

Print versión

ERASMUS MUNDUS EXTERNAL COOPERATION WINDOWS

Sandwich PhD Agreement

ACADEMIC YEAR 2010 – FIELD OF STUDY: ENGINEERING – TECHNOLOGY

This document should be signed before the beginning of the period abroad

Name of the programme: EADIC, Lot 16 (Argentina) coordinated by the University of Bologna (It)
Name of PhD Candidate: ASPROMONTE, SOLEDAD GUADALUPE
Sending institution: Universidad Nacional del Litoral
Matriculation number: 59920 2° serie


DETAILS OF THE PROPOSED STUDY PROGRAMME ABROAD/LEARNING AGREEMENT

Receiving institution: Universidad de Valladolid
Country: Spain
Date of arrival: 18/03/2010

Length of the stay (in months): 6 (six)

Presentation of the research work will be done in the host institution (from 3 to 10 lines maximum)

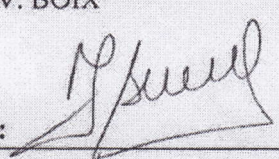
In the framework of my Doctoral Thesis, the research work is aimed to develop structured catalysts for environmental protection, able to minimize the emission of gaseous pollutants from combustion processes, such as nitrogen oxides (NOx), unburned hydrocarbons (HCs) and carbon oxides (COx). During the period to be spent at the University of Valladolid, the objective is to build on the promising results obtained so far on the issue raised, continuing the study of materials using supercritical CO₂, which represents a new method of preparation that is not explored by the time in our country. To develop new formulations of materials supported on monolithic structures suitable to adsorb HCs at low temperature, hold them until a suitable temperature and release them when they have reached normal operating conditions. The idea is to couple the process of adsorption-desorption with the selective reduction of NOx to N₂ (SCR-NOx) in excess of oxygen and in the presence of water vapor. This solution is a combined-effect alternative which has not yet been explored in the open literature. It also seeks to characterize these new materials through the use of techniques not available in Argentina.

Student's signature:  Date 05/02/2010

SENDING INSTITUTION

We confirm that the above research work description is approved,
Name of the Faculty or Department: FACULTAD DE INGENIERÍA QUÍMICA-DEPARTAMENTO DE QUÍMICA- AREA FISICOQUÍMICA
Name of the Scientific Supervisor: Alicia V. BOIX
Scientific Supervisor's signature

Date: 05/02/2010

Stamp: 

RECEIVING INSTITUTION

We confirm that this propose research programme is approved,
Name of the Faculty or Department: FACULTAD DE CIENCIAS-DEPARTAMENTO DE ING. QCA. Y TECNOLOGÍA DEL MEDIO AMBIENTE
Name of the Scientific Supervisor: Gloria Esther ALONSO SANCHEZ
Supervisor's signature

Date: 05/02/2010

Stamp: 