



FP7 Info Day on Green Energy

Overview of FP7 and How to Submit FP7 Proposal

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7th Framework Programme for Research and Technological Development



FP7 is a key tool

- to respond to Europe's needs in terms of jobs and competitiveness, and
- to maintain leadership in the global knowledge economy.
- Funding for research in Europe and Beyond (emphasis on India and China in this part of world)

National Contact Points

CSIR, DST, DBT

www.cordis.europa.eu/fp7/get-support_en.html





Who can participate in FP7

Participation in FP7 is open to a wide range of organisations and individuals:

- research groups at universities or research institutes
- *companies intending to innovate*
- *small or medium-sized enterprises (SMEs)*
- *SME associations or groupings*
- *public or governmental administration (local, regional or national)*
- *early-stage researchers (postgraduate students)*
- *experienced researchers*
- *institutions running research infrastructures of transnational*
- Interest
- *organisations and researchers from third countries*
- *international organisations*
- *civil society organisations*





Structure of FP7



- Co-operation
- Ideas
- People
- Capacities
- Nuclear Research





Themes under 'Co-operation'



- Health
- *Food, agriculture and fisheries, and biotechnology*
- *Information and communication technologies*
- *Nanosciences, nanotechnologies, materials and new production technologies*
- *Energy*
- *Environment (including climate change)*
- *Transport (including aeronautics)*
- *Socio-economic sciences and the humanities*
- *Space*
- *Security*





Opportunities under 'People'



- Initial training of researchers - Marie Curie Networks
- *Industry-academia partnerships*
- *Co-funding of regional, national and international mobility programmes*
- *Intra-European fellowships*
- *International dimension - outgoing and **incoming** fellowships,*
- international cooperation scheme, reintegration grants
- *Marie Curie Awards*





Steps in Project Submission and evaluation



- Call for proposal (thematic)
- Formulation of consortium
- Formulation of consortium and co-ordination agreement
- Joint evaluations
- Short listing
- Negotiations
- Letter of award





FP7 Format-A



- **PART –A**

- The project summary
- The list of beneficiaries
- Work plan tables – detailed implementation
 - List of work packages
 - List of deliverables
 - Work package descriptions
 - List of Milestones
 - Tentative schedule of project reviews
 - Project efforts (in person months) by beneficiary per work packages
 - Project efforts by activity type per beneficiary





FP7 Format-B



Part – B

- Scientific and/or technical quality, relevant to the topics addressed by the call
 - Concept and objectives
 - Progress beyond the stat-of-the-art
 - S/T methodology and associated work plan
 - Overall strategy of the work plan
 - Timing of the different WPs and their components Gantt chart
 - Detailed work description broken down into work packages
 - Graphical presentation of the components showing their interdependencies
 - Describe any significant risks, and associated contingency plans

- Implementation
 - Management structure and procedures
 - Individual participants
 - Consortium as a whole
 - Resources to be committed

- Impact
 - Expected impacts listed in the work programme
 - Dissemination and/or exploitation of project results, and management of intellectual property

- Ethical Issues
- Gender aspects in the consortium

Stringent evaluation
criteria: 12/15
With minimum marks
specified in each
criteris





Description of Work Packages

- Organization of work packages
 - Division of project to work packages
 - Brief theme of the work packages
 - Description of work packages

Work Package No.	WP - I				Start - End Dates			Month 1 to 36		
Work Package Title										
Activity Type										
Participants	CM1	CM2	CM3	CM ₄	CM5	CM6	CG1	NA1	IM1	
Number of Scientists	03	02	04	03	02	02	02	01	03	
<u>Objectives:</u>										
1. _____										
2. _____										
<u>Description of work :</u>										
1. Task 1.1: _____										
2. Task 1.2: _____										
<u>Deliverables:</u>										
-										





2008 India-European Commission Coordinated (Joint) Call for Proposal in
Computational Material Science

Interaction Meeting of Indian Co-ordinators

“Advanced Materials as CO₂ Removers:
A Computational Study of CO₂ Sorption
Thermodynamics and Kinetics”

AMCOS





Project Partners



Indian

- National Environmental Engineering Research Institute, Nagpur, India
- Institute of Chemical Technology, Mumbai, India
- Indian Institute of Technology-Madras, Chennai, India
- Indian Institute of Chemical Technology, Hyderabad, India

EU

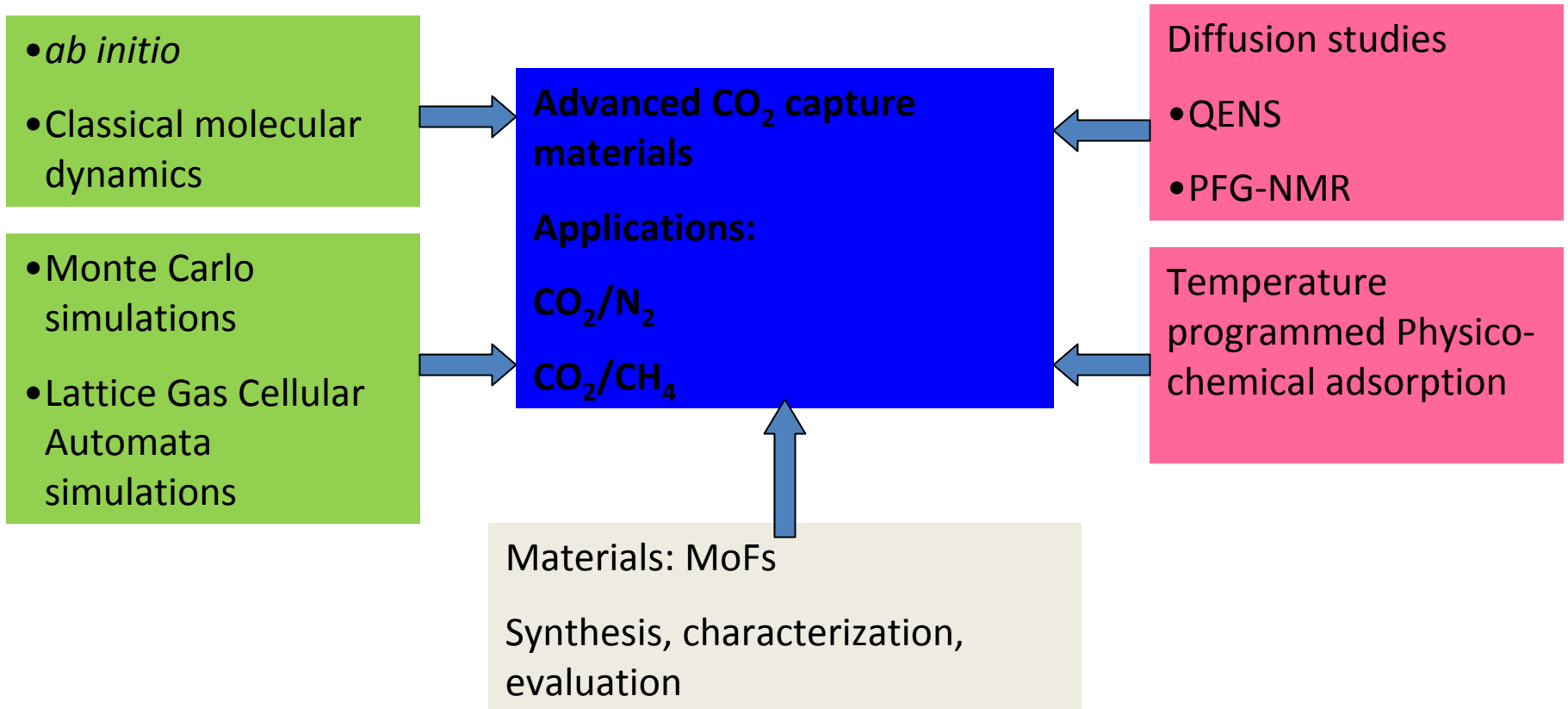
- National Technical University of Athens, Athens, Greece
- Institut de recherches sur la catalyse et l'environnement de Lyon CNRS-Université de Lyon, Lyon, France
- Leipzig University, Leipzig, Germany
- University of Sassari, Italy



AMCOS Project

Wide scale

atomistic (Monte Carlo, *ab initio* and equilibrium and non-equilibrium Molecular Dynamics) and mesoscopic level (Kinetic Monte Carlo and Lattice Gas Cellular Automata)



A balanced theoretical and experimental approach

Work Packages

Work Package No.	Work Package Title	Type of Activity	Lead Beneficiary No.	Person-months	Start month	End month
WP1	Molecular modeling tools for nanoporous materials - Solids builder algorithms	RTD Computational & Experimental	1 & 5	40	Start of the project	12 th month of the project
WP2	Adsorption prediction, validation and screening	RTD Computational & Experimental	2 & 3	42	13 th month of the project	24 th month of the project
WP3	Diffusion / Hydrocarbon co-adsorption prediction	RTD Computational & Experimental	1, 4, & 5	42	25 th month of the project	36 th month of the project
	Total			124 Person Months		36 months

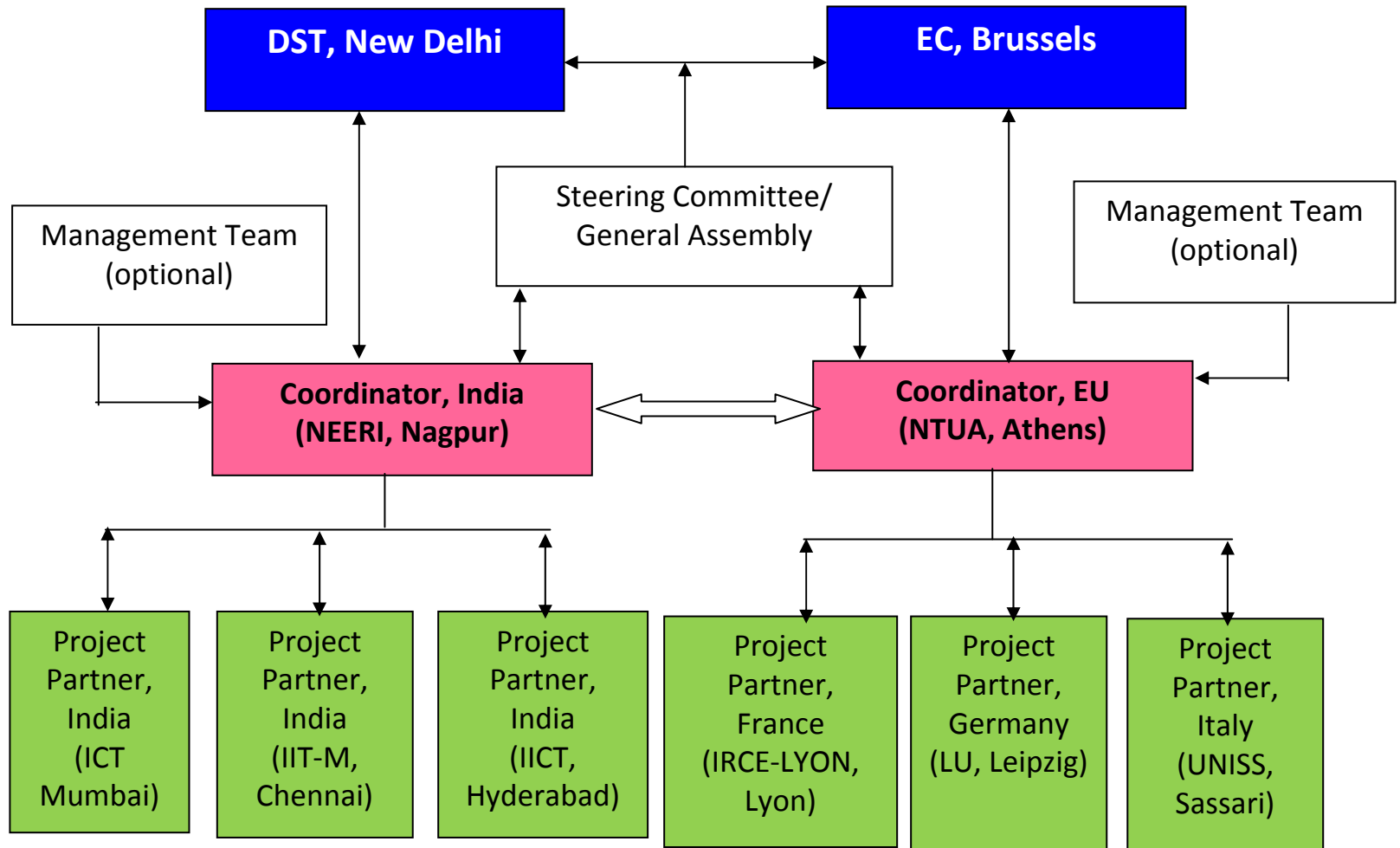
Deliverables: WP1

Del. No.	Deliverable Name	WP No.	Lead beneficiary	Estimated indicative person-months	Nature*	Dissemination Level**	Delivery Date
1	Code for atomistic / particle-based reconstruction of nanoporous media	WP1	1 (NTUA)	NTUA – 5	O	RE	8-12 Project month
2	Codes for static/dynamical ab initio calculations, and development of optimization algorithms for force field parameterization	WP1	4 & 8 (UNISS, IICT)	UNISS-6 IICT-6	O	CO	15-18 Project month
3	Synthesis of materials for preliminary QENS studies and physico-chemical characterization	WP1	5, 6 & 7 (NEERI, ICT, IITM)	NEERI-6 ICT-6 IITM-6	O	RE	5-6 Project month
4	Neutron scattering data on various materials under this study and PFG-NMR data generation	WP1	2 & 3 (IRCE-LYON, LU)	IRCE-LYON-3 LU-3	R	RE	6-10 Project month
5	3 publications in journals	WP1	All	All-0.5 each	O	PU	12 Project month

*Nature of deliverable using one of the following codes: R=Report P= Prototype D= Demonstrator O= Others

** Dissemination Level to be indicated using one of the following codes: PU=Public; PP= Restricted to other program participants; RE= Restricted to a group specified by the consortium; CO= Confidential, only to the members of the consortium

Management Structure



Milestones

Milestone number	Milestone name	Work Package(s) involved	Expected date	Means of verification
MS1	Synthesis of initial compositions of MoF	WP1	6 months from the start	A report from NEERI, ICT
MS2	Development of codes for atomistic/ particle based reconstruction of nano-porous media	WP1	12 months from the start	Availability of code to the consortium and a report on the same
MS3	First Interim Report	WP1	13 months from start	Report submission to DST and EC
MS4	Development of codes for static/dynamical ab initio calculations	WP1	12-18 months from the start	Availability of code to the consortium and a report on the same
MS5	Prediction of single component adsorption by various modeling methods	WP2	18 months from the start	Report on predicted adsorption studies
MS6	Obtaining neutron scattering and PFG-NMR data	WP2	18 months from the start	Report on QENS and PFG-NMR



Proposed schedule of project reviews

Review no.	Tentative timing, i.e. after month X = end of a reporting period #	<i>planned venue of review</i>
1	After project month: 12	NEERI
2	After project month: 24	NUTA
3	After project month: 35	NEERI/ ICT

Month after which the review will take place. Month 1 marking the start date of the project, and all dates being relative to this start date.



IP Protection and Dissemination

Background IP

Indian Partners

- NEERI: Holds IP related to similar materials however proposed materials are distinctly different and IP will not be carried to the project
- IICT, ICT, IIT-M: will not bring any background IP to project

EU Partners

- Background IP to Project: NIL

Foreground IP

- Foreground : Property of the party developing the same
- Foreground jointly developed: Joint property
- Transfer of FG: Free transfer for the use in the project to all partners in India and EU, vis-a-versa
- Transfer to third party: By the party owning the FG. In case of joint ownership with mutual consent and after payment of fair compensation

IP related to development of materials will be with Indian partners,

IP related to software development for classical molecular dynamics with IICT



Summary



- FP7 promotes India-EU collaborative projects
- Important aspects are value added collaborations with aim to create critical mass in the research area
- Project preparation, submission and evaluation is well defined elaborative process





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