



**Dr Muriel DURANDETTI**



Maître de Conférences HC

MESOO team

Tel : 02 35 52 24 37

E-mail : Muriel.durandetti@univ-rouen.fr

[Orcid ID](https://orcid.org/0000-0002-5136-9655) 0000-0002-5136-9655

## PROFESSIONAL EXPERIENCES

- 2005- Associate professor, Rouen Normandy University, France.  
1998-2005 Associate professor, University of Paris XII (Val de Marne), France.  
1994-1998 Assistant professor, Advisor: Prof. Périchon, University of Paris XII (Val de Marne), France.

## EDUCATION

- 06/2005 Habilitation à Diriger des Recherches, University Paris Val de Marne, France  
1991-1994 Ph.D. Chemistry, University Paris VI (Pierre et Marie Curie), France.  
1990-1991 M.S. Analytical Chemistry, University Paris VI (Pierre et Marie Curie), France.

## ADMINISTRATIVE & INSTITUTIONAL RESPONSIBILITIES

- 2017- Director of the C2iOrgA technical platform.  
2017- Member of the COBRA management team  
2015- Member of the board of the Société Chimique de France, Organic Chemistry Division (SCF-DCO) – Treasurer since 2018  
2012- Coordinator of the "Metal mediated Chemistry" axis of the LabEx SynOrg  
2006- Member of the Advisor Commission of faculty specialists (CCSE, section 32) – University of Rouen, France – vice president (2006-2019).

## RESEARCH INTERESTS

- Topic 1: Electrocatalysed cross-coupling reaction - Mechanistic investigation using electroanalytical process – Transition metal catalysis.  
Topic 2: Synthesis of silylated / germylated heterocycles (Si-CH<sub>2</sub>-Cl activation, Si-CH<sub>2</sub>-H activation, Si-Si activation, Si-H / Ge-H activation).  
Topic 3: Triple bond activation (carbometallation, heterometallation). Synthesis associated with theoretical study by DFT calculations.

## SCIENTIFIC ACHIEVEMENTS

### Academic record (h-index: 17)

47 publications, 2 patents, 25 invited lectures (academia & industry)

## SUPERVISION ACTIVITIES

10 PhD students

5 post-doctoral internships

3 technicians / engineers

10 Master 2 students

Ungraduated students

## GRANTS AND FELLOWSHIPS

Regional grants – Janssen-Cilag grants – CIFRE with Arkema – LabEx SynOrg grants – Scholarship of China – Co-tutelle with Carthage University

Participation in the LabFact program (Interreg VA France-Manche-Angleterre)

Participation in the SmartT program (Interreg VA France-Manche-Angleterre)

## TEACHING ACTIVITIES

University of Paris XII (Val de Marne)

Organic Chemistry / General Chemistry

IUT department of Chemistry:

General Chemistry / Analytical Chemistry / Electrochemistry / NMR

Master 2:

Electrosynthesis / Molecular electrochemistry applied to mechanisms determination

## MEMBERSHIPS OF SCIENTIFIC SOCIETIES

Member of the Organic Chemistry Division of the Société Chimique de France (SCF-DCO) since 2007

## CONFERENCES

25 invited lectures (academia & industry, 16 international) – 74 oral and poster presentations

## Selected Publications

- 1 - "Ni-Catalysed Activation of  $\alpha$ -Chloroesters: A simple Method for the Synthesis of  $\alpha$ -Arylestere and  $\beta$ -Hydroxy-esters". M. Durandetti, C. Gosmini, J. Périchon. *Tetrahedron*, **2007**, *63*, 1146-1153
- 2 - "Intramolecular carbolithiation of alkynes: *anti* selectivity". Catherine Fressigné, AL. Girard, M. Durandetti, J. Maddaluno. *Angew. Chem. Int. Ed.*, **2008**, *47*, 891-893
- 3 - "Synthetic applications of the nickel-catalyzed cyclisation of alkynes combined with addition reactions in a domino process". M. Durandetti, L. Hardou, R. Lhermet, M. Rouen, J. Maddaluno. *Chem. Eur. J.*, **2011**, *17*, 12773-12783
- 4 - "Intramolecular Sila-Matteson Rearrangement: a General Access to Silylated Heterocycles". C. François, T. Boddaert, M. Durandetti, O. Querolle, L. Van Hijfte, L. Meerpoel, P. Angibaud, J. Maddaluno. *Org. Lett.*, **2012**, *14*, 2074-2077
- 5 - "Anionic access to silylated and germylated binuclear heterocycles". T. Boddaert, C. François, L. Mistico, O. Querolle, L. Meerpoel, P. Angibaud, M. Durandetti, J. Maddaluno. *Chem. Eur. J.*, **2014**, *20*, 10131-10139
- 6 - "Intramolecular Carbolithiation of Heterosubstituted Alkynes: Experimental and Theoretical Study". R. Lhermet, M. Ahmad, C. Hauduc, C. Fressigné, M. Durandetti, J. Maddaluno. *Chem. Eur. J.*, **2015**, *21*, 8105-8111. **Hot paper. Inside back Cover picture**
- 7 - **Special Issue: Women in Chemistry** "Direct Carboxylation of Aryl Tosylates by CO<sub>2</sub> Catalyzed by *in situ* Generated Ni(0)". F. Rebih, M. Andreini, A. Moncomble, A. Harrison-Marchand, J. Maddaluno, M. Durandetti. *Chem. Eur. J.*, **2016**, *22*, 3758-3763
- 8 - "Access to Silylated Pyrazole Derivatives by Palladium-Catalyzed C-H Activation of a TMS group". L. Mistico, O. Querolle, L. Meerpoel, P. Angibaud, M. Durandetti, J. Maddaluno. *Chem. Eur. J.*, **2016**, *22*, 9687-9692
- 9 - "Direct *Syn* Addition of Two Silicon Atoms to a C $\equiv$ C Triple Bond by Si-Si Bond Activation: Access to Reactive Disilylated Olefins" M. Ahmad, A.-C. Gaumont, M. Durandetti, J. Maddaluno. *Angew. Chem. Int. Ed.*, **2017**, *56*, 2464-2468
- 10 - **Special Issue: Women of Catalysis** "Synthesis of *N*-Heterocycles-Fused azasilines by palladium-catalyzed Si-Si bond activation" L. Noël-Duchesneau, J. Maddaluno, M. Durandetti. *ChemCatChem*, **2019**, *11*, 4154-4160