

PhD seminar "Asymmetric catalysis with BINOL-derivatives:
Application in Organic Synthesis"

CURRICUL VITAE

Claudia LALLI



1 Short CV

Individual notice

Nationality: Italian

Place and date of birth: Florence, 09/06/1981

Personal status: Civil partnership, 2 children (born in 2017 and 2019), 35700 Rennes France

Professional status: CRCN, Université de Rennes 1, Institut de Sciences Chimiques de Rennes (ISCR)

UMR CNRS 6226, Equipe Chimie ORganique et INTerfaces (COrint), UFR Sciences Pharmaceutiques et Biologiques, 2, Avenue du Prof L. Bernard F-35043 Rennes

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Qualifications, training and career

Since 10/2012 Independent Researcher ISCR UMR CNRS 6226

11/2009-09/2012 Post-doctoral researcher ICSN, Gif-sur-Yvette

Research topic: Multicomponent reactions and asymmetric catalysis

Supervisors: Pr. Jieping Zhu et Dr. Géraldine Masson

03/2009-10/2009 Post-doctoral fellow University of Florence, Italy

Research topic: "Synthesis of Molecular Scaffolds and Application to biological systems"

Supervisor: Pr. Antonio Guarna

24/02/2009 PhD in Organic Chemistry University of Florence, Italy

Research topic: "Diversity-Oriented Synthesis of peptidomimetic scaffolds from sugars and amino acids derivatives"

Supervisors: Pr. Antonio Guarna, Dr. Andrea Trabocchi

21/09/2005 Master 2 in Organic Chemistry University of Florence, Italy

Research topic: "Design and Synthesis of inhibitors of enzyme poly-ADP ribose polymerase (PARP)"

Supervisors: Pr. Antonio Guarna, and Pr. Alberto Chiarugi (Department of Pharmacology, University of Florence, Italy)

Research evaluation

- Referee for journals: Org. Biomol. Chem., New J. Chem, Org. Lett., J. Org. Chem., Eur. J. Org. Chem., Adv. Syth. Catal., Chem. Rec., Tetrahedron.

- Review Editor for Frontiers in Chemistry since 2022.

- External referee for the ANR (2016)

PhD in Chemical Sciences
Department of Chemistry "Ugo Schiff"
University of Florence

- Member of the individual monitoring committee (CSI) of 3 PhD students (2019-2021, 2021-2024 and 2022-2025)
- Member of 4 PhD Jury: V. Durel (2016), B. Francois (2018), J. Braire (2021), C. A. Mattei (2021)
- Member of M2 internship defenses (2020-2021 and 2021-2022)
- Appointed member of Section 12 of the National Committee CNRS (2021-2026)

Conference organization

Member of the Organizing Committee of :

- "6th French Symposium in total synthesis", Rennes 31 May-1 June 2016.
- "Scientific Days of the French Society of Chemistry (SCF), Western Section (BPL)", Tregastel 1-3 April 2019.
- "EWPC 17: 17th European Workshop on Phosphorus Chemistry", Rennes 26-28 February 2020.
- "Scientific Days of the French Society of Chemistry (SCF), Western Section (BPL)", Rennes, 30th September-1st October 2021.
- "Scientific Days of the French Society of Chemistry (SCF), Western Section (BPL)", Noirmoutier, 27-29 June 2022.

Other activities

- 2016-2019: President of Young Network Bretagne-Pays de Loire of the French Chemical Society (SCF).
- 2017-2020: Budget and project manager of the National Young Network of the French Chemical Society (SCF).
- 2019-2024: Secretary of the Regional Section Bretagne-Pays de Loire of the French Chemical Society (SCF).

2 Bibliometric data

- Patent (1)
- Book Chapter (1)
- International peer-reviewed articles (31)
- Invited conferences (3)
- Oral Communications (12)
- Poster communications (14)
- Rennes Métropole scientific installation award (AIS) "young researcher" in 2013
- Co-supervision of 3 PhD, 2 foreign PhD, 9 Master 2 students, other undergraduate students

3 Selection of the 10 most relevant publications and/or patents

Circularly polarized luminescence of Eu(III) complexes with chiral 1,1'-bi-2-naphthol-derived bisphosphate ligands C. A. Mattei, K. Dhbaibi, B. Lefeuvre, V. Dorcet, G. Argouarch, O. Cador, B. Le Guennic, O. Maury, **C. Lalli**, S. Guy, A. Bensalah-Ledoux, F. Riobé,* B. Baguenard,* F. Pointillart,* *Chirality* **2022**, *34*, 34-47.

Luminescent Dysprosium Single-Molecule Magnets Made from Designed Chiral BINOL-Derived Bisphosphate Ligands C. A. Mattei, V. Montigaud, V. Dorcet, F. Riobé, G. Argouarch, O. Maury, B. Le Guennic, O. Cador, **C. Lalli**,* F. Pointillart,* *Inorg. Chem. Front.* **2021**, *8*, 963-976 (back-to-back in the same issue of the following article).

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Solid-State versus Solution Investigation of a Luminescent Chiral BINOL-Derived Bisphosphate Single-Molecule Magnet C. A. Mattei, V. Montigaud, F. Gendron, S. Denis-Quanquin, V. Dorcet, N. Giraud, F. Riobé, G. Argouarch, O. Maury, B. Le Guennic,* O. Cador, **C. Lalli**, F. Pointillart,* *Inorg. Chem. Front.*, **2021**, 8, 947-962 (**HOT paper**).

BINOL derivatives-catalysed enantioselective allylboration of isatins: application to the synthesis of (R)-chimonamide J. Braire, V. Dorcet, J. Vidal,* **C. Lalli**,* F. Carreaux,* *Org. Biomol. Chem.*, **2020**, 18, 6042-6046.

The aza-Prins reaction in the synthesis of natural products and analogues B. V. Subba Reddy,* P. Narayanan Nair, A. Antony, **C. Lalli**,* R. Grée,* *Eur. J. Org. Chem.* **2017**, 1805-1819.

Synergistic effect of the TiCl₄/p-TsOH promoter system on the aza-Prins cyclization V. Durel, **C. Lalli**,* T. Roisnel, P. van de Weghe,* *J. Org. Chem.* **2016**, 81, 849-859.

Enantioselective Prins Cyclization: BINOL-Derived Phosphoric Acid and CuCl Synergistic Catalysis **C. Lalli**,* P. van de Weghe,* *Chem. Commun.* **2014**, 50, 7495-7498.

Highly Enantioselective Electrophilic α -Bromination of Enecarbamates: Chiral Phosphoric Acid and Calcium Phosphate Salt Catalysts A. Alix, **C. Lalli**, P. Ratailleau, G. Masson,* *J. Am. Chem. Soc.* **2012**, 134, 10389-10392. Selected by *SINFACTS* **2012**, 9, 1023.

Diversity-Oriented Synthesis of Morpholine-Containing Molecular Scaffolds **C. Lalli**, A. Trabocchi,* F. Sladojevich, G. Menchi, A. Guarna, *Chem. Eur. J.* **2009**, 15, 7871-7875.

Heterocyclic Compounds Containing the Morpholine Nucleus their Preparation and Use. A. Guarna, A. Trabocchi, G. Menchi, **C. Lalli**, F. Sladojevich, N. Cini, WO2008/129004, October 30th **2008**.