

Postdoctoral position available, starting in January 2018

A postdoctoral position in organic synthesis is available for **12 months** at the “Institut des Sciences Moléculaires de Marseille” (iSm2 – UMR CNRS 7313 – Équipe STERÉO) and will be funded by the “Agence Nationale pour la Recherche (ANR).”

Keys words: Hydrogen-bonding organocatalysis – Phosphoric acids – P-Stereogenic catalysts.

P-ChiroCat Project: Since the pioneering work of Akiyama and Terada in 2004 on BINOL-derived chiral phosphoric acids, a huge amount of efforts worldwide has been devoted to the development of elaborated C2-axially chiral catalysts including sterically crowded atropisomeric BINOL, VAPOL or spirocyclic SPINOL derivatives. Although, successful in many inter- or intramolecular transformations involving activation of iminium or oxocarbenium ions, the scale up and the potential industrial development of this family of catalysts is hampered by a low variability and in most cases a tedious multistep synthetic access. The P-ChiroCat project has the ambition to propose an original and complementary design for simple and easily accessible Brønsted acids in which the chirality is now centered on the phosphorus atom opening new synthetic opportunities for both hydrogen-bonding and ion-pairing enantioselective organocatalyses.

Postdoctoral profile: The position requires a solid training in organic synthesis. The skills required for this research are the classical skills of an organic chemist, especially concerning the ability to perform reactions under inert conditions and to purify organic compounds using standard techniques (chromatography, recrystallization, distillation) and a good knowledge in NMR analysis (^1H , ^{13}C , DEPT, HSQC, HMBC). We will look for a rigorous, motivated and enthusiastic candidate with excellent knowledge in synthetic organic chemistry research with solid experience in enantioselective organocatalysis or in multi-step synthesis. The position will be entirely dedicated to this project and hence be 100% funded by the ANR.

Candidates should send: • a CV with a list of publications and communications • a motivation letter • the contact of at least two referees.

Gross salary: around 2400 Euros/month. Applications can be sent to jean.rodriquez@univ-amu.fr and damien.bonne@univ-amu.fr

For details about our research group, see: <http://ism2.univ-amu.fr/fr/stereo/stereo>