Partner Search Form

1. Project Proposal Information

Project Proposal Title	[POLLUTANT EMISSIONS REDUCTION OF IWT VESSELS ON DANUBE CORRIDOR
Project Proposal Acronym	IDA
Keywords	emission reduction, IWT vessels, nautical engineering
Abstract (Max. 2000 words)	The project proposal is focused on the issues regarding the pollutant emissions released from inland waterways vessels. Previous researches have consisted in developing of an experimental methodology to asses the influence of the naval engines in terms of air pollution. The research aimed to develop some math models, methods and technologies for the monitoring of the pollution effects on ships to propose normatives in the interference transport-environment field. It have been proposed numerical schemes, their implementation in a demonstrative platform, dedicated to the issues regarding the environment quality and their impact on the populous areas. The plaform developed allowed a comparative analysis between the simulation results and measurement results. The project is intended to develop new nanostructured composites materials for catalyst and filter system which could be implemented on board. The main objectives of the project will be: Objective 1: Study of pollutant emissions from inland waterways vessels Expected results: - acquiring information gained from previous research projects, creating a database and filling it with the emissions recorded from of ships that navigate on IWT - identifying at least three common criteria regarding pollutant emissions for stable engine operating regimes on board aiming a substantial reduction - Mathematical modeling and simulation of pollutant emission levels issued for special operating regimes of ships' engines in IWT sectors Objective 2: Research the influence of pollutant emissions of IWT vessels on the environment Expected results: - Experimental study of the influence of toxic emissions on the ecosystem in areas with low dissipation typically for IWT

Partner Search Form

	- Experimental study of the influence of contaminant particles released on the ecosystem Objective 3: Designing of some filtering and catalyst systems for the engines pollutant emissions of the IWT ships Expected results: - The research of the influence of the auxiliary microwave heating system under the catalyzing processes - The elaboration of the nanostructured ceramic composites materials for catalyst production - The research of the particles from pollutant emissions - The designing of the catalyst systems for the IWT ships - The designing of the filtering systems for the IWT ships - The mathematical modelling and simulation of the catalyzing systems - The mathematical modelling and simulation of the filtering systems
Project Description (Main Work Packages)	WP1 - Project Management WP2 - Research and Design of Nanostructured Catalysts and Filters WP3 - Environment Issues WP4 - Mathematical Modelling and Simulation WP5 - Communication and Dissemination
Current Consortium (Partners, Organisation Types)	-
Deadline for Responses	until the consortium is created

2. Profile of the Partners Sought

Organisation Type	education and research entities, SME's
Required Skills and Expertise	- Expertise in environment protection along the Danube corridor - Expertise in ship design - Expertise in ship engines - Expertise in mathematical modelling and simulation
Role in the project	Partner or Lead Partner
Other Requirements	-

Partner Search Form

3. Project Proposer Information

Name of the Organisation	UNIVERSITY OF CRAIOVA
Organisation Type	EDUCATION AND RESEARCH ENTITY
Country	ROMANIA
Fields of Activity	NAUTICAL ENGINEERING, MECHANICAL ENGINEERING
Contact Person	Prof. Gabriel BENGA, PhD
Position in the Organisation	VICE DEAN
Tel	0040723510286
Email	gabriel.benga@imst.ro gabrielbenga@yahoo.com
URL	http://www.imst.ro
Previous FP Projects Participated	FP 7 project: PLATFORM FOR THE IMPLEMENTATION OF NAIADES - PLATINA FP 6 project: IMPROVING THE UNDERSTANDING OF THE IMPACT OF NANOPARTICLES ON HUMAN HEALTH AND ENVIRONMENT - IMPART SEE project: COOPERATION-NETWORK FOR LOGISTICS AND NAUTICAL EDUCATION FOCUSING ON INLAND WATERWAY TRANSPORT IN THE DANUBE CORRIDOR SUPPORTED BY INNOVATIVE SOLUTION - NELI

Please send filled in form by 25. 3. 2011 to: fg.tec@uni-mb.si