

CURRICULUM VITAE

<i>Name and Surname</i>	Cristiana Di Valentin
<i>Place and date of birth</i>	Maniago (PN), July 29th 1973
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ACADEMIC POSITIONS

since March 2018 **Full Professor** of General and Inorganic Chemistry, Professore Ordinario CHIM03, Dipartimento di Scienza dei Materiali, Università di Milano Bicocca.

Mar 2012 – Feb 2018 **Associate Professor** of General and Inorganic Chemistry, Dipartimento di Scienza dei Materiali, Università di Milano Bicocca.

4 Jul 2007 Offer for a permanent Chair position in 'Theoretical Chemistry of Functional Materials' at the Chemistry Department of TUM München (Germany): declined for personal reasons

Jan 2003 – Feb 2012 **Assistant Professor** of General and Inorganic Chemistry, Dipartimento di Scienza dei Materiali, Università di Milano Bicocca.

EDUCATION

Nov 2000 – Nov 2002 **Master degree in Materials Science**
Università degli Studi di Milano-Bicocca, Milano (Italy)
Grade: 70/70 cum laude

Nov 1997 – Dec 2000 **PhD in Chemical Sciences - Computational Organic Chemistry**
Università degli Studi di Pavia, Pavia (Italy)
in collaboration with Technische Universität München (Germany) – Prof. N. Rösch
Title of the thesis: Computational study of pericyclic reactions.
Tutor: Prof. Remo Gandolfi.

Nov 1997 – Dec 2000 **Postgraduate Higher Education Diploma**
University School for Advanced Studies (IUSS) in Pavia (Italy).
Tutor of the thesis: Prof. J. Blondel.

Oct 1992 – Oct 1997 **Degree in Chemistry**, October 1997
Università degli Studi di Pavia, Pavia (Italy) – alumna of the Ghislieri College
Title of the thesis: E-Z isomerization of acyclic nitrones and diastereoselectivity in their reactions with olefins. A theoretical study.
Tutor: Prof. Remo Gandolfi.
Grade: 110/110 cum laude

Sep 1990 – Jun 1992 International Baccalaureate United World College of the Adriatic, Duino (TS)

INTERNATIONAL EXPERIENCES

Visiting scientist at the Department of Chemistry of the Ecole National Supérieure de Paris (France) in 2010, at the Department of Physical Chemistry of the University of Barcelona (Spain) in 2004, at the Institute of Physical and Theoretical Chemistry of the Technische Universität München (Germany) in 1998, 2000 e 2001 and **post-doc research scholar** at the Chemistry Department of Princeton University New Jersey (US) in 2003, 2004 e 2006.

ACADEMIC MERITS

since 09/2022	WP leader Spoke 6 PNNR National Center HPC, Big Data and Quantum Computing
since 2020	Associate Editor of <i>Materials Today Chemistry</i> (Elsevier) IF = 8.3
August 2018	Nano Award 2018 – International Association of Advanced Materials
February 2015	ERC Consolidator Grant 2014 – European Research Council, Panel 5: Materials and Synthesis.
January 2014	National Scientific Abilitation Full Professor of General & Inorganic Chemistry (CHIM03) and of Physical Chemistry (CHIM02).
September 2011	Prize (Gold Medal) Nasini awarded by the Italian Chemical Society (Inorganic Chemistry Division) to a young scientist who has given a significant contribution to the research in the field of inorganic chemistry.
1998-1999-2000	Prizes awarded to outstanding PhD students by the University School for Advanced Studies IUSS of the University of Pavia.
1999-1998-1997	Prizes “Mario Coggiola” awarded to a Chemistry PhD student for outstanding research studies.
Oct 1997- Aug 1998	Scholarship and fellowship at Maximilianeum Stiftung Munich (Germany).
1993-1994-1995	Merit-based scholarships by the University of Pavia awarded to students in science courses.
September 1992	Admitted , through entrance examination, at Ghislieri University College in Pavia (Italy).
September 1990	Admitted , through entrance examination, at the United World College of the Adriatic (Duino, TS Italy) with scholarship for total support of studying and living expenses by Italian Ministry of Education.

PUBLICATIONS AND BIBLIOMETRICS (Scopus Author ID: 7003843589)

Author or coauthor of:

- **200** scientific articles in international peer-reviewed journals;
 - 1 preface for a Special Issue in *Chemical Physics* (Elsevier) as Guest Editor;
 - 1 preface for a Volume of *Topics in Current Chemistry* (Springer) as Guest Editor;
 - 3 chapters in scientific books edited by Kluwer, Wiley and Springer;
- h-index = 59 Total number of citations > 14000** (by Scopus).

INVITED TALKS AND SEMINARS

She has presented more than 50 among plenary lectures, invited talks and seminars.

TEACHING ACTIVITY

Her teaching activity started in 2003. Since 2014 she has been teaching the Course of General and Inorganic Chemistry for the Bachelor degree in Chemistry. Since 2009 she has been teaching the Course of Spectroscopy and Symmetry in Inorganic compounds for the Master degree in Chemistry.

Deputy director of the PhD course in Materials Science and Nanotechnology.

FUNDED RESEARCH PROJECTS

Title of the project	Type	Financing agency	Total	Period	Role
Innovative diagnostics and therapies in precision medicine	Partenariato esteso PNRR	MUR	RTDA	01/01/2023 – 31/12/2025	co-PI
HPC, big data & quantum computing	Centro nazionale PNRR	MUR	RTDA	01/09/2022 - 31/08/2025	co-PI
Computational simulation laboratory for nanomedicine, pharmacology and cosmetics	Bando Infrastrutture di Ricerca - 2021	UNIMIB	60.000 euro	14/05/2021 - 13/05/2024	co-PI
Photodynamic therapy for brain tumors by multifunctional particles using in situ Cerenkov and radioluminescence light	Fondo di Ateneo Quota Competitiva	UNIMIB	25.000 euro	17/06/2020 - 16/06/2022	PI
Metal Activated 2D Carbon-based Platforms	PRIN-2018	MIUR	910.000 euro	01/06/2019 - 31/05/2022	PI
Smart Bioinorganic Hybrids for Nanomedicine	ERC Consolidator Horizon2020	European Commission	1.750.000 euro	01/02/2016 - 31/01/2022	PI
Designing New Materials with Quantum Mechanics	EIT Raw Materials KIC	European Commission	13.750 Euro	01/04/2017- 31/03/2020	Local coordinator
Applications of (doped) graphene to nanomedicine	Contract of scientific collaboration	Chalmers University of Technology	44.000 Euro	07/07/2017 - 31/03/2019	co-PI
New heterojunction-based photocatalytic materials for solar energy conversion	Advanced Materials Grant 2013	Cariplo Foundation	52.000 euro	01/04/2014 - 31/12/2016	Local coordinator
Direct ElectroChemical Oxidation Reaction of Ethanol DECORE	FP7 NMP.2012.1.1-1	European Commission	170.000 euro	01/01/2013 - 31/12/2016	Local coordinator & WP leader
Beyond graphene: tailored C-layers for novel catalytic materials and green chemistry	FIRB Future in research 2012	MIUR	900.000 euro	21/03/2013 - 21/03/2017	PI
Chemical reactivity on carbon based catalysts for fuel cells	LISA	Supercomputing center CINECA	2.200.000 CPU hours	01/06/2014 - 01/06/2015	PI
Investigating chemically modified graphene as an electrocatalyst material for fuel cells	ISCRA B	Supercomputing center CINECA	4.200.000 CPU hours	01/06/2014 - 01/06/2015	PI
Design of solar-light active photocatalysts	LISA	Supercomputing center CINECA	3.800.000 CPU hours	01/05/2013 - 30/04/2014	PI
Beyond graphene: tailored C-layers for novel catalytic materials and green chemistry	ISCRA-B	Supercomputing center CINECA	4.600.000 CPU hours	15/03/2013 - 15/04/2014	PI
Development of second generation photocatalysts for energy and environment	Advanced Materials Grant 2009	Cariplo Foundation	360.000 euro	01/04/2010 - 31/12/2012	PI
Biocompatibility at the atomic scale: phosphonates SAMs on TiO ₂ surfaces	HPC-Europa2 Transnational Access	European Commission	1.200 euro + 120.000 CPU hours	15/08/2010 - 15/09/2011	PI
Computational study of photoactivity and reactivity of N-doped TiO ₂ surfaces	Short Mobility Grant	CNR National Research Council	3.000 euro	01/07/2006 - 22/07/2006	PI
NO reactivity on CaO(001) surface by ab initio molecular dynamics	HPC-Europa Transnational Access	European Commission	1.200 euro + 150.000 CPU hours	01/07/2004 - 01/07/2005	PI
Structure of inorganic materials and their surface reactivity	Young researchers grant	MURST	8.000.000 lire	01/01/2002 - 31/12/2002	PI
Catalysis of O transfer reactions by transition metal peroxo complexes	Young researchers grant	MURST	7.000.000 lire	01/01/2000 - 31/12/2000	PI