

Capita

Cooperation in applied research leading to innovative and exploitable manufacturing technology for chemicals, materials, and energy

THEMATIC PRIORITY

Manufacturing technology for chemicals, materials, energy

PROJECT FUNDING

Joint Call For Research Proposals

DESCRIPTION

CAPITA is an ERA-Net, created with the goal of establishing enduring transnational cooperation in applied catalysis research leading to innovative and exploitable manufacturing technology for chemicals, materials, and energy.

CAPITA consists of (regional) ministries, funding agencies, and research councils from six European countries. The consortium has started with 8 partners and 6 associate partners. Furthermore the consortium is completed by 2 advisory partner networks SusChem and ERIC+

The major beneficial outcomes from the new ERA-Net will be:

- 1) High Quality Process REtD. The joint calls will aim for projects utilising state-of-the-art methodologies in experiment, measurement and modeling, inspired by cutting edge industry and academic practice.
- 2) The calls will focus on topics identified in European level research strategies as being vital for future sustainability and economic benefit. They will include: novel, innovative, clean and efficient manufacturing options across all chemistry related sectors; optimum technology for manufacture and utilisation of renewable fuels and feeds.
- 3) Better practice in innovation and industry-university cooperation.
- 4) A customer led approach to education and training in catalytic process technology.

The project comprises of 5 work packages:

- 1) Strategic Development of the CAPITA ERANET, its Programme and its Consortium
- 2) Implementation of regular transnational calls for projects
- 3) Training & Education and Interaction with European Industry, Initiatives and Stakeholders
- 4) Information management, communication and dissemination
- 5) Project coordination and management

ACTIVITY SUMMARY (November 2013 – May 2014)

Project funding:

November 2013, Publication of the results of the 1st CAPITA transnational joint call on *Innovative catalysis for the monetization of low value carbon*.

The call is supported by funding organizations from The Netherlands (NWO), Greece (GSRT), Italy (MIUR), Flanders regions (IWT) and Spain (MINECO), providing a total funding of 3.75 M€

Meetings & Conferences:

2nd CAPITA meeting on European Catalysis, 15 January 2014, Brussels.

The focus will be on applied catalysis with an expanded scope towards reaction engineering and process design, emphasis being given to the integration of new catalytic technologies into whole process streams and value chains.

Deliverable, studies, results:

CAPITA European Catalysis Roadmap 2014 – 2020 (expected March 2014).

The goal of this study is to examine the challenges facing innovation and sustainable

development in chemicals manufacturing and energy production in Europe, in order to roadmap the developmental requirements in applied catalysis and process technology which are needed to overcome those challenges. These requirements are vital for addressing societal and industrial needs in energy, in environmental concerns for transportation and the quality of life and in sustainable chemistry for clean processes for the chemical and industrial intermediates and the switch from petrochemical feeds to recycled or renewable feeds. Via identification of such needs and the development of appropriate roadmaps, the main tasks will be:

To identify the main trends in applied catalysis and process technology jointly with CAPITA's advisory group on Innovation and technology

To prepare the template with an executive summary which will define CAPITA's policy for the ensuing year, leading to

Annually update this template including remarks by the CAPITA Consortium, its advisory group on innovation and technology and from other initiatives on this field.

Through appropriate means (workshops, thematic working groups on particular areas) this task will roadmap and identify relevant themes, and will provide the CAPITA Consortium with topics for research calls and education and reach-out activities.

Activities of the network:

Preparation of the 2nd joint call for 2014.

International Catalytic Training Course 2014 in preparation, expected to take place in Italy, spring 2014.

The programme is based on advancing education and discovery through knowledge open to industrial staff and young professionals (including PhD or Post-doc students), focussing on the design of processes, products and systems with sustainable development goals and constraints and will highlight how chemistry and catalysis, by using alternative and sustainable technologies of the 21st century, contribute to a sustainable future.

Topics will be:

Synthesis and characterization of catalytic nanomaterials with application in thermal and photocatalytic processes.

Biomass conversion into fuels and chemicals (commodities and specialty) with implementation of the Biorefinery concept.

Utilization of solar energy for water splitting and for driving high energy processes such as the conversion of CO₂ into fuels.

Monetization of low carbon chains such as those produced in the petrochemical industry (C₂-C₄ moieties).

Others:

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START & END DATES

1/2012 - 1/2016

HOMEPAGE

<http://www.era-capita.eu/>

CONTACT DETAILS

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