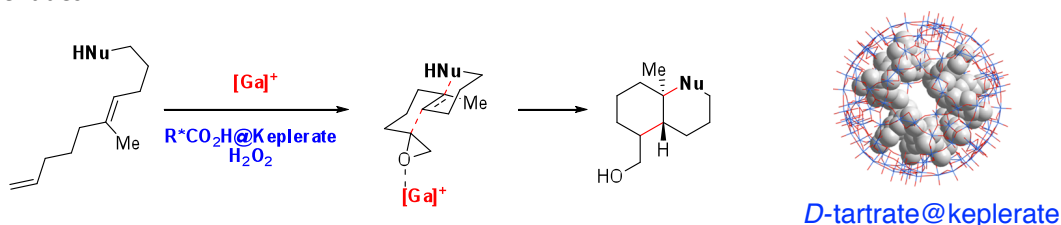


Post-doctoral Position

Enantioselective Multicatalytic Synthesis of Chiral Inorganic Nanocapsules and Organometallic Complexes

A postdoc position is available in the framework of Labex "CHARMMAT" within the team of Vincent Gandon and Christophe Bour at the University Paris-Sud, in collaboration with Sébastien Floquet and Vincent Coeffard of the University of Versailles. The project deals with enantioselective cyclizations of polyenes with new catalytic materials based on inorganic giant clusters called "Keplerates" and organometallic gallium(III) or gold(I) complexes. The concept is based on a multicatalytic sequence. For instance with gallium(III), it would be initiated by the asymmetric epoxidation of terminal alkenes with tartrates located inside the Keplerate and an external oxidant, then followed by a cationic cascade. The choice of the system will depend on the synergy of the two entities.



The project entails

- Synthesis and characterization of new (chiral) materials and organometallic species for use in catalysis.
- Development of a new (enantioselective) polycyclization in a multicatalytic process.

Requirements

- PhD in Chemistry
- Knowledge in homogeneous catalysis, experience for the synthesis and characterization of sensitive organometallic complexes.
- Knowledge in coordination and/or inorganic chemistry will be appreciated.
- Good English communication skills.

The position is for **one year**.

Approximate gross salary (remuneration depending on experience): max 2700€/month.

Applications including a motivation letter, CV (including a list of publications), and the names/contact details of at least two referees should be submitted (preferably in a single PDF file). The evaluation of candidates will start IMMEDIATELY. Starting date: last quarter- 2014.

Key papers:

Organometallics, 33, 594 ; *Angew. Chem. Int. Ed.*, 52, 5848 ; *Chem. Eur. J.*, 18, 10239 ; *Angew. Chem. Int. Ed.*, 50, 12326.

Please send your application to Prof. Vincent Gandon : vincent.gandon@u-psud.fr

For more information about our research topics, please visit: www.polycata.u-psud.fr