

CURRICULUM VITAE

Elisabetta Rossi
Full Professor



Education

1981: Degree in "Pharmaceutical Chemistry and Technologies" at Università degli Studi di Milano

1986: Post-degree School of "Chemical and Analytical Methodologies in Fine Chemicals" at Politecnico di Milano

Professional Experience

1983: Assistant Professor at Università degli Studi di Milano.

2003: Associate Professor at Università degli Studi di Milano.

2018: Full Professor at Università degli Studi di Milano.

Recent publications

1. E. Rossi, G. Abbiati, V. Pirovano
"2- and 3-Vinylindoles as 4π Components in Cycloaddition Reactions"
Eur. J. Org. Chem. **2017**, 4512-4529.
2. V. Pirovano, M. Borri, G. Abbiati, S. Rizzato, E. Rossi
"Gold(I)-Catalyzed Enantioselective Synthesis of Tetrahydrocarbazoles through Dearomative [4+2] Cycloadditions of 3/2-Substituted 2/3-Vinylindoles"
Adv. Synth. Catal. **2017**, 359, 1912-1918.
3. M. Dell'Acqua, V. Pirovano, S. Peroni, G. Tseberlidis, D. Nava, E. Rossi, G. Abbiati
"Silver-Catalysed Domino Approach to 1,3-Dicarbo-Substituted Isochromenes"
Eur. J. Org. Chem. **2017**, 1425-1433.
4. G. Tseberlidis, M. Dell'Acqua, D. Valcarengi, E. Gallo, E. Rossi, G. Abbiati, A. Caselli
"Silver comes into play: Henry reaction and domino cycloisomerisation sequence catalysed by [Ag(i)(Pc-L)] complexes"
RSC Adv. **2016**, 6, 97404-97419.
5. V. Pirovano, M. Negrato, G. Abbiati, M. Dell'Acqua, E. Rossi
"Gold-Catalyzed *cis*-Hydroarylation of Ynamides with Indoles: Regio- and Stereoselective Synthesis of a Class of 2-Vinylindoles"
Org. Lett. **2016**, 18, 4798-4801.

6. E. Rossi, G. Abbiati, M. Dell'Acqua, M. Negrato, A. Paganoni, V. Pirovano
"Exploiting the σ -phylic properties of cationic gold(I) catalysts in the ring opening reactions of aziridines with indoles"
Org. Biomol. Chem. **2016**, *14*, 6095-6110.
7. V. Pirovano, E. Arpini, M. Dell'Acqua, R. Vicente, G. Abbiati, E. Rossi
"Gold(I)-catalyzed synthesis of tetrahydrocarbazoles via cascade [3,3]-propargylic rearrangement/[4+2]-cycloaddition of vinylindoles and propargylic esters"
Adv. Synth. Catal. **2016**, *358*, 403-409.
8. E. Rossi, V. Pirovano, M. Negrato, G. Abbiati, M. Dell'Acqua
"Synthesis of constrained analogues of tryptophan"
Beilstein J. Org. Chem. **2015**, *11*, 1997-2006.
9. M. Dell'Acqua, L. Ronda, R. Piano, S. Pellegrino, F. Clerici, E. Rossi, A. Mozzarelli, M. L. Gelmi, G. Abbiati
"MediaChrom: discovering a class of pyrimidoindolone based polarity-sensitive dyes"
J. Org. Chem. **2015**, *21*, 10939-10954.
10. M. Dell'Acqua, V. Pirovano, G. Confalonieri, A. Arcadi, E. Rossi, G. Abbiati
"Synthesis of 3-benzylisoquinolines by domino imination/cycloisomerisation of 2-propargylbenzaldehydes"
Org. Biomol. Chem. **2014**, *12*, 8019-8030.
11. M. Trose, M. Dell'Acqua, T. Pedrazzini, V. Pirovano, E. Gallo, E. Rossi, A. Caselli, G. Abbiati
"[Silver(I)(Pyridine-Containing Ligand)] complexes as unusual catalysts for A3-coupling reactions"
J. Org. Chem. **2014**, *79*, 7311-7320.
12. M. Dell'Acqua, B. Castano, C. Cecchini, T. Pedrazzini, V. Pirovano, E. Rossi, A. Caselli, G. Abbiati
"Mild Regiospecific Synthesis of 1-Alkoxy-isochromenes Catalysed by Well-Defined [Silver(I)(Pc-L)] Complexes"
J. Org. Chem. **2014**, *79*, 3494-3505.
13. G. Abbiati, A. Arcadi, F. Marinelli, E. Rossi
"Sequential Addition and Cyclization Processes of α,β -Ynones and α,β -Ynoates Containing Proximate Nucleophiles"
Synthesis **2014**, *46*, 687-721.
14. G. Abbiati, E. Rossi
"Silver and gold-catalyzed multicomponent reactions"
Beilstein J. Org. Chem. **2014**, *10*, 481-513.
15. V. Pirovano, M. Dell'Acqua, D. Facoetti, S. Rizzato, G. Abbiati, E. Rossi
"Cycloaddition vs alkylation reactions of 2-vinylindoles with α,β -unsaturated carbonyl compounds under gold catalysis"
Eur. J. Org. Chem. **2013**, 6267-6279.
16. V. Pirovano, D. Facoetti, M. Dell'Acqua, E. Della Fontana, G. Abbiati, E. Rossi
"Gold(I) or Silver Catalyzed Synthesis of α -Indolylacrylates"
Org. Lett. **2013**, *15*, 3812-3815.
17. G. Abbiati, E. M. Beccalli, E. Rossi
"Groups 9 and 10 Metals-Catalyzed O-H Bond Addition to Unsaturated Molecules"
in *Top. Organomet. Chem.* **2013**, *43*, 231-290. Springer-Verlag Berlin Heidelberg 2011.

18. G. Abbiati, F. Marinelli, E. Rossi, A. Arcadi
“Synthesis of Indole Derivatives from 2-Alkynylanilines by Means of Gold Catalysis”
Isr. J. Chem. **2013**, *53*, 856-868.
19. V. Pirovano, L. Decataldo, E. Rossi, R. Vicente
“Gold-catalyzed synthesis of tetrahydrocarbazole derivatives through an intermolecular cycloaddition of vinyl indoles and *N*-allenamides”
Chem. Commun. **2013**, *49*, 3594-3596.

Activity

Professor Elisabetta Rossi obtained her master degree in Chemistry and Pharmaceutical Technology at the University of Milan in 1981 with full marks. In 1983 she obtained a postgraduate specialization in “Analytical and Chemical Methodologies for the Fine Chemicals” at the Politecnico of Milan. In 1983 she became researcher, in 2001 associate professor and in 2018 she was appointed full professor at the University of Milan (SSD CHIM06, organic chemistry). She is currently affiliated to the Department of Pharmaceutical Sciences, University of Milan, member of the academic board of the PhD program in Pharmaceutical Sciences, in charge as referent for the Quality Assurance of research and third mission and supervisor of the “General and Organic Chemistry Section” of the Department.

Professor Rossi research activities focus on the study of novel synthetic methodologies for the synthesis and functionalization of heterocyclic compounds. From a methodological point of view, great emphasis is given to homogenous metal catalysis (in particular Pd, Ti, Au, and Ag) and Lewis acids catalysis applied to domino and multicomponent methodologies and to intra and intermolecular cyclization and cycloaddition reactions. The most studied heterocycles belong to the class of simple and polycyclic imidazoles, pyrroles, furans, indoles, pyridines and quinolines. The syntheses are mainly realised making use of alkynes, benzamidines, aza-alkenes, allenes and new original heterocyclic scaffolds as starting materials.

Professor Rossi is the author of about 100 peer reviewed publications, 4 book chapters, 4 monographs on spectroscopic identification of organic compounds and several communications to national and international congresses (SCOPUS: h-index 28, 2388 total citations, December 2018). She is ad hoc reviewer for several international scientific journals, inter alias, *Journal of Organic chemistry*, *Angewandte Chemie*, *European Journal of Organic chemistry*, *Synthesis*, *Synlett*, *Tetrahedron*, *Tetrahedron Letters*, *Advanced Synthesis & Catalysis*, *Chemistry - a European Journal*, *Chemical Communications*.