

Laboratoire de Chimie – UMR CNRS 5182

PostDoc Position (1.5 year)

**SHAPES - Novel Selective Heterogeneous Amination Processes for
the Synthesis of Bio-based Monomers**

Context

The ANR project SHAPES aims at the development of eco-efficient processes for the synthesis of highly valuable diamine monomers using platform molecules obtained from biomass upgrading especially diols. It gathers several partners in catalysis, spectroscopy and modelling (Solvay, E2P2L, UCCS-Lille, ENS-Lyon and LCS-Caen). In this context, a 1.5 year position is opened in DFT modeling at the LC-ENSL in the group of Philippe Sautet.

Project

In conjunction with the experimental studies, the catalyst structure and the reaction mechanism will be investigated using the Density Functional Theory (DFT). The main goal will be to understand the borrowing H₂ mechanism for the design of amination catalysts, with a strong emphasize on the metal/support interaction.

Applicant

The successful applicant is expected to have strong background in physical chemistry and strong interest in the use of computational modeling techniques for chemical reactivity and catalysis. A PhD in theoretical chemistry degree is required. The PostDoc will be supported for 1.5 year with a net salary of around 2000€/month, possibly higher depending on the working experience. Lyon's listing by UNESCO as a World Heritage Site gives recognition to the long history heritage of the city. It is also recognized for its gastronomy and last but not least, Lyon is a vivid city with thousands of students.

Contact/Application

To apply, please send a detailed CV and the names and addresses of at least

three references to :

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www.ens-lyon.fr/CHIMIE