

PERSONAL INFORMATION Giorgio Molteni, PhD
 Dipartimento di Chimica, via Golgi 19, 20133 Milano
 Phone: +390250314079
 Fax: +390250314139
 Mail: giorgio.molteni@unimi.it

POSITION Researcher, scientific area CHIM/06 (organic Chemistry)

WORK EXPERIENCE

2002-to date

Researcher, organic Chemistry

Università degli Studi di Milano - Dipartimento di Chimica

- During the first years of his activity, he explored the synthetic aspects of heterocyclic Chemistry, mainly focussing on 1,3-dipolar cycloadditions, for the formation of pharmacologically relevant molecules including enantiopure tricyclic benzodiazepines and β -lactam-based molecules. Later, he developed a strong interest on mechanistic and theoretical aspects of 1,3-dipolar cycloadditions. Recently, his research activity is related to the catalysis of cycloadditions by metal-oxide nanoparticles and the behaviour of 1,3-dipolar species in aqueous medium;
- he is the author of over 110 papers (see below);
- he wrote the textbook on physical organic Chemistry "elementi di Chimica organica fisica" (Aracne Editrice, 2009) and the textbook on instrumental analysis of food entitled "introduzione all'analisi strumentale degli alimenti" (Aracne editrice, two editions, 2013 and 2018);
- he wrote book chapters on "cycloadditions and cyclisation reactions" ("Science of synthesis" series, Thieme), and "stereoselective synthesis by catalysts supported on magnetic nanoferrite" (Wiley);
- he currently acts as a reviewer for the following journals: *Angew. Chem.*, *Eur. J. Org. Chem.*, *J. Org. Chem.*

1996-2002

Research assistant

Università degli Studi di Milano - Dipartimento di Chimica

- Research activity in the field of organic Chemistry, cooperation with non-academic institutions (Sorin, Bracco)

EDUCATION AND TRAINING

1996

PhD in Chemistry

Università degli Studi di Milano

- PhD thesis entitled: "intramolecular 1,3-dipolar cycloadditions". Tutor: Prof. L. Garanti

1992

Graduate degree in Chemistry

Università degli Studi di Milano

- Graduate thesis entitled: "behaviour of arylsulfonylallenes towards 2,4,6-trimethyl-3,5-dichloro benzonitrile oxide". Tutor: Prof. G. Zecchi

PERSONAL SKILLS

Mother tongue

Italian

English

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
B1	B2	A2	B1	B2

Communication skills

Good communication skills acquired with the experience in University teaching:

- “organic Chemistry” course, 56 h, for first-year Biology Students (current);
- “laboratory of organic Chemistry”, 60 h, for second-year industrial Chemistry Students (current);
- “wine Chemistry” laboratory, 12 h, for high school Students (current);
- “applications in food science” course, 60 h, for fifth-year nutritional Biology Students (2012-2021);
- “nylon-6,6” laboratory, 32 h, for high school Students (2012-2020);
- “laboratory of macromolecular Chemistry”, for third-year industrial Chemistry Students (2014-2015);
- “reaction mechanisms in organic Chemistry” (physical organic Chemistry), for fifth-year Chemistry Students (2006-2011);
- lecturer at the School of specialisation in organic synthesis in Milan (2001-2003)

Organisational skills

Good organisational skills acquired as:

- head of a University research laboratory (current);
- former assistant in a University research laboratory (current);
- member of the commission PLS (Scientific Degree Plan, current);
- tutor of a number of graduation theses in Chemistry, industrial Chemistry, nutritional Biology;
- coordinator of the course “applications in food science” (2015-2021);
- coordinator of a course within the School of doctorate in Chemistry, University of Milan (2013);
- member of the board of the Chemical library, University of Milan (2009-2016);
- member of the commission “commissione paritetica” (University of Milan, didactics quality and efficiency)

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Independent user	Independent user	Independent user	Basic user	Independent user

- good command of office suite (windows software)
- good command of photo editing and presentation software

Selection of recent publications

- A. Silvani, M. Manenti, G. Molteni, “Copper(I)-catalysed reaction of hydrazone chlorides with homopropargylic alcohols: regioselective synthesis of 5-substituted pyrazoles”, *Synthesis*, **2023**, DOI: 10.1055/s-0042-1751770
- M. Manenti, L. Lo Presti, G. Molteni, A. Silvani “Unexpected chiral vicinal tetrasubstituted diamines via borylcopper-mediated homocoupling of isatin imines”, *Beilstein J. Org. Chem.*, **2022**, *18*, 303-308.
- M. Manenti, S. Gusmini, L. Lo Presti, G. Molteni, A. Silvani “Enantiopure β -isocyano-boronic esters: synthesis and exploitation in isocyanide-based multicomponent reactions”, *Mol. Divers.*, **2022**, <https://doi.org/10.1007/s11030-022-10549-8>
- G. Molteni, F. Cargnoni, R. Soave, A. Ponti, “The (E, Z) isomerization of C-methoxycarbonyl-N-aryl chlorohydrazone”, *Chemistry*, **2022**, *4*, 1624-1653.
- G. Molteni, A. Ponti “The azide-allene dipolar cycloaddition: is DFT able to predict site- and regioselectivity?”, *Molecules*, **2021**, *26*, 928.
- G. Molteni, S. Baroni, M. Manenti, A. Silvani “When hydrazone chlorides meet allenes: a site- and regio-selective copper(I)-catalysed approach to 5-substituted pyrazoles”, *Heterocycles*, **2021**, *102*, 1995-2006.
- M. Manenti, S. Gazzotti, L. Lo Presti, G. Molteni, A. Silvani “Highly diastereoselective entry to chiral oxindole-based β -amino boronic acids and spiro derivatives”, *Org. Biomol. Chem.*, **2021**, *19*, 7211-7216.
- G. Molteni, A. Silvani “Spiro-2-oxindoles via 1,3-dipolar cycloadditions. A decade update”, *Eur. J. Org. Chem.*, **2021**, 1653-1675.

The complete list of publication (114 papers of which 15 as a single Author, 2 textbooks, 2 book chapters) can be found at the following URL: <https://air.unimi.it/cris/rp/rp03725#.XR8rIhYzBIU>

Author Identifiers

- ORCID-ID: 0000-0001-7408-345X
- Web of Science (WOS) Researcher ID: O-8344-2016
- Scopus Author ID: 7005790329

Citations

H-index = 25 (Scopus)

Personal information

I authorize the handling of personal information in this curriculum, according to D.Lgs n. 196/03 and following modifications and Regulations EU 679/2016 (General Regulations concerning Data Protection or GRDP) and art. 7 of University Regulations concerning protection of personal information.

I authorize, according to D.lgs 14/03/2013 n. 33 concerning transparency, in case of conferment of the position and of the fellowship, the publication of this curriculum in the web site of Università degli Studi di Milano in the section "Amministrazione trasparente", "Consulenti e collaboratori".

Date 04/01/2023

Giorgio Molteni