

## Karinne MIQUEU



**Affiliation :** Université de Pau & des Pays de l'Adour - IPREM - UMR CNRS 5254 -  
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### Education

**January 2000** Ph.D. in Physical Chemistry, University of Pau (Dr. G. Pfister-Guillouzo)  
**2000-2001** Post-doctoral position, University of Southampton, England, Laboratory of Chemical Physics (Pr. John Dyke)  
**2001-2002** Post-doctoral position, University Paul Sabatier of Toulouse, Laboratory of "Hétérochimie Fondamentale et Appliquée" (Dr. G. Bertrand).  
**November 2011** Habilitation to direct research, University of Pau

### Position

**2002-2014** CNRS assistant Researcher at IPREM, University of Pau  
**2014-present** Director of research at CNRS, IPREM, University of Pau

### Awards

**2010** Bronze medal CNRS

### Research interests

My research activities aim at understanding reactivity of molecular architectures by a joint experimental/theoretical approach. They are mainly focus on the study of their electronic and spectroscopic properties, description of new bonding situations and mechanisms.

#### Keywords :

Main group chemistry - Coordination chemistry - Highly reactive species  
Computational Chemistry - UV Photoelectron Spectroscopy in gas phase  
Electronic structure - Analysis of new bonding situation or new bonding modes  
Catalytic reaction pathways - Polymerization reaction pathways

### Publications :

97 (15 *J. Am. Chem. Soc.*, 15 *Angew. Chem.Int. Ed. Engl.*, 8 *Chem. Eur. J.*, 22 *Organometallics*, 2 *Chemical Sciences*, 1 *Macromolecules*, 1 *Organic Letters*, 1 *Chem. Comm.*, 2 *Dalton Trans...*)  
h-index : 28 (web of sciences), Sum of times cited without self-citations : 2143.

### Other activities

#### Teaching :

2008-2011 Engineering School, CESI Pau, Organic Chemistry.  
2012-2013 University of Anglet : Organic chemistry and Physical-Chemistry in L1 and L3.  
since 2013 University of Anglet : Physical-Chemistry in L3.

#### Collective and Administrative responsibilities :

Since 2016 Member of the CNRS National Committee, (section 12)  
Since 2012 Elected member of the Scientific Council, University of Pau  
Since 2016 Member of the laboratory council of the team of Chemical Physics at IPREM, Pau  
Since 2008 Elected member of "Commission experts", section 32, University of Pau  
Since 2005 Member of the "Bureau section Aquitaine" of the French Chemical Society.  
Treasurer since 2016.

### Institutional fundings :

- National support from the National Agency of Research : BILI 2006-2009, NITC 2008-2011, DESIGETIN 2008-2011, MELIBO 2010-2014, IODINOVO 2010-2014, CATAPULT 2011-2015, RICH 2014-2019, COLAMET 2015-2019.
- International supports: CNRS-PICS 2003-2006 - CAPES-COFECUB 21621SL, 2009-2013 - VOLUBILIS MA/11/428 Egide 24425 WH, 2010-2014.
- Local and regional government : CONSEIL GENERAL 64, 2013 - CDAPP 64, 2015-2016.

### Selected publications

Organic Lewis Pairs Based on Phosphine and Electrophilic Silane for the Direct and Controlled Polymerization of Methyl Methacrylate: Experimental and Theoretical Investigations.

W. N. Ottou, E. Conde-Mendizabal, A. Pascual, A-L. Wirotius D. Bourichon, J. Vignolle, F. Robert, Y. Landais, J-M. Sotiropoulos, K. Miqueu, D.Taton, *Macromolecules*, **2017**, 50 (3), 762.

Experimental and theoretical evidence for an agostic interaction in a Gold(III) complex.

F. Rekhroukh, L. Estévez, C. Bijani, K. Miqueu, A. Amgoune, D. Bourissou. *Ang. Chem. Int. Ed. Engl.*, **2016**, 55(10), 3414.

$\beta$ -Hydride Elimination at Low-Coordinate Gold(III) Centers. F. Rekhroukh, L. Estévez, S. Mallet-Ladeira, K. Miqueu, A. Amgoune, D. Bourissou. *Journal of the American Chemical Society*, **138**(36), **2016**, 11920.

From the N-Heterocyclic Carbene-Catalyzed Conjugate Addition of Alcohols to the Controlled Polymerization of (Meth)acrylates. W.N. Ottou, D. Bourichon, J. Vignolle, A-L. Wirotius, F. Robert, Y. Landais, J-M. Sotiropoulos, K. Miqueu, D.Taton, *Chemistry - A European Journal*, **2015**, 21, 9447.

A Stable but Highly Reactive Phosphine-Coordinated Boremium: Metal-free Dihydrogen Activation and Alkyne 1,2-Carboboration. M. Devillard, R. Brousses, K. Miqueu, G. Bouhadir, D. Bourissou, *Ang. Chem. Int. Ed. Engl.*, **54**, **2015**, 5722

Facile Oxidative Addition of Aryl Iodides to Gold(I) by Ligand Design: Bending Turns on Reactivity. M. Joost, A. Zeineddine, L. Estévez, S. Mallet-Ladeira, K. Miqueu, A. Amgoune, D. Bourissou, *J. Am. Chem. Soc.*, **2014**, 136, 14654.

Cyclodimerization *versus* polymerization of methyl methacrylate induced by N-heterocyclic carbenes: A combined experimental and theoretical study. W.N. Ottou, D. Bourichon, J. Vignolle, A-L. Wirotius, F. Robert, Y. Landais, J-M. Sotiropoulos, K. Miqueu, D.Taton, *Chemistry - A European Journal*, **2014**, 20, 3989.

Mechanisms of *syn*-Insertion of Alkynes and Allenes into Gold–Silicon Bonds: A Comprehensive Experimental/Theoretical Study. M. Joost, L. Estevez, S. Mallet-Ladeira, K. Miqueu, A. Amgoune, D. Bourissou, *J. Am. Chem. Soc.*, **2014**, 136, 10373.

Combined DFT and experimental studies of C–C and C–X elimination reactions promoted by a chelating phosphine–alkene ligand: the key role of penta-coordinate PdII. L. Estévez, L-W. Tuxworth, J-M. Sotiropoulos, P-W. Dyer, K. Miqueu, *Dalton Trans.*, **2014**, 43, 11165.

A Contribution to the Direct Observation of Transient Phosphanidene Complexes [RP=W(CO)<sub>5</sub>, (R: Me, Ph)]: A Revisited Approach to Their Electronic Structure by UV Photoelectron Spectroscopy. S. Labat, K. Miqueu, J.-M. Sotiropoulos, P. Baylère, G. Pfister-Guillouzo, N-H Tran-Huy, F. Mathey, *European Journal of Inorganic Chemistry*, **2014**, 1694.