

CURRICULUM VITAE and STUDIORUM
(including list of publications)

Prof. Dr. Barbara Milani

University of Trieste
Department of Chemical and Pharmaceutical Sciences

(update on September 2021)

Personal Notes

Born in: Varese, at 01/12/1965
Nationality: Italian
Marital status: married

Resident

Via Degli Eroi 3
34072 Gradisca d'Isonzo (GO)
Italy
Tel.: 0481 93211

Positions occupied:

10/2014 – present **Associate Professor of Inorganic Chemistry**
Permanent Position
Università di Trieste
Dipartimento di Scienze Chimiche e Farmaceutiche

4/1998 – 9/2014 **Assitant Professor of Inorganic Chemistry**
Permanent Position
Università di Trieste
Faculty of Science

Education:

11/1994 – 12/1997 **Post doc**
Università di Trieste
Dipartimento di Scienze Chimiche
Supervised by: Prof. Giovanni Mestroni

11/1991 – 10/1994 **Ph. D. Student**
Università di Trieste
Dipartimento di Scienze Chimiche
Tutor: Prof. Giovanni Mestroni
Ph. D. Thesis title: "Palladium complexes with bidentate nitrogen-donor chelating ligands: synthesis, characterization and catalytic activity"

5/1990 – 5/1991 **Industrial Fellowship**
Sponsored by Istituto Guido Donegani – ENICHEM Novara
Research topic: "Reductive carbonylation of nitroaromatic compounds"

12/1989 **“Laurea” in Chemistry**
 Università di Trieste
 Mark: 110/110 cum laude
 Title of the graduation thesis: “Catalytic oxidation of thioether to sulfoxide by molecular oxygen, promoted by ruthenium(II) complexes”
 Tutor: Prof. Giovanni Mestroni

Studies, Research and Teaching Activity out of Italy:

04/2019, 03/2017, **ERASMUS exchange teaching staff mobility at University Rovira i**
 04/2014, 03/2012 **Virgili in Tarragon (Spain)**
 1 week Teaching 8 h topic Metal carbonyls to student of Chemistry – Bachelor level

05/2014 **Visiting Professorship at Université Pierre et Marie Curie at Paris**
 1 month Teaching “Catalysis for Polymerization” PhD Students

10/2010 **Visiting Professorship at Ecole Nationale Supérieure des Ingenieurs en Arst Chimiques et Technologiques – Institut National Polytechnique de Toulouse**
 1 month Teaching “Catalysis for Polymerization” Students of Chemistry Master Level

6/2001, 9/2000 **Studies and Research Activity at University of Amsterdam**
 Supervisor: Prof. Dr. Cornelis J. Elsevier

4-5/2002, 7-9/1993 **Studies and Research Activity at ETH in Zürich**
 Supervisor: Prof. Giambattista Consiglio

Titles

- National Abilitation for Full Professor in Inorganic Chemistry (April 2017)
- National Abilitation for Associate Professor in Inorganic Chemistry (December 2013)
- National Abilitation for Associate Professor in Industrial Chemistry (December 2013)
- Accreditation for Advanced Research in Catalunya (March 2010)
- Ph. D. in Chemistry (October 1995)
- Abilitation for teaching Chemistry in the High School (February 1995)
- Laurea in Chemistry (December 1989)

Principal Investigator and scientist in charge of the following research grants

Local Research Grants

2019-2021 **Participant to Research Fund of Trieste University – FRA2018**
 “INorganic chemistry for the SustaInable DEvelopment”

2016-2018 **Participant to Research Fund of Trieste University – FRA2015**
 “Small molecules: keys for sustainable development”

2014-2015 **Participant to Research Fund of Trieste University – FRA2013**
 “Design and development of new coordination compounds having specific functionality”

2012-2013 **Participant to Research Fund of Trieste University – FRA2011**

- 2009-2010 “Application of ^{19}F NMR spectroscopy for multidisciplinary studies”
Scientist in charge of a University grant for a Post doc fellowship
 2009 **Recipient of a donation** of 10000 € by Fondazione Benefica Kathleen Foreman Casali specifically dedicated to buy a tinyclave reactor
 2007-2008 **Scientist-in-charge for a Post doc position**
 “Regio- and stereocontrolled polymerization reactions catalyzed by late transition metals”

National Research Grants:

- 2016-2020 **Participant to one Research Unit of the Italian Project PRIN 20154X9ATP_005**
 Project Title: Towards a Sustainable Chemistry: Design of Innovative Metal-Ligand Systems for Catalysis and Energy Applications.
 Central Coordinator: Prof. Alberto Albinati Università di Milano
 2016 **Participant to Progetti Competitivi**
 Subproject title: Development of homogeneous catalysts for the CO_2 /cyclic ether copolymerization
 Central Coordinator: National Interuniversity Consortium for Chemical Reactivity and Catalysis (CIRCC)
 2014 **Participant to Progetti Competitivi**
 Subproject title: Catalysis for polymerization and polymeric materials
 Central Coordinator: National Interuniversity Consortium for Chemical Reactivity and Catalysis (CIRCC)
 2008-2010 **Principal Investigator of the Research Unit of the Italian Project PRIN 2007HMTJWP_002**
 Project title: Catalysis for chemo- and stereocontrolled polymerization: powerful tool for the synthesis of new polymeric materials
 Central Coordinator: Prof. Serafino Gladiali Università di Sassari
 2006-2007 **Principal Investigator of the Research Unit of the Italian Project PRIN 2005035123**
 Project title: Regio- and Stereocontrolled Polymerization and Post-polymerization Reactions Catalyzed by Late Transition Metal Complexes
 Central Coordinator: Prof. Serafino Gladiali Università di Sassari
 2004-2005 **Principal Investigator of the Research Unit of the Italian Project PRIN 2003033857**
 Project title: Chiral nitrogen-donor ligands for asymmetric catalysis promoted by transition metals complexes. New tools for fine chemicals synthesis
 Central Coordinator: Prof. Serafino Gladiali Università di Sassari

International Research Grants:

- 2016 **Recipient of a donation** of 25000 € by BENEFICIENTIA Stiftung Lichteststein
 2013-2017 **Coordinator of the Working Group “CM1205/0002”**
 Project title: “ CO_x Reduction”
 COST Action CM1205 - CARISMA
 2007-2011 **Member of Working Group N. D40/WG3**
 Project title: C-C and C-Hetero Bond Forming Reactions
 COST Action D40 “Innovative Catalysis: New Processes and Selectivities”
 2006-2007 **Principal Italian Investigator for the Bilateral Action Italy/Germany “Vigoni”**
 Project title: Development of efficient catalysts based on palladium and nitrogen-donor ligands for stereocontrolled polymerization reactions

- 2002-2006 **Central Coordinator of a European Research Training Network**
 Project title: Atom-economic synthesis using palladium, the chamaleon catalyst”
 “PALLADIUM
 5th Framework Program
 Contract identifier: HPRN-CT-2002-00196
- 2000-2006 **Coordinator of the Working Group “D17/0002/00”**
 Project title: New catalysts for copolymerization of olefins and polar monomers
 COST Action D17

Industrial Research Grants

- 2008-2010 **Scientist-in-charge of contract with Marlin enterprise**
 Project title: Development of new polymeric materials for environmentally friendly antifouling paints

Collaborations

Collaborations with Italian Professors

Dr. Barbara Milani is currently successfully collaborating with the following research groups of Italian Universities:

Dott.ssa Carla Carfagna	University of Bologna
Prof. Claudio Pellecchia	University of Salerno
Prof. Fabio Ragaini	University of Milano
Prof. Fulvia Felluga	University of Trieste
Prof. Paolo Fornasiero	University of Trieste

International Collaborations

Dr. Barbara Milani is currently successfully collaborating with the following research groups of European Universities:

Prof. Dr. Martin Albrecht	University of Bern (Switzerland)
Dr. Cyril Godard	University Roviria i Virgili of Tarragona (Spain)
Dr. Jerome Durand	ENSIACET Toulouse (France)
Prof. Dr. Cornelis J. Elsevier	University of Amsterdam (The Netherlands)
Prof. Dr. Pedro Gomez	Tecnico Lisboa (Portugal)
Prof. Dr. Anna Masdeu	University Roviria i Virgili of Tarragona (Spain)
Dr. Edwin Otten	University of Gröningen (The Netherlands)

Editorial activity

- 2007-2009 Member of Advisory Board of European Journal of Inorganic Chemistry
 2008-present Member of Advisory Board of Dalton Transaction
 2009- present Member of Advisory Board of International Symposium on Homogeneous Catalysis

Co-editor of:

- Helvetica Chimica Acta, 2006, 89 (8): special issue dedicated to Prof. Giambattista Consiglio
- Book of abstracts of International Symposium on Homogeneous Catalysis, ISHC-XVI (Florence, July 2008)
- Dalton Transactions themed issue on “Metal-catalysed polymerisation” issue 41, 2009
- Dalton Transaction themed issue on “Small Molecules activation” issue 45, 2016

Member of the organizing committee of:

- VIII National Conference on Supramolecular Chemistry (Trieste, September 2007)
- International Symposium on Homogeneous Catalysis, ISHC-XVI (Florence, July 2008)

- XXXVIII National Conference of the Inorganic Chemistry Division (Trieste, September 2010)
- 28^a International Conference on Organometallic Chemistry ICOMC (Florence, July 2018)
- Session Chair for the Topic “T12 – Homogeneous Catalysis” at the 44th International Conference on Coordination Chemistry – ICC2020 (Rimini, July 2021)

Responsible Activities inside the Department and at National level

2021-present	ERASMUS coordinator for chemistry for the Department of Chemical and Pharmaceutical Sciences
2021-present	Member of the Board of the Inorganic Chemistry Division of the Italian Chemical Society
2017-2019	Coordinator of the PhD School Doctorate in Chemistry (joint PhD School between University of Trieste and Ca' Foscari University Venice)
2016-2019	Member of the Board (Collegio Docenti) of the PhD School in Chemistry
2013-2018	Member of the Advisory Board (Giunta) of the Department
2008-2018	ERASMUS coordinator for chemistry for the Department of Chemical and Pharmaceutical Sciences
2008-present	Responsible for the 500 MHz NMR Varian spectrometer installed at the Department of Chemical Sciences on March 2008.
2008-present	Representative of University of Trieste in the National Interuniversity Consortium for Chemical Reactivity and Catalysis (CIRCC).

Refereeing and evaluation activity

I have been/currently am the evaluator for: FIRB Projects and VQR for the Italian Ministry of University, ANR (France), ICREA (Spain), Petroleum Research Funds from American Chemical Society projects;

I have been/currently am the referee for scientific Journals: ACS Catalysis, Organometallics, Macromolecules, Inorganic Chemistry, ChemCatChem, Dalton Transactions, Inorganica Chimica Acta; Applied Organometallic Chemistry, Journal of Polymer Science, European Polymer Journal.

PUBLICATIONS and PATENTS

Prof. Milani (*H index* = **28/27** (**Scopus/WoS March 2021**)) is co-author of 81 publications on indexed Journals and of 8 Industrial Patents.

See a short list of publications in the relevant file.

INVITED LECTURES

38 Invited lectures at National and International Universities and at Companies, such as SHELL, BASF, DSM, SABIC.

19 Keynote and Invited Lectures at National, International Conferences and Schools.

POSTERS and ORAL PRESENTATIONS at CONFERENCES

Presentations (90) at National and International Conferences of which 12 oral communications.

TEACHING ACTIVITY

Since 2003 Prof. Milani regularly teaches to undergraduate students, both at Bachelor (Laboratory of Inorganic Chemistry for 3rd year students in Chemistry and Fundamental and General Chemistry for 1st year students of Geology) and Master students (Industrial Applications of Homogeneous Catalysis and Photocatalysis) in Chemistry.

Tutoring and cotutoring of thesis for graduation

Prof. Milani has been cosupervisor of students for graduation in Chemistry (10), and supervisor of students for graduation in Chemistry: bachelor level 17 students, master level 14 students, three of which awarded with the Master Thesis Prize “Catalysis applied to organic synthesis” given by the Interdivisional Group of Catalysis of the Italian Chemical Society.

Tutoring and cotutoring of Ph.D. thesis

- Academic Year 2008/2009:

Cotutor of a Ph.D. thesis

Ph.D. Student: Lidia Fanfoni

Thesis title: “Development of chiral nitrogen ligands for applications in homogeneous catalysis”

- Academic Years 2002/2003, 2003/2004, 2004/2005:

Tutor of a Ph.D. thesis

Ph.D. student: Alessandro Scarel

Thesis Title: “Stereocontrolled polymerisation reactions catalysed by palladium complexes with nitrogen-donor ligands”

- Academic Years 2010/2011, 2011/2012, 2012/2013:

Tutor of a Ph.D. thesis

Ph.D. student: Angelo Meduri

Thesis Title: “Development of palladium catalysts with nitrogen-donor ligands for controlled polymerization reactions”

The thesis has been awarded with the National prize for the best PhD Thesis of year 2013 from the Inorganic Chemistry Division of the Italian Chemical Society

- Academic Years 2012/2013, 2013/2014, 2014/2015:

Tutor of a Ph.D. thesis of XXVIII Cycle

Ph.D. student: Vera Rosar

Thesis Title: “The importance of ligand structural diversity in palladium catalysed polymerization”

- Academic Years 2016/2017, 2017/2018, 2018/2019:

Tutor of a Ph.D. thesis of XXXII Cycle

Ph.D. student: Anna Dall’Anese

Thesis Title: “Pd-catalyzed copolymerizations: from ligand architecture to macromolecule microstructure”

The thesis has been awarded with the National prize for the best PhD Thesis of year 2020 from the Inorganic Chemistry Division of the Italian Chemical Society

Currently she is supervisor of the PhD students Chiara Alberoni and Francesca Malori.

She is/was Member of jury for several Ph D thesis discussions both in Italian and Foreign Universities.

She has been member of Commissions for comparative evaluations of RTD-A, RTD-B and internal PA positions.