PARTNER SEARCH FORM

DATE: **10 December 2010**
PROJECT INFORMATION
TITLE: Black Sea water naturalization by hydrogen sulphide extraction **ACRONYM:** BlaSeWaNat
SUMMARY: One presents a special method and installation to extract the hydrogen sulphide, dissolved in the Black Sea deep waters, eliminating the eruptive phenomenon due to the gas bubbles in expansion.
KEYWORDS*: Black Sea water naturalization. Hydrogen sulphide extraction. Environment protection.
CALL: BS-ERA.NET 2010
NAME(S) of the PARTNER(S) INVOLVED: - Polytechnic University of Bucharest, Power Engineering Faculty, Hydraulics, Hydraulic Machines and Environment Engineering Department, - National Institute for Research, Development and Innovation in Electrotechnics – ICPE-Advanced Researches, Bucharest, - Maritime University of Constanta, Electro-Mechanics Faculty, Ship Mechanics Engineering Department, - Romanian Research and Development Institute for Gas Turbines – COMOTI, Bucharest.
SCIENTIFIC AND TECHNOLOGICAL EXPERTISE OFFERED*: - Patented method and installation to extract the hydrogen sulphide, eliminating the eruptive phenomenon of gas bubbles in expansion in the vertical pipeline, - Diverse calculations afferent to different parts of this installation as: the accelerated motion of the water in the vertical pipeline by vacuum, the designs of the air ventilator and hydrogen sulphide turbo expanders for the energy production, - Experimental determination of the bubble lift velocity on a special laboratory installation.
PARTNER SOUGHT
SCIENTIFIC AND TECHNOLOGICAL EXPERTISE REQUESTED: We need a chemical study concerning the transformation of hydrogen sulphide in other utile products, for instance the extraction of Deuterium for the future fusion reaction. We need also the following constructions: - a special ship with an interior space at atmospheric pressure, having the constant water level, to reduce the vertical movement caused by the waves, where we can locate our installation, - our installation construction with a vertical pipeline at least 500 meters.
EXPECTED CONTRIBUTION TO THE PROJECT: - the installation design for a vertical pipeline length of 500, 1000, 1500 and 2000 meters
ORGANISATION TYPE*: ☐ Higher Education x Research Institute ☐ R&D Company x SME ☐ Other

HOW MANY PARTNERS ARE REQUIRED? From three countries around the Black Sea and other countries from Europe
CONTACT PERSON
NAME* : Mircea Dimitrie CAZACU
TELEPHONE* : +4021-402.92.96 +4021- 665.21.38
FAX: +4021-402.98.65
E-MAIL*: cazacumircea@yahoo.com
INSTITUTION*: Polytechnic University of Bucharest
ADDRESS*: 313 Splaiul Independentei, Bucuresti 060042, sector 6
COUNTRY* : Romania

*** mandatory fields**