

CV

Alexandre Martinez

Born in Nantua (East of France) in 1976, agrégation (national teacher exam) in Chemistry in 2000, PhD in 2004 from University of Toulouse III under the supervision of Bernard Meunier " Synthesis of new macrocyclic chiral manganese(III) Schiff bases as catalysts for the asymmetric epoxidation of olefins " (Jury President Henri Kagan); post-doctoral fellow in Genève in the group of Jérôme Lacour "asymmetric organocatalysis"; permanent position as assistant professor in the team of Jean-Pierre Dutasta "Supramolecules, material and stereochemistry" in 2006.

Our research interests are focused on chiral hemicryptophane design for supramolecular catalysis and biologically active compound recognition.

POSITION

Assistant Professor, Ecole Normale Supérieure de Lyon, Organic Chemistry

Research activities :

- Supramolecular asymmetric catalysis
- Supramolecular recognition of biologically active compound
- Supported super base and catalysis

SCIENTIFIC BACKGROUND

2006-2009 **Assistant Professor** - Organic Chemistry, Ecole Normale Supérieure de Lyon

2005-2006 **Graduat Teaching assistant** – IUFM of Nice - University of Toulon

2004-2005 **Postdoctoral Fellowship** - University of Genève (Prof. J. Lacour)

2001-2004 **PhD Thesis** : Synthesis of new macrocyclic chiral manganese(III) Schiff bases as catalysts for the asymmetric epoxidation of olefins (Dr. B. Meunier)

2000 **Agrégation** (national teacher exam) Physical Chemistry

LECTURES EXPERIENCE – JURIES

2006-2009 Lectures : Organic Chemistry (Agregations in Chemistry and Physic)

Problem classes : Stereochemisrty (M1)

Lab classes : Agrégation, Organic chemistry (M1)

2006-2009 Jury member : Ecoles normales supérieures national exam

PUBLICATIONS

11. “Hemicryptophane-oxovanadium complexes: lead of a new class of efficient supramolecular catalysts” Alexandre Martinez and Jean-Pierre Dutasta *Journal of catalysis*, **2009**, 267, 188-192.

10. “Controlling Helical Chirality in Atrane Structures: Solvent Dependent Chirality Sense in Hemicryptophane-Oxovanadium Complexes” Alexandre Martinez, Vincent Robert, Heinz Gornitzka, and Jean-Pierre Dutasta *Chemistry a European Journal*, **2009**, sous presse

9. “Diastereoselective supramolecular ion-pairing between the TRISPHAT anion and *pro*-chiral heptamethine cyanine Dyes“ Pierre-Antoine Bouit, Christophe Aronica, Laure Guy, Alexandre Martinez, Chantal Andraud and Olivier Maury *Organic & Biomolecular Chemistry*, **2009**, 7, 3086-3090.

8. “On the enantioselective olefin epoxidation by doubly bridged biphenyl azepine derivatives - mixed tropos/atropos chiral biaryls.” Vachon, Jerome; Rentsch, Samuel; Martinez, Alexandre; Marsol, Claire; Lacour, Jerome; *Organic & Biomolecular Chemistry*, **2007**, 5(3), 501-506

7. “Enantioselective epoxidation of olefins using phase transfer conditions and a chiral [azepinium][trisphat] salt as catalyst.” Vachon, Jerome; Perollier, Celine; Martinez, Alexandre; Lacour, Jerome; *Catalysts for Fine Chemical Synthesis*, **2007**, 5 235-239.

6. “Enantioselective olefin epoxidation using homologous amine and iminium catalysts - a direct comparison.” Goncalves, Maria-Helena; Martinez, Alexandre; Grass, Stephane; Page, Philip C. Bulman; Lacour, Jerome; *Tetrahedron Letters*, **2006**, 47(30), 5297-5301.

5. “Synthesis of New Macrocyclic Chiral Manganese(III) Schiff Bases as Catalysts for Asymmetric Epoxidation.” Martinez, Alexandre; Hemmert, Catherine; Loup, Christophe; Barre, Guillaume; Meunier, Bernard; *Journal of Organic Chemistry* **2006**, 71(4), 1449-1457.

4. "Macrocyclic chiral metal salen-type polyether complexes and analogs usable as oxidation catalysts." Meunier, Bernard; Hemmert, Catherine; Martinez, Alexandre; Fr. Demande **2006**, 63 pp.

3. "A macrocyclic chiral manganese(III) Schiff base complex as an efficient catalyst for the asymmetric epoxidation of olefins." Martinez, Alexandre; Hemmert, Catherine; Meunier, Bernard; *Journal of Catalysis* , **2005**, 234(2), 250-255.

2. "Synthesis and activity of macrocyclized chiral Mn(III)-Schiff-base epoxidation catalysts." Martinez, Alexandre; Hemmert, Catherine; Gornitzka, Heinz; Meunier, Bernard; *Journal of Organometallic Chemistry*, **2005**, 690(9), 2163-2171.

1. Addition of lithium ethyl fluoroacetate to *cis* and *trans* α,β -epoxyaldehydes. Access to C₂ fluorotinated butyrolactones. Magalie Collet, Michel Baltas, Alexandre Martinez, Cécile Dehoux-Baudoin and Liliane Gorrichon *Tett. Lett.* **2003**, 44, 1891-1894