

## CV

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### Professional Experience

2015-present **Chargé de Recherche CNRS**, Université de Rennes 1.  
2014-2015 **Postdoctoral researcher** with T. Ooi, ITbM-Nagoya University.  
2011-2014 **Postdoctoral researcher** with J. N. H. Reek, University of Amsterdam.

### Education

2019 **Habilitation** for Direction of Research (HDR) with C. Bruneau, Université de Rennes 1.  
2012 **PhD** in Chemistry with D. Armspach and Dr. D. Matt, Université de Strasbourg.  
2008 **MSc** in Molecular and Supramolecular Chemistry with F. R. Leroux, Université de Strasbourg.  
2008 **Ingénieur**, Ecole Européenne de Chimie, Polymères et Matériaux de Strasbourg.  
2008 **BSc** in Chemistry, University of Valencia.

### Management responsibilities

2022 **Nominated member** of the user's council of CRMPO platform from the UAR2025 ScanMAT.  
2021 **Elected member** of the CID-50 "Gestion de la recherche (CID50)" of the CoNRS.  
2021 **Elected member, secretary and handicap correspondent** of the CoNRS section 14.  
2021 **Elected member** for the French Chemical Society – Bretagne & Pays Loire office.

### Research interests

Homogeneous, transition metal and supramolecular catalysis, green chemistry: atom- and step-economy, non-covalent interactions, reaction mechanism studies.

### Bibliometrics

45 articles since 2011 (25 as corresponding author), 1 book chapter, 1 patent, including 6 *Angewandte*, 1 *JACS*, 7 *Chem. Eur. J.*, 2 *Chem. Soc. Rev.*, 2 *Chem. Commun.*, 4 *Catal. Sci. Technol.*, 4 *JOC*, 1 *ASC*  
H-index 16; citation/publication = 27; total citations 1200.  
Research articles highlighted as cover (9), hot paper (3), INC-CNRS website (4), ChemistryViews (1).  
+30 international oral communications, national oral communications, and laboratory seminars.

### Awards

- *Jean-Pierre Sauvage* young researcher award from the SCF-DCO, 2022.
- Emerging Investigator recognition by the RSC journal *Catal. Sci. Technol.* 2021.
- CNRS PEDR award (bonus for excellence in research and training/supervision), 2020-2023.
- Junior Scientists Participation Fellowship 55<sup>th</sup> Bürgenstock Conference, 2020/2021.
- European Young Chemist award finalist, 2018.
- Societe Chimique de France young researcher travel award, 2018.
- Division Chimie Coordination young researcher travel award, 2018.
- CNRS PEDR award (bonus for excellence in research and training/supervision), 2016-2019.
- PhD thesis award from Société des Amis des Universités de l'Académie de Strasbourg, 2013.
- Bourse Docteur Ingénieur, CNRS - Région Alsace, 2008.
- Erasmus Fellowship, 2006-2008.

### Memberships and networks

- Société Chimique de France, SCF.
- Real Sociedad Espanola de Quimica, RSEQ.
- International Consortium on Eco-conception and renewable resources (INCREASE)
- Laboratoire International Associé (LIA) ChemSusCat with Leibniz-Institut für Katalyse, 2015-2020.
- COST Action CA15106: C-H Activation in Organic Synthesis CHAOS, 2015-2020.

### Congress organization

- 4<sup>th</sup> International Green Catalysis Symposium, 19<sup>th</sup>-22<sup>th</sup> April 2022, Rennes, France.
- 3<sup>rd</sup> International Green Catalysis Symposium, 23<sup>th</sup>-24<sup>th</sup> March 2017, Rennes, France.

## Teaching

- Travaux Dirigés (36 h) Chemical equilibria (L1 Life Sciences), Université de Rennes 1.

## Supervision (§ denotes co-authorship)

Current: 2 PhD students (J. Trouvé,<sup>§</sup> N. Abuhafez<sup>§</sup>), 2 MSc students (J. Mehrez, P. Rajeshwaran), 2 BSc students (F. Guicheteau, T. Durand), 1 short-term engineer (A. Dhaka).

Previous: 1 post-doctoral researcher (P. Zardi<sup>§</sup>), 1 PhD student (Y.-C. Yuan<sup>§</sup>), 1 short-term engineer (H. Ruffin<sup>§</sup>), 8 MSc students (A. Perennes,<sup>§</sup> T.-M. Nguyen,<sup>§</sup> E. Prignot, K. Youssef, S. Al-Shehimi,<sup>§</sup> S. Kasemthaveechok,<sup>§</sup> R. Kamaraj,<sup>§</sup> J. Hou<sup>§</sup>), 5 BSc students (M. Joly, E. Tregiaud, M. Goujon,<sup>§</sup> L. Jacquet, C. Besnard, F. Bourriquen), 1 visiting PhD student (M. Kadri,<sup>§</sup> Algeria), 1 visiting researcher (A. R. Garcia-Marquez,<sup>§</sup> Mexico).

## Funding

Janssen research collaboration (2021), ISCR projet inter-équipe local grant (2020, 2017), Allocations de Recherche Doctorale (Région Bretagne, 2020-2023), Défis scientifiques grant (Université de Rennes 1, 2020), Agence Nationale de la Recherche (ANR-JCJC, 2019-2023), Boost-Europe (Région Bretagne, 2021, 2018), Aide à l'installation scientifique (Rennes Métropole, 2018), Prestige Marie Curie program (hosting PI, 2017), Stratégie d'attractivité durable (Région Bretagne, 2017), China Scholarship Council (hosting PI, 2016-2019).

## National and International Collaborations

- Matthieu Jouffroy, Janssen Pharmaceutica, Belgium (industrial partner), co-authors of 1 publication.
- Marielle Blot: HPLC analysis, Rennes, co-author of 1 publication.
- Thierry Roisnel, Marie Cordier, Vincent Dorcet: X-ray studies, Rennes, co-authors of 14 publications.
- Jean-Francois Halet and Samia Khalal: DFT calculations, Rennes, co-authors of 1 publication.
- Albert Poater: DFT calculations, Spain, co-author of 1 publication.
- Bruno Fabre and Gabriel Loget: electrochemistry, Rennes, co-authors of 1 publication.
- Francoise R.-Le Guen and Sylvain Achelle: heterochemistry, Lannion, co-authors of 1 publication.
- Thierry Labasque: GC gas analysis, Rennes, co-author of 1 publication.
- Antonio Frontera: DFT calculations, Rennes, co-author of 1 publication.

## Board

- PhD thesis jury member Rouen (2020), Toulouse 3 (2019), Sorbonne (2019).
- PhD thesis external jury member at University Zaragoza (2021), Tarragona (2020), University Castilla La Mancha Toledo (2019), Indian IEST, Shibpur, West Bengal (2019), University of Valencia (2018).
- Jury PhD students day at Institut des Sciences Chimiques de Rennes, 19<sup>th</sup> November 2020.
- Jury for master final presentations, Master Chemistry, University of Rennes 1, 2018-now.
- Jury for master final presentations, Master CatGreenChem, University of Rennes 1, 2015-now.

## Outreach activities (interview, magazine, press releases)

<https://www.youtube.com/watch?v=yVaC84OhqKM> at 0:48 timing.

<https://www.youtube.com/watch?v=maLLElafzYo> at 2:44 timing.

<https://www.espace-sciences.org/sciences-ouest/359/dossier/de-l-hydrogene-grace-au-soleil>.

[http://www.cnrs.fr/inc/communication/direct\\_labos/gramage.htm](http://www.cnrs.fr/inc/communication/direct_labos/gramage.htm)

<https://inc.cnrs.fr/fr/cnrsinfo/des-catalyseurs-artificiels-qui-imitent-de-mieux-en-mieux-les-enzymes>

## Representative, selected publications from the last five years

- "Iridium-Catalyzed Direct Reductive Amination of Ketones and Secondary Amines: Breaking the Aliphatic Wall" *Chem. Eur. J.* **2022**, *28*, e202201078.
- "Enzyme-like supramolecular iridium catalysis enabling C-H bond borylation of pyridines with meta-selectivity" *Angew. Chem. Int. Ed.* **2021**, *60*, 18006-18013.
- "Beyond hydrogen bonding: recent trends of outer sphere interactions in transition metal catalysis" *Chem. Soc. Rev.* **2021**, *50*, 3565-3584.
- "A supramolecular palladium catalyst displaying substrate selectivity by remote Control" *Chem. Eur. J.* **2019**, *25*, 627-634.
- "Palladium-catalysed cross-Coupling reactions controlled by non-covalent Zn<sup>II</sup>·N interactions" *Chem. Eur. J.* **2017**, *23*, 5033-5043.
- "Unmasking Amides: Ruthenium-Catalyzed Protodecarbonylation of N-Substituted Phthalimide Derivatives" *Org. Lett.* **2017**, *19*, 6404-6407.
- "One-Pot Directing Group Formation/C-H Bond Functionalization via Copper(I) and Ruthenium(II) Catalysis" *Adv. Synth. Catal.* **2016**, *358*, 3847-3856.