune Department of Physics
94	EE 7	Neodeterministic seismic hazard assessment in Indian Megacities	Giuliano F. PANZA University of Trieste Department of Earth Sciences	Imtiyaz A. PARVEZ CSIR Centre for Mathematical Modelling and Computer Simulation (C-MMACS) Bangalore
HFB - HEALTH, FOOD & BIOTECHNOLOGY (7)				
5	HFB 1	Systemic pathogens of fruit tree crops in India: molecular investigation and development of control strategies	Marina BARBA CRA - Centro di Ricerca per la Patologia Vegetale Roma	Aijaz A. ZAIDI Institute of Himalayan Bioresource Technology Palampur
16	HFB 2	Protein-S-Homocysteinylathion as a biomarker in the vascular damage: analytical aspects and clinical evaluations	Ciriaco CARRU University of Sassari Department of Biomedical Sciences	Shantanu Sengupta Institute of Genomics and Integrative Biology New Delhi
35	HFB 3	Neuro-nanotechnology-quantum dot applications in invertebrate models	Dario SONETTI University of Modena and Reggio Emilia	Pradip Kumar KAR Jhargram Raj College Jhargram
54	HFB 4	To study the influence of self assembling nanofiber scaffolds in the cell growth and differentiation of human retinal progenitor/stem cells	Fabrizio GELAIN University of Milan Bicocca Department of Biosciences and Biotechnology	S. KRISHNAKUMAR Department of Ocular Pathology Vision Research Foundation Shankar Netralaya Chennai
86	HFB 5	Design synthesis and characterization of nanomaterials for use in imaging, drug delivery and therapy	Alvise BENEDETTI Università Ca' Foscari di Venezia Dipartimento di Chimica Fisica	B. JAGANNADH Indian Institute of Chemical Technology Hyderabad
60	HFB 6	Brain MRI studies of motor and behavioural function in health and disease, with particular emphasis on stroke	Marco FIGLIOLI University of Rome 'La Sapienza' Department of	Arun Kumar GUPTA Sree Chitra Tirunal Institute for Medical Sciences and

			Neurological Sciences	Technology Department of Imaging Sciences & Interventional Radiology Trivandrum
	HFB7	Structure – function studies on signalling proteins from the malaria parasite	Carlo PEDONE CRdC DFM Centro Regionale di Competenza in Diagnostica e Farmaceutica Molecolari Napoli	Amit Sharma ICGEB International Centre for Genetic Engineering and Biotechnology New Delhi
MST- MATERIAL SCIENCE & TECHNOLOGIES (4)				
26	MST 1	Natural fibre based hybrid yarns and their thermoplastic composites	Marta RINK Politecnico di Milano Dipartimento di Chimica, Materiali e Ingegneria Chimica "G. Natta"	R. ALAGIRUSAMY Indian Institute of Technology Department of Textile Technology Delhi
28	MST 2	Designing novel photosystems for enhanced charge transfer efficiency: a detailed theoretical modelling	Anna PAINELLI Università degli Studi di Parma	Swapan K PATI JNCASR Jawaharlal Nehru Centre for Advanced Scientific Research Bangalore
45	MST 3	Theoretical investigation of oxide supported metal nanoparticle catalysts	Stefano de GIRONCOLI SISSA Scuola Internazionale Superiore di Studi Avanzati Trieste	Shobhana NARASIMHAN JNCASR Jawaharlal Nehru Centre for Advanced Scientific Research Bangalore
85	MST 4	Innovative catalytic patterns for nanowire growth	Stefan HEUN NEST CNR-INFM Scuola Normale Superiore (SNS) Pisa	Giridhar U. KULKARNI JNCASR Jawaharlal Nehru Centre for

				Advanced Scientific Research Bangalore
PhT - PHYSICS, TECHNOLOGY & APPLICATION OF ACCELERATED PARTICLES (2)				
17	PhT 1	Applications of fast electrons and ions produced in ultrahigh intensity laser matter interactions	Alessandro GALASSI Università di Milano Bicocca Dipartimento di Fisica "G. Occhialini"	Ravindra Kumar G. TIFR Tata Institute of Fundamental Research Mumbai
72	PhT 2	Study of exotic nuclei far away from stability by means of high intensity ion beams	Giacomo de ANGELIS INFN-Laboratori Nazionali di Legnaro	Sudeb BHATTACHARY A Saha Institute for Nuclear Physics Kolkata

List of the **Significant Bilateral Projects Selected** in the framework of the Indo-Italian Programme of Scientific and Technological Co-operation for the years 2008-2010 by Department of Science & Technology (DST) ,Government of India & Ministry of Foreign Affairs (MAE),Government of Italy

S. No	Research Area Code	Project Title	Italian Coordinator	Indian Coordinator
MATERIAL SCIENCE & TECHNOLOGIES				
59	MST 2	Spintronic devices for mass-scale electronics	Roberto CINGOLANI National Nanotechnology Laboratory of CNR-INFM Distretto Tecnologico di Lecce	Dipankar DAS SARMA Centre for Advanced Materials Indian Association for Cultivation of Science Jadavpur Kolkata
PHYSICS, TECHNOLOGY & APPLICATION OF ACCELERATED PARTICLES				
89	PhT 1	Collaboration in the field of accelerator technology & application between Sincrotrone S.C.p.A. and Indian Institutions identified by Department of Science & Technology Government of India	Giorgio PAOLUCCI Sincrotrone Trieste S.C.p.A. Trieste	Dipankar DAS SARMA Centre for Advanced Materials Indian Association for Cultivation of Science Kolkata
ENERGY & ENVIRONMENT				
39	EE	Development of Novel Antioxidant Drugs	Luciano SASO Dept. of Human Physiology and Pharmacology "Vittorio Erspamer", Sapienza University of Rome	Dr. Ashok K. PRASAD Deptt. of Chemistry, University of Delhi
ELECTRONICS, TELECOMMUNICATIONS & COMPUTER SCIENCES				
DST ITP AR Phase II	ET&CS	ITPAR – India-Trento Program for advanced research – Phase II	Riccardo ZANDONINI Faculty of Engineering, University of Trento	Kota HARINAYANA National Aerospace Laboratories, Bangalore

List of the on-going projects from Executive Program 2005-2007 agreed to be carried forward to 2008-2010 Indo-Italian Executive Program of Cooperation in Science & Technology by Department of Science & Technology (DST) ,Government of India & Ministry of Foreign Affairs (MAE),Government of Italy

S. No	Research Area Code	Project Title	Italian Coordinator	Indian Coordinator
ELECTRONICS & ROBOTICS				
11	ER	Enabling technologies for the design and implementation of next generation optical internet prototype based on optical packet switching	Giancarlo PRATI Scuola Superiore Sant' Anna di Studi Universitari e Perfezionamento, Pisa	R. GANGOPADHYAY IIT Kharagpur
MATERIALS SCIENCE & TECHNOLOGY				
35	MST	Spectroscopic investigations of dip-pen nanolithography patterns	Stefan HEUN TASC National Laboratory, National Institute for Physics of Matter, Basovizza	CNR RAO JNCASR Bangalore
39	MST	Effect of local environment on catalytic activity	Stefano DE GIRONCOLI Scuola Internazionale Superiore Studi Avanzati(SISSA) Trieste	S. NARASIMHAN JNCASR Bangalore

