BLUESHIP

ELECTROSPUN FUNCTIONALIZED NANO-MATERIALS FOR ULTRA-COMPACT DE-NO_X SCR SYSTEM IN NAVAL SHIPPING

Kick-off meeting for BLUESHIP project

Rome, ITALY
20th and 21ST of March 2014

The 20th and 21st of March 2014, LABOR srl, one of the consortium partners and coordinator in the project, hosted the Blueship Kick-Off meeting, in its headquarters in Rome. The consortium is composed of 3 SMEs: AKRETIA GmbH (Germany); LINARI Engineering Srl (ITALY); StoGda Ship Design & Engineering Sp (Poland) and 3 RTDs: Labor Srl – Industrial Research Lab; Danmarks Tekniske Universitet (Denmark) and Next Technology Tecnotessile Società Nazionale di Ricerca r.l (Italy).

The project and its research, officially started on the 1st of March 2014 under Grant Agreement no. 605102 with the Research Executive Agency of the European Commission.

The project

The main objective that the BlueShip Consortium intends to achieve is the realization of an innovative de-NO_x Selective Catalytic Reactor (SCR) specifically tailored to the shipping industry, based on electrospun ceramic fibers tailored in designed textures modules. The current monolithic design used in the SCR implies a very large volume of reaction and heterogeneous reaction yields and rates in the different parts of the reactor, but on the other hand, electrospun fibers allow to achieve a dramatic increase of the exposed area in the SCR reactor, permitting higher yield of the NH3-NoX reaction and optimization of the fluid-dynamics and gas conversion.

Objectives

The main objectives in this project are a reduction of the size and weight of the De-NOx SCR of 50% with respect to state of the art SCR, for installation and retrofit in existing ships and for possible integration into De-Sox units; reduce the consumption, need of purchase and costs of reactant (ammonia or urea) of 20%; reduce the installation costs of 20%; reduce operation and maintenance costs of 15%.

Contact:

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Consortium

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