

**39 years old**

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## SKILLS

### Project Management

- Management of a research team (Engineers, PhDs, Postdocs, Technicians)
- Financing research
- Patent
- Risk management
- Budget monitoring
- Piloting and planning
- Budget monitoring
- International collaboration

### Innovation and Research

- Development of organic synthesis methodologies
- Homogeneous catalysis
- Optimization and Scale-up
- Organometallic chemistry
- Substitutes for noble transition metals
- Budget monitoring
- Coordination Chemistry
- Molecular characterization

### Teaching

- Teaching in Bachelor and Master degree (lectures, tutorial, exercises)
- Teaching of General, Organic, Organometallic & Inorganic Chemistry
- Science popularization in elementary schools
- Educational engineering
- Animation
- English Teaching in Organic chemistry

## BIBLIOMETRIC INDICATORS

- **52 publications** including 47 articles, 3 reviews, 1 book chapter, 1 patent, **H-index = 19**, sum of times cited: >1076, average citations per articles: 23.89, 4 covers.
- Most frequent journals: *Chem. Eur. J.* (7), *Angew. Chem. Int. Ed.* (4), *Org. Lett.* (4), *Chem. Comm.* (3), *J. Am. Chem. Soc.* (2), *Chem. Sci.* (1), *Coord. Chem. Rev.* (1)

## FELLOWSHIPS & AWARDS

- Accueil en Délégation CNRS - University Paris Sud
- Prime d'Encadrement Doctoral - University Paris Sud
- JSP Fellow Program- 50th Bürgenstock Stereochemistry Brünen Switzerland
- CNRS Postdoctoral Fellowship - Strasbourg
- Consolider Program ICIQ Spain
- Ministry of Education PhD Fellowship Strasbourg

## ADMINISTRATION DE LA RECHERCHE

- Member of the board SCF, Ile de France
- Member of CCSU - University Paris Sud
- Elected Member of the ICMMO - University Paris-Sud
- Member of the organizing committee of 10th RCO
- Member of the organizing committee of GECOM-CONCOORD 2017
- President of the second Main Group Metal Chemistry Symposium 2020
- Frequent reviewer: ANR, submitted manuscrit (10/an)

## COMMUNICATIONS

- **6 invited lectures in congress**
- **15 invited lectures (+8 in 2020)**
- **1 press release: L'éthanol, candidat sérieux pour la fabrication de molécules bioactives**
- **30 oral communications**

# CHRISTOPHE BOUR

Associate Professor

## ABOUT ME

*Attracted by academic research for the challenges it offers and the freedom it gives me, I have addressed many complex issues. The resolution of fundamental scientific issues has been a real source of satisfaction for me, as well as for the education of graduate students*

## EXPERIENCES

### University Paris Saclay

*since sept 2010*

### Senior Research Scientist- Homogeneous Sustainable Catalysis

Project management / Financing research / Management of a research team / Scientific valorization / Diffusion of knowledge / Writing of scientific articles / Communication / International

### University Paris Sud

*since sept 2010*

### Associate Professor

Teaching of General Chemistry, Organic Chemistry, Organometallic, Inorganic, Analytical in License, Master (192h/year)

### Université of Strasbourg

*sept 2008- sept 2010*

### Post-doctoral Fellow - Total Synthesis

R&D project: # Ring-Closing Metathesis of O<sub>2</sub>-O-Acetals Enynes # Total Synthesis of Salvinorin A through diastereoselective Diels-Alder

### ICIQ Tarragona - Spain

*janv 2007- août 2008*

### Post-doctoral Fellow - Homogeneous Catalysis

R&D project: # Development of enantioselective gold catalysis # Synthesis of new gold molecular complexes for catalysis

### Université of Strasbourg

*sept 2003- déc 2006*

### PhD - New Synthetic Methodologies

R&D project: # Development of palladium catalysis # Electrocyclization # Cross-coupling

## EDUCATION

### Université Paris Saclay

*2015*

### Diploma of « Habilitation à diriger des recherches »

De nouveaux procédés catalytiques pour l'activation carbophile par des acides de Lewis

### Université OF Strasbourg

*2006*

### PhD Thesis in Organic Chemistry supervised by Dr. J. Suffert

4-exo-dig and 5-exo-dig Cyclocarbopalladation: an expeditive solution towards molecular diversity

*2003*

Master Science in Chemistry with honors  
Diploma of « Magistère Interdisciplinaire en Chimie-Biologie »

*2002*

Bachelor of Science in chemistry

## RELEVANT PUBLICATIONS

1. Iron-Catalyzed Reductive Ethylation of Imines Using Ethanol. Vayer, M.; Morcillo, S.; Dupont, J.; Gandon, V.; Bour, C. *Angew. Chem. Int. Ed.* **2018**, 57, 3228.
2. Low-Valent Cationic Gallium(I) Complexes as  $\pi$ -Acid Catalysts. Li, Z.; Thierry, G.; Lichtenthaler, M.; Krossing, I.; Guillot, R.; Gandon, V.; Bour, C. *Adv. Synth. Cat.* **2018**, 3, 544.
3. Revealing the Activity of  $\pi$ -Acid Catalysts Using a 7-Alkynyl Cycloheptatriene. Vayer, M.; Guillot, R.; Bour, C.; Gandon, V. *Chem. Eur. J.* **2017**, 23, 13901
4. Dibromoindium(III) Cation as  $\pi$ -Lewis Acid: Characterization of [IPr-InBr<sub>2</sub>][SbF<sub>6</sub>] and Catalytic Activity Towards Alkynes and Alkenes. Colard-Itté, J. R.; Michelet, B.; Guillot, R.; Bour, C.; Gandon, V. *Chem. Commun.* **2015**, 51, 7401.
5. Well-Defined Organo-Gallium Complexes as Lewis Acids for Molecular Catalysis: Structure-Stability-Activity Relationship. Bour, C.; Gandon, V. *Coord. Chem. Rev.* **2014**, 279, 43.
6. Copper Salts as Additives in Gold(I)-Catalyzed Reactions. Guérinot, A.; Fang, W.; Sircoglou, M.; Bour, C.; Bezenine-Lafollée, S.; Gandon, V. *Angew. Chem. Int. Ed.* **2013**, 52, 5848.

## SUPERVISION

11 PhDs (dont 5 en cours)  
8 Master 2  
7 Post-doc  
7 juries of PhD Thesis

## RESEARCH CONTRACTS

- Merlion Research Program (25 k€) *Coordinator*
- ANR HICAT (320k€) *Partner*
- Prematuration IDEX P. Saclay (50 k€) *Coordinator > 1 brevet*
- ANR ALCACAT (250k€) *Partner > 1 publication*
- Labex CHARM3AT (50k€) *Coordinator > 1 publication*
- Labex CHARM3AT (50k€) *Partner > 2 publications*
- ANR COLAMET (200k€) *Partner > 1 publication*
- Labex CHARM3AT (50k€) *Partner > 3 publications*
- Labex CHARM3AT (50k€) *Partner > 1 publication*
- Attractivité U. Paris-Sud (20k€) *Coordinator > 5 publications*

## PATENT

Trisubstituted tertiary amines synthesis via hydrogen borrowing strategy. Vayer, M.; Gandon, V.; Bour, C. PCT/PCT Int. Appl. (2019), WO 2019063952 A1 20190404

## COLLABORATIONS

- Pr. I. Krossing, University of Freiburg
- Dr. V. Coeffard, Prof. C. Greek, University of Versailles
- Dr. S. Floquet, University of Versailles
- Pr. E. Mata, University of Rosario Argentina,
- Dr. H. Vinh Huynh, NUS, Singapore
- Prof. J. M. Cuerva, University of Granada
- Dr. G. Masson, ICSN, CNRS, Gif-sur-Yvette
- Dr. Y. Sarrazin, University of Rennes
- Dr. D. Bourissou, Prof. G. Bouhadir, University of Toulouse
- Dr. S. Dargone, University of Strasbourg

## SCIENTIFIC POPULARIZATION

- Science Festival, University of Strasbourg
- Science workshop, kindergarten
- Creation of MOOC (Massive Open Online Course) in Organic Chemistry for the L1 of Biology (AAP-e-learning). 4 videos made.
- Scientific workshop, primary school

## COVERS



# Details of my experiences

## SENIOR RESEARCH SCIENTIST - HOMOGENEOUS SUSTAINABLE CATALYSIS



Université Paris Saclay # since sept 2010

*Homogeneous catalysis - Coordination chemistry - Organometallic chemistry - Gold chemistry - Gallium chemistry - Electronic properties of ligands - Divalent carbon chemistry - Chemistry of noble metals - Chemistry of main group metals - Iron chemistry - Glove box*

### ASSIGNMENTS CONDUCTED

Project Coordinator

R&D Project Manager

### DETAILS OF THE EXPÉRIENCE

- Head of 15 research projects
- Supervision of 11 PhD (5 theses in progress), 6 Postdoc, 1 ATER, 8 trainees, 1 assistant engineer
- 10 contracts (coordinator and partner) of ANR, Labex, valorization project = 600 k € since 2010
- 8 collaborations, 4 european of which resulted in publications

- 35 articles published in peer-reviewed journals
- 7 thesis jury participations
- Scientific Evaluator for ANR and many scientific journals (10/year)
- Co-organization of 2 scientific conferences: 100 participants, 50k € budget
- 17 invitations for seminars/congress
- CNRS delegation in 2016
- Multicultural context
- International patent

## ASSOCIATE PROFESSOR

Université Paris Sud # since sept. 2010



### ASSIGNMENTS CONDUCTED

Teaching in Bachelor and Master degree (lectures, tutorial, exercices) 192h/year

### DETAILS OF THE EXPERIENCE

- Organic Chemistry for "Agrégation interne" (Course lecturer)
- Stereochemistry M1
- Introduction to Organic Chemistry L1 PC (Course lecturer)
- Basic Organic Chemistry Laboratory L2 (Supervisor)

- Tuteur Stage M1 Chimie Organique
- Introduction to Stereoselective
- Reaction L3 (Teaching Assistant)
- Organic - Inorganic chemistry towards sustainability M1 SERP+
- Organometallic M1
- Organic Chemistry (Course L2 lecturer + Coordinator)

## Junior Research Scientist-Total Synthesis



ECPM, University of Strasbourg # sept 2008-2010 with Dr. Hanquet

### DETAILS OF THE EXPERIENCE

- Demonstration of a diastereoselective method hitherto postulated
- Writing articles

- Animation of 3 national dissemination seminars
- Transmission of my know-how to the trainees of the team
- Acquisition of new skills in total syntheses (multigram scale)
- Collaborative initiative

## Junior Research Scientist-Organometallic catalysis



ICIQ Tarragona Spain # fev. 2007- aug 2008 avec Prof. Echavarren

### DETAILS OF THE EXPERIENCE

- Head of 5 research projects
- Supervision of PhD students
- 5 articles published in peer-reviewed journals

- Design, synthesis and characterization of new ligands and gold complexes
- Study of the reactivity of complexes in polyenes cycloisomerizations