

PERSONAL INFORMATION Cesare Gennari

POSITION Full Professor of Organic Chemistry

WORK EXPERIENCE

- from 1994 Full Professor of Organic Chemistry, Milan University
- 1985-1994 Associate Professor of Organic Chemistry, Milan University
- 1982-1983 Research Associate in the group of Prof. Clark Still, Columbia University, New York (USA)
- 1981-1985 Assistant Professor (with tenure) in the group of Prof. Luigi Canonica, Milan University
- 1978-1981 Assistant Professor in the group of Prof. Luigi Canonica, Milan University
- 1976-1978 Research assistant in the group of Prof. Carlo Scolastico, Milan University

- 2012-2018 ▪ Member of the Academic Senate, Milan University
- 2008-2012 ▪ Director of the Department of Organic and Industrial Chemistry, Milan University
- 2008-2011 ▪ Director of the Centre of Excellence C.I.S.I. (Centro Interdipartimentale Studi bio-molecolari e applicazioni Industriali), Milan University
- 2005-2008 ▪ Deputy director of the Department of Organic and Industrial Chemistry, Milan University

EDUCATION AND TRAINING

1975 Doctor in Chemistry cum laude, Milan University

PERSONAL SKILLS

Mother tongue Italian

Other languages

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C2	C1	C1	C1

Organisational / managerial skills

- In the period 1999-2004 member of the Board of Directors of A.P.R.E. (Agenzia per la Promozione della Ricerca Europea [Agency for the promotion of European research]) on behalf of Milan University Rector (first Paolo Mantegazza and then Enrico Decleva).

Job-related skills

- In the period 1998-2001 member of the IUPAC Organic Chemistry Division Committee, presently a IUPAC fellow since 2004.

Editorial activity

- Presently (2017-) member of the International Advisory Board of the European Journal of Organic Chemistry (chairman of the Editorial Board 2013-2016, member of the Editorial Board 2008-2012, member of the International Advisory Board 1998-2004). From 2015 ChemPubSoc Europe Fellow. Member of the consulting board of editors of Tetrahedron:Asymmetry since its foundation (1990-2017).

National and international grants awarded

- National scientific coordinator of PRIN-2006, PRIN-2008, PRIN-2010/11 and presently PRIN-2015 research grants.

Research interests

- NATO 1988-91, EC "twinning research grant" 1990-93, NATO 1992-94, EC Network "Human Capital and Mobility" grant 1993-96 [Network Coordinator], NATO 1995-99, EC "Marie Curie" grants 1996-2007, EC Network "Improving Human Potential" grants 1996-2006, EC "Marie Curie Research Training Network" grants 2006-2010, 2012-2016 [Network Coordinator], and 2015-2018.
- Design and development of new enantioselective methods, and their application to the synthesis of natural and unnatural targets with interesting biological and chemical properties. Synthesis and bio-medical applications of tumor-targeting peptidomimetics and conjugates. Development of new catalytic methodologies for organic functional group transformations.

ADDITIONAL INFORMATION

Honours and awards

- NATO senior fellowship (1985), Ciamician medal of the Organic Division of the Italian Chemical Society (1986), Federchimica prize (1993), Karl Ziegler-Giulio Natta award and lecture (Gesellschaft Deutscher Chemiker & Italian Chemical Society, 1997), Merck Frosst lecture (University of Toronto, 2005-2006), "Prize for research in synthetic organic chemistry" of the Organic Division of the Italian Chemical Society (2006), AstraZeneca lecture (University of Sheffield, 2010), Quilico gold medal of the Organic Division of the Italian Chemical Society (2013), Piria gold medal of the Italian Chemical Society (2017).

Publications

- Author/coauthor of 6 patents, 6 chapters of books and > 200 papers published in international, refereed journals in the 1978-2019 period, with h-index \geq 45.
<http://orcid.org/0000-0002-7635-4900>

List of recent publications (2011-2019)

180) Bifunctional 2,5-Diketopiperazines as Rigid Three-Dimensional Scaffolds in Receptors and Peptidomimetics

Ressurreição, A. S. M.; Delatouche, R.; Gennari, C.; Piarulli, U.
Eur. J. Org. Chem. **2011**, *14*, 217-228.

181) Supramolecular ligand-ligand and ligand-substrate interactions for highly selective transition metal catalysis

Carboni, S.; Gennari, C.; Pignataro, L.; Piarulli, U.
Dalton Trans. **2011**, *40*, 4355-4373.

182) Highly Stereoselective Total Synthesis of (+)-9-*epi*-Dictyostatin and (-)-12,13-bis-*epi*-Dictyostatin

Zanato, C.; Pignataro, L.; Ambrosi, A.; Hao, Z.; Trigili, C.; Díaz, J. F.; Barasoain, I.; Gennari, C.
Eur. J. Org. Chem. **2011**, *14*, 2643-2661.

183) Bifunctional 2,5-Diketopiperazines as Efficient Organocatalysts for the Enantioselective Conjugate Addition of Aldehydes to Nitroolefins

Durini, M.; Sahr, F. A.; Kuhn, M.; Civera, M.; Gennari, C.; Piarulli, U.
Eur. J. Org. Chem. **2011**, *14*, 5599-5607.

184) Total Synthesis of (+)-7,11-Heliane and (+)-5-Chloro-7,11-Heliane via a Stereoselective Aromatic Claisen Rearrangement

Quartieri, F.; Mesiano, L. E.; Borghi, D.; Desperati, V.; Gennari, C.; Papeo G.
Eur. J. Org. Chem. **2011**, *14*, 6794-6801 and 6802.

185) Stereoselectivity in (Z)-Vinylmetal Additions to the Dictyostatin C1-C9 β -Silyloxy Aldehyde

Ambrosi, A.; Pignataro, L.; Zanato, C.; Gennari, C.
Eur. J. Org. Chem. **2012**, *15*, 144-153.

186) Rhodium-Catalyzed Asymmetric Hydrogenation of Olefins with PhthalaPhos, a New Class of Chiral Supramolecular Ligands

Pignataro, L.; Boghi, M.; Civera, M.; Carboni, S.; Piarulli, U.; Gennari, C.
Chemistry - A European Journal **2012**, *18*, 1383-1400.

- 187) Nuovi Composti Antitumorali - Cyclic Peptide Integrin Derivatives for Use as Anticancer Agents
Gennari, C.; Belvisi, L.; Potenza, D.; Colombo, R.; Mingozi, M.; Marchini, M.; Manzoni, L.; Arosio, D.; Perego, P. M. C.; Zaffaroni, N.; De Cesare, M.; Piarulli, U.
Italian Patent - Application 31 January 2012, N. MI2012A000121
PCT Int. Appl. **IB2013/000116**, 30 January 2013; *WO* **2013 114180 A1**
- 188) Cyclic RGD-Peptidomimetics Containing Bifunctional Diketopiperazine Scaffolds as New Potent Integrin Ligands
Marchini, M.; Mingozi, M.; Colombo, R.; Guzzetti, I.; Belvisi, L.; Vasile, F.; Potenza, D.; Piarulli, U.; Arosio, D.; Gennari C.
Chemistry - A European Journal **2012**, *18*, 6195-6207.
- 189) A Library Approach to the Development of BenzaPhos, Highly Efficient Chiral Supramolecular Ligands for Asymmetric Hydrogenation
Pignataro, L.; Bovio, C.; Civera, M.; Piarulli, U.; Gennari, C.
Chemistry - A European Journal **2012**, *18*, 10368-10381.
- 190) Synthesis and Biological Evaluation (*in Vitro* and *in Vivo*) of Cyclic RGD Peptidomimetic - Paclitaxel Conjugates Targeting Integrin $\alpha_v\beta_3$
Colombo, R.; Mingozi, M.; Belvisi, L.; Arosio, D.; Piarulli, U.; Carenini, N.; Perego, P.; Zaffaroni, N.; De Cesare, M.; Castiglioni, V.; Scanziani, E.; Gennari, C.
J. Med. Chem. **2012**, *55*, 10460-10474.
- 191) Cyclic *iso*DGR Peptidomimetics as Low-Nanomolar $\alpha_v\beta_3$ Integrin Ligands
Mingozi, M.; Dal Corso, A.; Marchini, M.; Guzzetti, I.; Civera, M.; Piarulli, U.; Arosio, D.; Belvisi, L.; Potenza, D.; Pignataro, L.; Gennari, C.
Chemistry - A European Journal **2013**, *19*, 3563-3567.
- 192) Determination of the binding epitope of RGD-peptidomimetics to $\alpha_v\beta_3$ and $\alpha_{IIb}\beta_3$ integrin-rich intact cells by NMR and computational studies
Guzzetti, I.; Civera, M.; Vasile, F.; Araldi, E. M.; Belvisi, L.; Gennari, C.; Potenza, D.; Fanelli R.; Piarulli, U.
Organic & Biomolecular Chemistry, **2013**, *11*, 3886-3893.
- 193) Synthesis and biological evaluation of dual action *cyclo*-RGD/SMAC mimetic conjugates targeting $\alpha_v\beta_3/\alpha_v\beta_5$ integrins and IAP proteins
Mingozi, M.; Manzoni, L.; Arosio, D.; Dal Corso, A.; Manzotti, M.; Innamorati, F.; Pignataro, L.; Lecis, D.; Delia, D.; Seneci, P.; Gennari, C.
Organic & Biomolecular Chemistry, **2014**, *12*, 3288-3302.
- 194) Enantioselective synthesis of 1-vinyltetrahydroisoquinolines through palladium-catalysed intramolecular allylic amidation with chiral PhthalaPhos ligands
Pignataro, L.; Marelli, E.; Gennari C.; Ferraccioli, R.
Tetrahedron: Asymmetry **2014**, *25*, 844-850.
- 195) Chiral (Cyclopentadienone)iron Complexes for the Catalytic Asymmetric Hydrogenation of Ketones
Gajewski, P.; Renom-Carrasco, M.; Vailati Facchini, S.; Pignataro, L.; Lefort, L.; de Vries, J. G.; Ferraccioli, R.; Forni, A.; Piarulli, U.; Gennari, C.
Eur. J. Org. Chem. **2015**, *18*, 1887-1893.
- 196) Cyclic *iso*DGR and RGD Peptidomimetics Containing Bifunctional Diketopiperazine Scaffolds are Integrin Antagonists
Panzeri, S.; Zanella, S.; Arosio, D.; Vahdati, L.; Dal Corso, A.; Pignataro, L.; Paolillo, M.; Schinelli, S.; Belvisi, L.; Gennari, C.; Piarulli, U.
Chemistry - A European Journal **2015**, *21*, 6265-6271.
- 197) Synthesis and Biological Evaluation of RGD Peptidomimetic-Paclitaxel Conjugates bearing Lysosomally Cleavable Linkers
Dal Corso, A.; Caruso, M.; Belvisi, L.; Arosio, D.; Piarulli, U.; Albanese, C.; Gasparri, F.; Marsiglio, A.; Sola, F.; Troiani, S.; Valsasina, B.; Pignataro, L.; Donati D.; Gennari, C.
Chemistry - A European Journal **2015**, *21*, 6921 - 6929.
- 198) Assisted Tandem Catalysis: Metathesis Followed by Asymmetric Hydrogenation from a Single

Ruthenium Source

Renom-Carrasco, M.; Gajewski, P.; Pignataro, L.; de Vries, J. G.; Piarulli, U.; Gennari, C.; Lefort, L. *Adv. Synth. Catal.* **2015**, *357*, 2223-2228.

199) Synthesis of (*R*)-BINOL-Derived (Cyclopentadienone)iron Complexes and Their Application in the Catalytic Asymmetric Hydrogenation of Ketones

Gajewski, P.; Renom-Carrasco, M.; Vailati Facchini, S.; Pignataro, L.; Lefort, L.; de Vries, J. G.; Ferraccioli, R.; Piarulli, U.; Gennari, C.

Eur. J. Org. Chem. **2015**, *18*, 5526-5536.

200) Synthesis, characterization and biological evaluation of a dual action ligand targeting $\alpha_v\beta_3$ integrin and VEGF receptors

Zanella, S.; Mingozi, M.; Dal Corso, A.; Fanelli, R.; Arosio, D.; Cosentino, M.; Schembri, L.; Marino, F.; De Zotti, M.; Formaggio, F.; Pignataro, L.; Belvisi, L.; Piarulli, U.; Gennari, C.

ChemistryOpen **2015**, *4*, 633 - 641.

201) Synthesis of a 4-Vinyltetrahydrocarbazole by Palladium-Catalyzed Asymmetric Allylic Alkylation of Indole-Containing Allylic Carbonates

Pignataro, L.; Fiorito, D.; Vece, V.; Ferraccioli, R.; Gennari, C.

Eur. J. Org. Chem. **2015**, *18*, 6669 - 6678.

202) $\alpha_v\beta_3$ Integrin-Targeted Peptide/Peptidomimetic-Drug Conjugates: In-Depth Analysis of the Linker Technology

Dal Corso, A.; Pignataro, L.; Belvisi, L.; Gennari, C.

Current Topics in Medicinal Chemistry **2016**, *16*, 314-329.

203) Asymmetric Transfer Hydrogenation of Ketones with modified Grubbs Metathesis Catalysts: On the Way to a Tandem Process

Renom-Carrasco, M.; Gajewski, P.; Pignataro, L.; de Vries, J. G.; Piarulli, U.; Gennari, C.; Lefort, L. *Adv. Synth. Catal.* **2016**, *358*, 515-519.

204) Asymmetric Hydrogenation of 3-Substituted Pyridinium Salts

Renom-Carrasco, M.; Gajewski, P.; Pignataro, L.; de Vries, J. G.; Piarulli, U.; Gennari, C.; Lefort, L. *Chemistry - A European Journal* **2016**, *22*, 9528 - 9532.

205) A Mixed Ligand Approach for the Asymmetric Hydrogenation of 2-Substituted Pyridinium Salts

Renom-Carrasco, M.; Gajewski, P.; Pignataro, L.; de Vries, J. G.; Piarulli, U.; Gennari, C.; Lefort, L. *Adv. Synth. Catal.* **2016**, *358*, 2589 - 2593.

206) Expanding the catalytic scope of (cyclopentadienone)iron complexes to the hydrogenation of activated esters to alcohols

Gajewski, P.; Gonzalez-de-Castro, A.; Renom-Carrasco, M.; Piarulli, U.; Gennari, C.; de Vries, J. G.; Lefort, L.; Pignataro, L.

ChemCatChem **2016**, *8*, 3431-3435.

207) Riding the wave of monodentate ligand revival: from the A/B concept to non-covalent interactions

Pignataro, L.; Gennari, C.

Chem. Rec. **2016**, *16*, 2544 - 2560.

208) Insights into the binding of cyclic RGD peptidomimetics to $\alpha_5\beta_1$ integrin by live cell NMR and computational studies

Guzzetti, I.; Civera, M.; Vasile, F.; Arosio, D.; Tringali, C.; Piarulli, U.; Gennari, C.; Pignataro, L.; Belvisi, L.; Potenza, D.

ChemistryOpen **2017**, *6*, 128-136.

209) Synthesis of [bis(hexamethylene)cyclopentadienone]iron tricarbonyl and its application to catalytic reductions of C=O bonds

Vailati Facchini, S.; Neudörfl, J.-M.; Pignataro, L.; Cettolin, M.; Gennari, C.; Berkessel, A.; Piarulli, U.

ChemCatChem **2017**, *9*, 1461-1468.

210) Tumor Targeting with an isoDGR-Drug Conjugate

Zanella, S.; Angerani, S.; Pina, A.; López Rivas, P.; Giannini, C.; Panzeri, S.; Arosio, D.; Caruso, M.; Gasparri, F.; Fraietta, I.; Albanese, C.; Marsiglio, A.; Pignataro, L.; Belvisi, L.; Piarulli, U.; Gennari,

C.

Chemistry - A European Journal **2017**, *23*, 7910-7914.

211) Targeting Integrin $\alpha_v\beta_3$ with Theranostic RGD-Camptothecin Conjugates Bearing a Disulfide Linker: Biological Evaluation Reveals a Complex Scenario

Pina, A.; Dal Corso, A.; Caruso, M.; Belvisi, L.; Arosio, D.; Zanella, S.; Gasparri, F.; Albanese, C.; Cucchi, U.; Fraietta, I.; Marsiglio, A.; Pignataro, L.; Donati, D.; Gennari, C.

ChemistrySelect **2017**, *2*, 4759-4766.

212) Use of the Trost Ligand in Ruthenium-Catalyzed Asymmetric Hydrogenation of Ketones

Cettolin, M.; Puylaert, P.; Pignataro, L.; Hinze, S.; Gennari, C.; de Vries, J. G.

ChemCatChem **2017**, *9*, 3125 - 3130.

213) Investigating the interaction of cyclic RGD peptidomimetics with $\alpha_v\beta_6$ integrin by biochemical and molecular docking studies

Civera, M.; Arosio, D.; Bonato, F.; Manzoni, L.; Pignataro, L.; Zanella, S.; Gennari, C.; Piarulli, U.; Belvisi, L.

Cancers **2017**, *9*, 128; DOI:10.3390/cancers9100128

214) Multivalency Increases the Binding Strength of RGD Peptidomimetic-Paclitaxel Conjugates to Integrin $\alpha_v\beta_3$

Raposo Moreira Dias, A.; Pina, A.; Dal Corso, A.; Arosio, D.; Belvisi, L.; Pignataro, L.; Caruso, M.; Gennari, C.

Chemistry - A European Journal **2017**, *23*, 14410-14415;

DOI: 10.1002/chem.201703093

215) Synthesis and Biological Evaluation of RGD and isoDGR Peptidomimetic- α -Amanitin Conjugates for Tumor-Targeting

Bodero, L.; López Rivas, P.; Korsak, B.; Hechler, T.; Pahl, A.; Müller, C.; Arosio, D.; Pignataro, L.; Gennari, C.; Piarulli, U.

Beilstein J. Org. Chem. **2018**, *14*, 407-415; DOI:10.3762/bjoc.14.29

216) Efficient Synthesis of Amines by Iron-Catalyzed C=N Transfer Hydrogenation and C=O Reductive Amination

Vailati Facchini, S.; Cettolin, M.; Bai, X.; Casamassima, G.; Pignataro, L.; Gennari, C.; Piarulli, U.

Adv. Synth. Catal. **2018**, *360*, 1054-1059; DOI 10.1002/adsc.201701316

217) Synthesis and Biological Evaluation of Paclitaxel Conjugates Involving Linkers Cleavable by Lysosomal Enzymes and $\alpha_v\beta_3$ -Integrin Ligands for Tumor Targeting

López Rivas, P.; Randelović, I.; Raposo Moreira Dias, A.; Pina, A.; Arosio, D.; Tóvári, J.; Mező, G.; Dal Corso, A.; Pignataro, L.; Gennari, C.

Eur. J. Org. Chem. **2018**, *21*, 2902-2909; DOI: 10.1002/ejoc.201800447

Eur. J. Org. Chem. **2018**, *21*, DOI: 10.1002/ejoc.201800634

218) Improving C=N Bond Reductions with (Cyclopentadienone)iron Complexes: Scope and Limitations

Cettolin, M.; Bai, X.; Lübken, D.; Gatti, M.; Vailati Facchini, S.; Piarulli, U.; Pignataro, L.; Gennari, C.

Eur. J. Org. Chem. **2019**, *22*, 647-654; DOI: 10.1002/ejoc.201801348

219) Neutrophil Elastase Promotes Linker Cleavage and Paclitaxel Release from an Integrin-Targeted Conjugate

Raposo Moreira Dias, A.; Pina, A.; Dean, A.; Lerchen, H.-G.; Caruso, M.; Gasparri, F.; Fraietta, I.; Troiani, S.; Arosio, D.; Belvisi, L.; Pignataro, L.; Dal Corso, A.; Gennari, C.

Chemistry - A European Journal **2019**, *25*, 1696-1700; DOI: 10.1002/chem.201805447

220) Chiral (cyclopentadienone)iron complexes with a stereogenic plane as pre-catalysts for the asymmetric hydrogenation of polar double bonds

Bai, X.; Cettolin, M.; Mazzocanti, G.; Pierini, M.; Piarulli, U.; Colombo, V.; Dal Corso, A.; Pignataro, L.; Gennari, C.

Tetrahedron **2019**, *75*, 1415-1424; DOI: 10.1016/j.tet.2019.01.057

221) Rational Design of Antiangiogenic Helical Oligopeptides Targeting the Vascular Endothelial Growth Factor Receptors

Zanella, S.; Bocchinfuso, G.; De Zotti, M.; Arosio, D.; Marino, F.; Raniolo, S.; Pignataro, L.; Sacco, G.; Palleschi, A.; Siano, A. S.; Piarulli, U.; Belvisi, L.; Formaggio, F.; Gennari, C.; Stella L.
Front. Chem. **2019**, *7*, 170; DOI: 10.3389/fchem.2019.00170

222) The importance of details: how differences in ligand structures determine distinct functional responses in integrin $\alpha_v\beta_3$

Paladino, A.; Civera, M.; Curnis, F.; Paolillo, M.; Gennari, C.; Piarulli, U.; Corti, A.; Belvisi, L.; Colombo G.

Chemistry - A European Journal **2019**, *25*, 5959-5970; DOI: 10.1002/chem.201900169

In press:

223) Synthesis and Biological Evaluation of RGD and isoDGR - Monomethyl Auristatin Conjugates Targeting Integrin $\alpha_v\beta_3$

Raposo Moreira Dias, A.; Boderio, L.; Martins, A.; Arosio, D.; Gazzola, S.; Belvisi, L.; Pignataro, L.; Steinkühler, C.; Dal Corso, A.; Gennari, C.; Piarulli, U.

Chem.Med.Chem. **2019**, DOI: 10.1002/cmdc.201900049

224) β -Glucuronidase Triggers Extracellular MMAE Release from an Integrin-Targeted Conjugate

López Rivas, P.; Müller, C.; Breunig, C.; Hechler, T.; Pahl, A.; Arosio, D.; Belvisi, L.; Pignataro, L.; Dal Corso, A.; Gennari, C.

Organic & Biomolecular Chemistry, **2019**, DOI: 10.1039/C9OB00617F

Conferences

1980 Lecturer at the V National School of Synthetic Organic Chemistry (Gargnano, Italy).

1983 Lecturer at the XIV Italian Chemical Society Meeting (S.Margherita Ligure, Italy).

1985 Lecturer at the II National School for graduate students in Chemistry and Medicinal Chemistry (Urbino, Italy).

1985 Lecturer at the IX International Symposium on "Synthesis in Organic Chemistry" organized by the Royal Society of Chemistry (Oxford, England, July 22-25).

1986 Lecturer at the XVI Italian Chemical Society Meeting. "Ciamician medal" lecture (Urbino, Italy).

1987 Lecturer at the XII National School of Synthetic Organic Chemistry (Gargnano, Italy).

1987 Lecturer at the Berkeley Mini-Symposium on "Metals in Organic Synthesis" (Berkeley, California, August 4).

1988 Lecturer at the Nato Conference on "Selectivities in Lewis Acid-Promoted Reactions" (Glyfada-Athens, Greece, October 2-7).

1989 Lecturer at the Organic Chemistry Division Meeting of the SFC French Chemical Society (Paris, France, March 7).

1989 Lecturer at the XIV National School of Synthetic Organic Chemistry (Gargnano, Italy, June 19-23).

1991 Lecturer at the VII European Symposium on Organic Chemistry (ESOC 7, Namur, Belgium, July 15-19).

1992 Lecturer at the "Annual Chemical Congress" of the Royal Society of Chemistry (Perkin Division Symposium on "Asymmetric Processes", Manchester, England, April 13-16).

1992 Lecturer at the "Autumn Meeting" of the Royal Society of Chemistry (Perkin Division Symposium on "Working Molecules: The Design and Synthesis of Molecular Machinery", Trinity College, Dublin, Ireland, September 16-18).

1992 Lecturer at the "I Convegno Italo-Tedesco di Chimica Organica" (Salsomaggiore Terme, Parma, October 4-7).

1994 Lecturer at the "Ischia Advanced School of Organic Chemistry" (Ischia, Napoli, September 25-30).

1995 Lecturer at the XV National School for graduate students in Chemistry and Medicinal Chemistry (Urbino, Italy, July 3-7).

1995 Lecturer at the 1st European Chemical Society Symposium (Louvain-la-Neuve, Belgium, August 12-17).

1996 Lecturer at the 11th "International Conference on Organic Synthesis" (ICOS 11, Amsterdam, The Netherlands, June 30-July 4).

1998 Lecturer at the Symposium "The Carbonyl Group in Organic Chemistry" organized by the Society of Chemical Industry (SCI) (London, April 28).

1998 Lecturer at the 8th "Brazilian Meeting on Organic Synthesis" (BMOS 8, Sao Pedro, SP, Brazil,

- September 7-11).
- 1999 Lecturer at the 2nd French Symposium on Combinatorial Chemistry (Rennes, France, April 14-16).
- 1999 Lecturer at the 1st French-Italian Symposium on Asymmetric Synthesis (Maratea, Italy, May 14-15).
- 1999 Lecturer at the 11th European Symposium on Organic Chemistry (ESOC 11, Goteborg, Sweden, July 23-28).
- 2000 Lecturer at the French Symposium on "Reactivity and Catalysis in Organic Synthesis" (Marseille, France, May 11-12).
- 2000 Lecturer at the XXV National School of Synthetic Organic Chemistry (Gargnano, Italy, June 12-16).
- 2000 Lecturer at the XX National School for graduate students in Chemistry and Medicinal Chemistry (Urbino, Italy, July 3-6).
- 2001 Lecturer at the 15th Symposium "New Trends in Organic Synthesis" (Milano, Italy, November 26).
- 2002 Lecturer at the joint meeting of the French Medicinal Chemical Society (SCT) - SFC Organic Chemistry Division (Paris, France, March 26).
- 2002 Lecturer at the DECHEMA meeting on "Combinatorial catalysis" (Frankfurt, Germany, October 25).
- 2003 Lecturer at the Royal Society of Chemistry Symposium "Design and Synthesis at the Frontiers of Biorganic Chemistry" (Bristol, England, March 5).
- 2003 Lecturer at the XXI Italian Chemical Society Meeting (Torino, Italy, June 22-27).
- 2003 Lecturer at the 20th Conference on Isoprenoids (Liberec, Czech Republic, September 12-18).
- 2003 Lecturer at the "International Symposium on Organic Synthesis and Catalysis" (Falkau/Feldberg, Germany, September 21-24).
- 2003 Lecturer at the workshop "Combinatorial Chemistry and High Throughput Experimentation" organized by the Royal Netherlands Academy of Arts and Sciences (Amsterdam, The Netherlands, November 17-19).
- 2005 Lecturer at the Southampton Organic Synthesis Symposium (SOSS-5) (Southampton, UK, January 21).
- 2005 Lecturer at the 1st Austrian-German-Italian Meeting on Organic Chemistry (Vienna, Austria, April 1-2).
- 2005 Lecturer at the XXX National School of Synthetic Organic Chemistry (Gargnano, Italy, June 13-17).
- 2005 Lecturer at the 13th IUPAC Symposium on Organometallic Chemistry directed towards Organic Synthesis "OMCOS 13" (Geneva, Switzerland, July 17-21).
- 2006 Lecturer at the 16th IUPAC International Conference on Organic Synthesis "ICOS-16" (Mérida, México, June 11-15, 2006).
- 2006 Lecturer at the ORCHEM 2006 meeting (Gesellschaft Deutscher Chemiker, Bad Nauheim, Germany, September 7-9).
- 2006 Lecturer at the XXII Italian Chemical Society Meeting (SCI-2006, Firenze, Italy, September 10-15).
- 2007 Lecturer at the European School of Medicinal Chemistry and XXVII Advanced Course of Medicinal Chemistry and Seminar for PhD students (Urbino, Italy, July 1-6).
- 2008 Lecturer at the 16th International Symposium on Homogeneous Catalysis (ISHC XVI, Florence, Italy, July 6-11).
- 2008 Lecturer at the First IRBM Workshop on Medicinal & Organic Chemistry (Istituto Ricerche Biologia Molecolare - P. Angeletti [Merck & Co.], Pomezia, Roma, Italy, September 26).
- 2009 Lecturer at the ICCA-11 (11th International Conference on the Chemistry of Antibiotics and Other Bioactive Compounds, San Sebastian, Spain, 29 Sept - 2 Oct 2009).
- 2010 Lecturer at the 43rd Annual Meeting on 'Modern Aspects of Stereochemistry', AstraZeneca lecture (Sheffield, UK, January 12, 2010).
- 2010 Lecturer at the "Ischia Advanced School of Organic Chemistry" (Ischia, Napoli, September 25-30).
- 2010 Lecturer at the 25th Symposium "New Trends in Organic Synthesis" (Milano, Italy, November 15).
- 2013 Lecturer at the 35th Meeting of the Organic Division of the Italian Chemical Society, Adolfo Quilico lecture (Sassari, Italy, September 9-13).
- 2015 Lecturer at the 5th Int. CeBiTec Research Conference "Drug Conjugates for Directed Therapy" (Bielefeld, Germany, September 20-23).

- 2015 Lecturer at the SCI (Society of Chemical Industry) meeting "Synthesis from the Six Nations II" (London, UK, October 7).
- 2017 Lecturer at the 26th National Congress of the Italian Chemical Society, Raffaele Piria lecture (Paestum-Salerno, Italy, September 10-14).
- 2018 Lecturer at the Meeting "Peptides and conjugates for tumor targeting, therapy and diagnosis" (Rimini, Italy, June 16-18).
- 2018 Lecturer (plenary) at the 22nd IUPAC International Conference on Organic Synthesis "22-ICOS" (Florence, Italy, September 16-21).

Seminars

- September 12, 1985 Columbia University, New York, N.Y., USA
- November 12, 1985 University of Minnesota, Minneapolis, Minnesota, USA
- January 21, 1986 University of Houston, Houston, Texas, USA
- February, 19, 1987 Geneva University, Geneva, Switzerland
- January 8, 1988 Universitat Zurich, Zurich, Switzerland
- February 15, 1988 F.Hoffmann-La Roche & Co., Basel, Switzerland
- October 17, 1988 University of Lausanne, Lausanne, Switzerland
- December 2, 1988 Cambridge University, Cambridge, England
- December 7, 1988 Schering Agrochemicals, Chesterford Park, England
- December 9, 1988 Merck Sharp & Dohme Neuroscience Research Centre, Harlow Town, England
- June 28, 1989 Italfarmaco S.p.A., Milano, Italy
- July 4, 1989 Ferrara University, Ferrara, Italy
- October 13, 1989 Philipps Universitat Marburg, Marburg, BDR
- October 14, 1989 Universitat Hamburg, Hamburg, BDR
- October 15, 1989 Universitat Gottingen, Gottingen, BDR
- October 16, 1989 Freie Universitat Berlin, Berlin, BDR
- January 31, 1990 Research Institute-Zambon, Milano, Italy
- November 6, 1990 ICI Pharmaceuticals, Alderley Park, England
- November 7, 1990 ICI Agrochemicals, Jealott, Bracknell, England
- February 1, 1991 Istituto Ricerche Biologia Molecolare - P. Angeletti, Pomezia, Roma, Italy
- April 21, 1992 The University, Newcastle upon Tyne, England
- May 22, 1992 Italfarmaco S.p.A., Milano, Italy
- January 4, 1993 Merck Sharp & Dohme Research Laboratories, Rahway, New Jersey, USA
- February 11, 1994 University of Barcelona, Barcelona, Spain
- February 18, 1994 University of Amsterdam, Amsterdam, The Netherlands
- December 21, 1994 Pharmacia-Farmitalia, Milano, Italy
- February 1, 1995 Boeringher-Ingelheim, Milano, Italy
- February 28, 1995 Istituto Ricerche Biologia Molecolare - P. Angeletti, Pomezia, Roma, Italy
- April 12, 1995 Zambon Group, Milano, Italy
- May 12, 1995 University of Gent, Belgium
- November 28, 1995 Glaxo, Verona, Italy
- May 17, 1996 University of Camerino, Italy
- May 20, 1996 Centro Ricerche Lepetit, Gerenzano, Italy
- March 4-7, 1997 University of Neuchatel, Switzerland
- April 24, 1997 Great Lakes Chemical, S.Donato Milanese, Milano, Italy
- May 12, 1997 University of Wuerzburg, Germany (Ziegler-Natta lecturer)
- May 13, 1997 University of Aachen, Germany (Ziegler-Natta lecturer)
- May 16, 1997 University of Marburg, Germany (Ziegler-Natta lecturer)
- June 11, 1997 Zambon Group, Milano, Italy
- July 3, 1997 Geneva University, Geneva, Switzerland
- April 27, 1998 University of Cambridge, England
- March 3, 1999 Glaxo-Wellcome, Verona, Italy
- April 30, 1999 University of Strathclyde, Glasgow, U.K.
- November 26, 1999 Academy of Sciences of the Czech Republic, Prague
- April 19, 2000 Le Giornate di Chimica Organica a Pavia, University of Pavia, Italy
- June 16, 2000 Helsinki University of Technology, Finland
- April 22, 2002 University of Cologne, Germany

April 23, 2002 Bayer, Leverkusen, Germany (GDCh-speaker)
 March 25, 2003 Istituto Ricerche Biologia Molecolare - P. Angeletti (Merck & Co.), Pomezia, Roma, Italy
 November 7, 2003 Pharmacia-Pfizer, Nerviano (Milano), Italy
 July 12, 2004 Nerviano Medical Science (NMS), Nerviano (Milano), Italy
 January 18, 2005 Syngenta AG, Basel, Switzerland (Syngenta Chemistry Lecture)
 February 2, 2005 Department of Chemistry, Queen Mary, University of London (Royal Society of Chemistry speaker)
 September 27, 2005 van't Hoff Institute for Molecular Sciences, University of Amsterdam, Amsterdam, The Netherlands
 January 27, 2006 Department of Chemistry, University of Toronto, Canada (Merck Frosst lecturer)
 January 30, 2006 Merck Frosst, Montreal, Canada (Merck Frosst lecturer)
 January 31, 2006 Department of Chemistry, University of Montreal, Canada (Merck Frosst lecturer)
 February 21, 2008 Incontro con l'Università, il CNR e l'Industria - Dipartimento di Chimica Organica e Industriale, University of Milano, Italy
 April 9, 2008 Le Giornate di Chimica Organica a Pavia, University of Pavia, Italy
 February 5, 2010 AstraZeneca R&D Mölndal, Mölndal, Sweden
 February 9, 2011 Bayer Schering Pharma AG, Wuppertal, Germany (GDCh-speaker)
 February 17, 2011 Incontro con l'Università, il CNR e l'Industria - Dipartimento di Chimica Organica e Industriale, University of Milano, Italy
 December 12, 2013 Nerviano Medical Science (NMS), Nerviano (Milano), Italy
 June 1, 2015 University of Neuchatel, Switzerland
 November 27, 2017 FIS, Vicenza, Italy
 January 18, 2018 Istituto Lombardo Accademia di Scienze e Lettere, Milano, Italy

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, 23 April 2019

Signature

