

## 12 months post-doctoral position

In the context of the ANR PALCOCA program a post-doctoral position is available from April 2024 in the SITH team of the Département de Chimie Moléculaire in Grenoble (France)

Person involved: Dr Yves Gimbert, Dr David Gatineau

### Project description:

The PALCOCA research program focuses on the implementation of new chiral ligands for asymmetric catalysis whose stereogenicity is based on the axial chirality of allenes. In parallel to the synthesis of new chiral ligand, bis-phosphine allene for asymmetric catalysis by Prof Virginie Mouriès-Mansuy (coordinator of PALCOCA) in the MACO group at the Institut Parisien de Chimie Moléculaire (Paris, France), mass spectrometry (MS) investigations will be carried out to support the experimental research program. Electro-spray ionization coupled to mass spectrometry (ESI-MS) will be used to analyze ligands, catalysts, coordination chemistry and possible intermediates at the liquid/gas interface present in solution. These analyses will also provide in-depth knowledge of the steric and electronic properties of the ligands and of the corresponding active species involved in the catalytic processes.

### Description of the position:

The postdoc's work will be devoted to the development of reaction monitoring, isolation of reaction intermediates, and determination of thermochemical parameters. This requires a strong background in organometallic chemistry and the ability to handle sensitive products under inert conditions, or a strong experience in mass spectrometry for the determination of thermodynamic parameters.

### Personal qualities

If you want to contribute to cutting-edge research in a multidisciplinary playground, your curiosity will be piqued by a collaborative environment that spans synthesis, followed by analysis of reaction intermediates and instrument and method development in mass spectrometry.

With a strong inner drive, you'll thrive in a work environment that encourages freedom, idea sharing, creative thinking and risk-taking.

To apply, please send your CV, cover letter, diploma and the name of two referees to David Gatineau ([david.gatineau@univ-grenoble-alpes.fr](mailto:david.gatineau@univ-grenoble-alpes.fr); <https://dcm.univ-grenoble-alpes.fr/research/equipe-sith>)

Examination of applications begins immediately and will continue until the positions are filled.