

**Dr. Hervé CLAVIER**

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**POSITIONS**

June 2024- present	CNRS Senior Researcher (Directeur de Recherche), Institut de Chimie Radicalaire, Equipe Chimie Moléculaire Organique (UMR CNRS 7273), Aix-Marseille University
Oct 2022- May 2024	CNRS Senior Researcher (Directeur de Recherche), Institut des Sciences Moléculaires de Marseille, Equipe Chirosciences (UMR CNRS 7313), Aix-Marseille University - Centrale Marseille
2010 –2022	CNRS Associate Researcher (Chargé de Recherche), Institut des Sciences Moléculaires de Marseille, Equipe Chirosciences (UMR CNRS 7313), Aix-Marseille University - Centrale Marseille
2009	Senior Researcher , Pr. S. P. Nolan's Group, University of Saint Andrews, Scotland
2006 - 2008	Post-doctoral Research Associate , Pr. S. P. Nolan's Group, Institute of Chemical Research of Catalonia, Tarragona, Spain
Early 2006	Post-doctoral Research Associate , Pr. S. P. Nolan's Group, University of New-Orleans, USA; temporarily University of Ottawa, Canada

EDUCATION

2015	Habilitation , Aix Marseille University
2002 - 2005	Ph.D. Thesis in Organic Chemistry , University of Rennes I, Dr. J.-C. Guillemin, Dr. M. Mauduit <i>Design and synthesis of new imidazolium and imidazolinium salts: applications to supported and asymmetric catalysis</i>
2001 - 2002	Master of Organic Chemistry (DEA), Université de Rennes I
1999 - 2002	Diplôme d'ingénieur de l'Ecole Nationale Supérieure de Chimie de Rennes (ENSCR, Engineering College of Chemistry)

RESEARCH INTERETS**Chirality – Organic synthesis – Coordination chemistry – Asymmetric Catalysis**

Design and synthesis of chiral ligands (phosphorus-based ligands and N-heterocyclic carbenes)
Enantioselective catalysis using transition metal-based catalysts
Preparation of original metal-based complexes

SCIENTIFIC COMMUNICATIONS AND REPORTS

70 publications (30 as corresponding author) – 1 patent – 13 book's chapters - 5300 citations –
h index 38 - 28 oral communications (10 invited) – 25 poster communications

SUPERVISION OF STUDENTS - TEACHING

Direction and co-direction of 9 Ph.D. students, 3 post-doctoral research associates and teaching assistants, 3 Master students

Participation to 12 Ph.D. juries
Teaching charge at the IUT of Marseille in practical courses

SCIENTIFIC ANIMATION & ADMINISTRATIVE REponsibilities

Leader of the Thema "Phosphorus and Asymmetric Catalysis" in the Chirosciences Team (2016 – 2023)
Elected member of the iSm2 Council – UMR 7313 (2012 – 2023)
Member of the Scientific board of the Sciences Faculty at Aix-Marseille Université (2016 – 2022)
Head of the organization committee for the seminars program of Fédération des sciences chimiques de Marseille (2019 – present)
Member of organization committee des Rencontres de Chimie Organique de Marseille 2012 (RCOM7)

PROJECT MANAGEMENT

2017-2022 Project Amino Acids : Région SUD - Ecole Centrale Marseille - Adisseo (135 k€).
2020-2024 Project cRésolu : ANR PRC grant , coordination - Marc Mauduit (Institut des Sciences Chimiques de Rennes) et Rodolphe Jazzar (CNRS – San Diego University), partenaires (481 k€).
2022-2026 Project ChiraSalt : équipement project granted by PACA région (79 k€).

RECENT PUBLICATIONS



Atropisomeric N-Heterocyclic Carbene-Palladium(II) Complexes: Influence of the NHC Backbone Substitution

Yajie Chou, Mathilde Vançon, Muriel Albalat, Carla Deschodt, Paola Nava, Stéphane Humbel, Nicolas Vanthuyne, * Hervé Clavier*

Eur. J. Inorg. Chem. **2024**, e202300780
doi.org/10.1002/ejic.202300780



C₂-Symmetric Atropisomeric N-Heterocyclic Carbene-Palladium(II) Complexes: Synthesis, Chiral Resolution and Application in enantioselective α -Arylation of Amides

Lingyu Kong, Yajie Chou, Muriel Albalat, Marion Jean, Nicolas Vanthuyne, Stéphane Humbel, Paola Nava, Hervé Clavier*

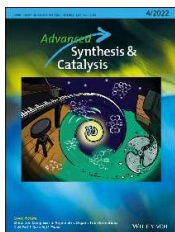
Dalton Trans. **2023**, 52, 8728-8736.
doi.org/10.1039/D3DT01182H



Expedient Access to Optically Pure Atropisomeric-NHC Ruthenium Complexes for (Z)-Selective Asymmetric Ring-Opening Cross Metathesis

Jennifer Morvan, Dylan Bouëtard, Lingyu Kong, Yajie Chou, Thomas Vives, Muriel Albalat, Thierry. Roisnel, Christophe Crévisy, Paola Nava, Stéphane Humbel, Nicolas Vanthuyne, Hervé Clavier*, Marc Mauduit*

Chem. Eur. J. **2023**, 29, e202300341.
<https://doi.org/10.1002/chem.202300341>

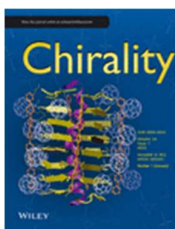


Rhodium(III)-Catalyzed Aldehyde C-H Activation and Functionalization with Dioxazolones: An Entry to Imides

Joe Massouh, Antoine Petrelli, Virginie Bellière-Baca, Damien Hérault,* Hervé Clavier*

Adv. Synth. Catal. **2022**, *364*, 831-837.

<https://doi.org/10.1002/adsc.202101099>

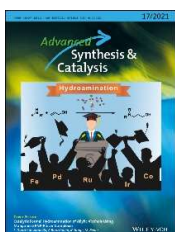


Transition metal complexes bearing atropisomeric saturated NHC ligands

Mariia Savchuk, Lucas Bocquin, Muriel Albalat, Marion Jean, Nicolas Vanthuyne, Paola Nava, Stéphane Humbel, Damien Hérault, Hervé Clavier*

Chirality **2022**, *33*, 13-26.

<https://doi.org/10.1002/chir.23378>

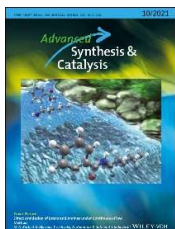


C₁-Symmetric Atropisomeric NHC Palladium(II) Complexes: Synthesis, Resolution and Characterization

Lingyu. Kong, Yajie Chou, Marion Jean, Muriel Albalat, Nicolas Vanthuyne, Paola Nava, Stéphane Humbel, Hervé Clavier*

Adv. Synth. Catal. **2021**, *363*, 4229-4238.

doi.org/10.1002/adsc.202100491

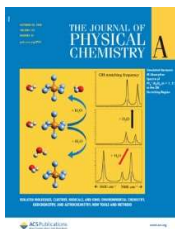


Cobalt-catalyzed hydroalkynylation of vinylaziridines

Bohdan. Biletskyi, Lingyu Kong, Alphonse Tenaglia, Hervé Clavier*

Adv. Synth. Catal. **2021**, *363*, 2578-2585.

doi.org/10.1002/adsc.202001575



Exploring phosphine electronic effects on molybdenum complexes: a combined photoelectron spectroscopy and energy decomposition analysis study

Héloïse. Dossmann,* David Gatineau, Hervé Clavier, Anthony Memboeuf, Denis Lesage, Yves Gimbert,

J. Phys Chem. A **2020**, *124*, 8753-8765.

doi.org/10.1021/acs.jpca.0c06746



From Prochiral N-Heterocyclic Carbenes (NHC) to Optically Pure Metal Complexes: New Opportunities in Asymmetric Catalysis

Lingyu. Kong, Jennifer Morvan, Delphine Pichon, Marion Jean, Muriel Albalat, Thomas Vives, Sophie Colombel-Rouen, Michel Giorgi, Vincent Dorcet, Thierry Roisnel, Christophe Crévisy, Didier Nuel, Paola Nava, Stéphane Humbel, Nicolas Vanthuyne, Marc Mauduit*, Hervé Clavier*,

J. Am. Chem. Soc. **2020**, *142*, 93-98.

<https://doi.org/10.1002/chir.23378>