POSTDOC - HETEROGENEOUS CATALYSIS

Catalytic synthesis of fluorinated aromatics

Description:

Solvay is a science company whose technologies bring benefits to many aspects of daily life. Solvay businesses are aligned in 3 segments: Materials, Chemicals and solution to power today and anticipate tomorrow's megatrends (green chemistry, circular economy, recycling, biobased materials...).

In close partnership with Solvay, a 12-month post-doc position is currently available at IC2MP (UMR CNRS7285: University of Poitiers).

An increasing proportion of compounds having a biological activity (therapeutic / phytosanitary) contains one or more fluorine atoms. Fluorinated molecules bring also specific properties which are critical to develop new materials for the batteries, and for the new hydrogen industry. One of the main routes of access to organofluorine compounds is to perform a nucleophilic substitution reaction of a chlorine atom with fluorine. The synthesis of these products therefore involves fluorination ecoefficient processes, in particular by HF, which make use of homogeneous or heterogeneous catalysis.

The purpose of the proposed postdoctoral internship is to develop and research new catalytic systems (homogeneous or heterogeneous) and new fluorination gas phase processes. Solvay will bring strong support including simulation and modelization to design the next generation of catalysts.

The researcher will be in direct contact with the company through reports and progress meetings.

Profile: PhD in catalysis, organic synthesis, experience in operating lab-scale equipment with HF, heterogeneous catalysis, catalyst preparations.

Duration: 12 months

Salary: about 2200 € / month.

Start: as soon as possible

Applications should be sent by email (CV + letter):

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