

CURRICULUM VITAE

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Full name: Isabella CHIAROTTO

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Education: in 1989 Graduated in Chemistry and Pharmaceutical Technology *Sapienza University of Rome*, 110/110

in 1996-Research Training *Ecole Normale Supérieure in Paris*

Academic Appointments

Isabella Chiarotto is an Assistant Professor (Ricercatore Universitario Confermato a tempo indeterminato) from 1992 of General Chemistry at the *Sapienza University of Rome*. In 2017 she received National Academic Qualification as Associate Professor in Area 03/B2 FONDAMENTI CHIMICI DELLE TECNOLOGIE. In 2018 she received National Academic Qualification as Full Professor in Area 03/B2 FONDAMENTI CHIMICI DELLE TECNOLOGIE.

Teaching

Since 1996, she has taught classes of General Chemistry in the following Courses at the *Sapienza University of Rome* for 60-90 hours/year (on average):

MSc in Civil Engineering (5 years degree)

BSc in Energy Engineering (1st level bachelor degree)

She is member of the Doctoral Committees of the PhD Programs in Member of Professor Board of the PhD in Sciences and Technologies for Complex Systems at the *Sapienza University of Rome*.

In 1989 she received the Pharmacist Licensure - *Sapienza University of Rome*.

She has been mentor, supervisor and collaborator with MSc students for the Courses of Pharmacy and Chemistry and Pharmaceutical Technology (CTF) during the preparation of experimental theses.

Society memberships, Awards, Honors and Editorial Activity

from 1995 Member of Italian Chemical Society

from 2001 Member of International Society of Electrochemistry

from 2006 Member of AICIng

She is currently referee for several ISI journals: RCS Advanced, Tetrahedron Letters, Synlett, Communications, Industrial & Engineering Chemistry Research, Journal of Electroanalytical Chemistry

Research Projects and Collaborations

She has participated in national and international projects. Since 2013, she is a research collaborator for activities with multinational **Covestro** former Bayer **MaterialScience**

Funding Information as PI:

2015	Sapienza Research Projects	(about 13 k€)
2009	Sapienza University federated Projects AST	(about 19k€) for research grant holder
2008	Sapienza University federated Projects AST	(about 12 k€)
2007	Sapienza University federated Research Projects AST	(about 10 k€)

2001 Sapienza Research Projects (about 12 k€)

Scientific Activity Current Research Interests

Her interest focuses on various themes of molecular electrochemistry, on the applications in organic syntheses, for the use of ionic liquids in the electrochemical syntheses, for the electrochemical syntheses of substance of biological and pharmaceutical interest, for the development of mechanistic and synthetic studies on palladium complex under CO atmosphere. He has several scientific collaborations with academic research groups in Italy and Europe, and with Industrial Partners.

The results of her research have been published over 57 publications, including:

49 papers on international journals (47 SCOPUS)

3 chapters/monographs on international books

2 Peer reviewed Proceedings

2 International Patents

1 National Patents

Her publications have been cited over 648 times, h-index 17

List of patents

1. **2017** – International Patent
I. Chiarotto, M. Feroci, G. Forte, A. Inesi, F. Richter, V. Trieu
Sustainable Synthesis of carbamate compounds. Applicant: Covestro AG (De)
International Publication Date 17.08.2017 WO2017/137343 A1
2. **2016** - International Patent
I. Chiarotto, M. Feroci, G. Forte, H. Heckroth, A. Inesi, F. Richter, V. Trieu
Electrochemical synthesis of dicarbamates. Applicant: Covestro AG (De)
International Publication Date 02.06.2016 WO2016/083475 A1
3. **2014** - National Patent
I. Chiarotto, M. Feroci, G. Forte, H. Heckroth, A. Inesi, F. Richter, V. Trieu
Sintesi elettrochimica di dicarbammati.
Richiedente: BayerMaterialScience AG (De) Numero domanda: 102014902313272
(RM2014A000694) Date 28.11.2014

Selected Publications list

1. Papers on International Journal Source: **Scopus**
M. Feroci, I. Chiarotto, M. Orsini, F. Pandolfi, D. Zane, A. Inesi
Electrogenerated N-Heterocyclic Olefins: Stability and Catalytic Ability
ChemElectroChem, **2018** Article in Press. **IF** 4,136 (2016)
DOI: 10.1002/celc.201700992
2. Paper on International Journal Source: **Scopus**
F. Billeci, F. D'Anna, I. Chiarotto, M. Feroci, S. Marullo
The anion impact on the self-assembly of naphthalene diimide diimidazolium salts.
New Journal of Chemistry **2017**, *41*, 13889-13901. **IF** 3,269 (2016)
DOI: 10.1039/c7nj03705h
3. Paper on International Journal
G. Forte, I. Chiarotto, F. Richter, V. Trieu, M. Feroci
Towards a sustainable electrochemical activation for recycling CO₂: synthesis of bis-O-alkylcarbamates from aliphatic and benzyl diamines.
Reaction Chemistry & Engineering (RCS) **2017**, *2*, 646-649. **IF** pending
DOI: 10.1039/C7RE00101K
4. Paper on International Journal
M. Papa, I. Chiarotto, M. Feroci
Willgerodt-Kindler Reaction of Benzaldehydes: A Comparative Study for a Sustainable Synthesis of Secondary Thiobenzamides

ChemistrySelect (Wiley-VCH) **2017**, 2, 3207-3210. **IF** pending
DOI: 10.1002/slct.201700507

5. Paper on International Journal Source: **Scopus**. Cited 1 time.

I. Chiarotto, M. Feroci, A. Inesi
First direct evidence of N-heterocyclic carbene in BMIm acetate ionic liquids. An electrochemical and chemical study on the role of temperature
New Journal of Chemistry **2017**, **41**, 7840-7843. **IF** 3,269 (2016)
DOI: 10.1039/c7nj00779e

6. Paper on International Journal Source: **Scopus**

F. Pandolfi, I. Chiarotto, D. Rocco, M. Feroci
Electrogenerated superoxide anion induced oxidative amidation of benzoin
Electrochimica Acta **2017**, **254**, 358–367. **IF** 4,798 (2016)
DOI: 10.1016/j.electacta.2017.09.135

7. Paper on International Journal Source: **Scopus**. Cited 1 time

I. Chiarotto
Tetraethylammonium Hydrogen Carbonate: A Cheap, Efficient and Recyclable Catalyst for Transesterification Reactions Under Solvent-Free Conditions
Synthetic Communications **2016**, **46**, 1840-1847. **IF** 1,134
DOI: 10.1080/00397911.2016.1233343

8. Paper on International Journal Source: **Scopus** Cited 1 time

M. Feroci, I. Chiarotto, A. Inesi
Advances in the Knowledge of N-Heterocyclic Carbenes Properties. The Backing of the Electrochemical Investigation
Catalysts **2016**, **6**, 178. **IF** 3,082
DOI: 10.3390/catal6110178

9. Paper on International Journal Source: **Scopus** Cited 2 times

G. Forte, I. Chiarotto, I. Giannicchi, M. A. Loreto, A. Martinelli, R. Micci, F. Pepi, S. Rossi, C. Salvitti, A. Stringaro, L. Tortora, S. Vecchio Cipriotti, M. Feroci
Characterization of Naproxen-Polymer Conjugates for Drug-Delivery
Journal of Biomaterials Science: Polymer Edition **2016**, **27**(1), 69-85. **IF** 1,9

10. Paper on International Journal Source: **Scopus** Cited 2 times

M. Feroci, I. Chiarotto, F. D'Anna, L. Ornano, C. Rizzo, A. Inesi
Azolium and acetate ions in DMF: formation of free N-heterocyclic carbene. A voltammetric analysis
Electrochemistry Communications **2016**, **67**, 55-58. **IF** 4,396
DOI: 10.1016/j.elecom.2016.03.012

11. Paper on International Journal Source: **Scopus** Cited 2 times

M. Feroci, I. Chiarotto, F. D'Anna, F. Gala, R. Noto, L. Ornano, G. Zollo, A. Inesi
N-Heterocyclic carbenes and parent cations: acidity, nucleophilicity, stability and hydrogen bonding. Electrochemical study and ab initio calculations
ChemElectroChem **2016**, **3**, 1133–1141. **IF** 4,136
ISSN: 2196-0216, DOI: 10.1002/celec.201600187

12. Paper on International Journal Source: **Scopus** Cited 1 time

D. De Vita, F. Pandolfi, L. Ornano, M. Feroci, I. Chiarotto, I. Sileno, F. Pepi, R. Costi, R. Di Santo, L. Scipione
New N,N-dimethylcarbamate inhibitors of acetylcholinesterase: design synthesis and biological evaluation
J. Enzyme Inhib. Med. Chem. **2016**, **31**, 106-113. **IF** 3,776
DOI: 10.1080/14756366.2016.1220377

13. Paper on International Journal Source: **Scopus** Cited 4 times

I. Chiarotto, M. Feroci, G. Forte, A. Inesi
Stability of electrogenerated 1-butyl-3-methylimidazol-2-ylidene in DMF. Part 2. Role of acid substrates.

Electrochimica Acta **2015**, 176, 627-635. **IF** 4,803

DOI: 10.1016/j.electacta.2015.06.129

14. Paper on International Journal Source: **Scopus** Cited 14 times

M. Feroci, I. Chiarotto, F. D'Anna, G. Forte, R. Noto, A. Inesi
Stability and Organocatalytic Efficiency of N-Heterocyclic Carbenes Electrogenerated in Organic Solvents from Imidazolium Ionic Liquids

Electrochimica Acta **2015**, 153, 122-129. **IF** 4,803

DOI: 10.1016/j.electacta.2014.11.135

15. Paper on International Journal Source: **Scopus** Cited 5 times

I. Chiarotto, M. Feroci, Gianpiero Forte, Monica Orsini, Achille Inesi
Proton Exchange Equilibrium between bases and BMImBF₄. An Electrochemical Procedure to Evaluate the Presence of Carbene for Synthetic Applications

ChemElectroChem **2014**, 1, 1525-1530. **IF** 3,506

DOI: 10.1002/celec.201402134

16. Paper on International Journal Source: **Scopus** Cited 12 times

M. Feroci, I. Chiarotto, G. Forte, S. Vecchio Cipriotti, A. Inesi
Stability and CO₂ Capture Ability of Electrogenerated N-Heterocyclic carbene in the Parent 1-Butyl-3-methylimidazolium ionic liquid (BMIm-X): the role of the anion X⁻

ChemElectroChem **2014**, 1, 1407-1414. **IF** 3,506

DOI: 10.1002/celec.201300269

17. Paper on International Journal Source: **Scopus** Cited 6 times

G. Forte, I. Chiarotto, A. Inesi, M. A. Loreto, M. Feroci
Electrogenerated N-Heterocyclic Carbene in Ionic Liquid: an Insight into the Mechanism of the Oxidative Esterification of Aromatic Aldehydes

Advanced Synthesis & Catalysis **2014**, 356, 1773-1781. **IF** 5,663

DOI: 10.1002/adsc.201400163

18. Paper on International Journal

M. Feroci, I. Chiarotto, G. Forte, S. Giovanna, F. Diodata D'Auria, L. Maes, L. Scipione, L. Friggeri, R. Di Santo, D. De Vita, S. Tortorella

Efficient electrochemical N-alkylation of N-Boc-protected 4-aminopyridines: towards new biologically active compounds

ISRN Organic Chemistry Volume 2014 (**2014**), Article ID 621592, 10 pages.

<http://dx.doi.org/10.1155/2014/621592>

19. Paper on International Journal Source: **Scopus** Cited 18 times

I. Chiarotto, M. Feroci, G. Sotgiu, A. Inesi
Electrogenerated N-heterocyclic carbene in the parent room temperature ionic liquid as efficient medium for the transesterification/acylation reaction

European Journal of Organic Chemistry **2013**, 2, 326-331. **IF** 3,154

DOI: 10.1002/ejoc.201201023-ISSN:1434-193X

20. Paper on International Journal Source: **Scopus** Cited 13 times

M. Feroci, I. Chiarotto, A. Inesi
Electrolysis of Ionic Liquids. A Possible Keystone for the Achievement of Green Solvent-Catalyst Systems

Current Organic Chemistry **2013**, 17, 204-219. **IF** 2,537

DOI: 10.2174/1385272811317030003- ISSN:1385-2728