

MARIO CHIESA – CV

PERSONAL INFORMATION

Nationality Italian

Place/date of birth Bra / 03.05.1971

CURRENT/PAST POSITIONS

2018- Full Professor of Inorganic Chemistry, Department of Chemistry, University of Torino

2011-2018 Associate Professor, Department of Chemistry, University of Torino

2006-2011 Researcher, Department of Chemistry, University of Torino

2004-2005 Post-Doctoral Research Scientist, Department of Chemistry, University of Torino

2002-2003 Post-Doctoral Research Scientist, National Institute for the Physics of Matter (INFM), Torino

1997-1998 Scientist, Tribological Polymers Dept., T&N Technology Ltd. (Private Company) Cawston House, Cawston Rugby, U.K.

Education

2002 Ph.D. in Physical Chemistry, Cardiff University, UK. Supervisor Dr. Damien Murphy.

1996 Degree in Chemistry, University of Torino.

AWARDS

2001 Jeol Prize of the Royal Society of Chemistry ESR Spectroscopy Group.

1999-2001 Marie Curie fellowship. "Probing the Novel Magnetic Properties of Surface Trapped Electrons" (ERB4001GT974510)

VISITING

2005 Visiting Researcher, Department of Physics of the University of Antwerp, Belgium (Prof. Sabine van Doorslaer)

2003 Visiting Researcher, Department of Chemistry of the Jagiellonian University, Krakow, Poland (Prof. Zbigniew Sojka)

MAIN RESEARCH ACTIVITY (List)

- Surface and interfacial coordination chemistry of inorganic solids, heterogeneous catalysis.
- Application and implementation of Electron Magnetic Resonance methods to the study of spin centres for applications in catalysis, quantum information technologies and biochemistry.

RESEARCH PERFORMANCE

- Research funding: 6 individual grants (overall budget 3178,38 k€) as Principal Investigator. 5 projects as member of research groups.
- Publications: 151 publications in high ranking peer refereed international journals with over 2300 citations and h index=33. Cumulative impact factor 1024 Over 35 oral presentations at national and international meetings and conferences and 20 invited lectures.
- Career supervision: 12 PhD students and 15 master thesis students.

FUNDING ID

Individual grants

2018- Coordinator H2020-MSCA-ITN-EJD 2018 813209 PARACAT "Paramagnetic Species in Catalysis Research. A Unified Approach Towards Heterogeneous, Homogeneous and Enzyme Catalysis" k€ 2600.

2018- Principal local investigator PRIN2017 "QQuantum detection of chiral-induced spin selectivity at the

molecular level" k€ 98.3

2016 Principal local investigator PRIN2015 "Quantum Coherence in Nanostructures of Molecular Spin Qubits" k€ 85.28

2012-2015 Principal Investigator in the project: "Direct insight into elusive active Ti species of high-yield Ziegler Natta catalysts." k€ 190. Funded by Dutch Polymer Institute (DPI)

2010 Principal Investigator in the project "Fluid dynamic and kinetic studies of the chemical events occurring in exhaust gases, with particular reference to the abatement of NOx with SCR technology" k€ 22.8. Funded by Magneti Marelli S.p.A. (Private Company).

2007-2009 Principal Investigator in the project "NOx Diesel reduction by means of on board generated ammonia for Euro 6 emission compliant vehicles" k€ 182. Funded by Piemonte Region (CIPE Bando Ricerca Scientifica 2006).

Grants as member of research group

2012-2014 "Oxides at the nanoscale: multifunctionality and applications" FIRB - Italian Ministry of Research.

2010-2012 "New generation photosensitive semiconducting oxides modified with non metals to enhance solar light harvesting. Design, synthesis, characterisation and testing. PRIN - Italian Ministry of Research

Other projects as member of research groups include:

2006-2010 COST Action D-41 "Inorganic Oxides: Surfaces and Interfaces"

2005-2007 "Novel electronic and chemical properties of metal oxides by doping and nanostructuring" Ministry of Education, University and Research

2000-2005 COST Action D-19 "Chemical Functionality Specific to the Nanometer Scale"

TEACHING

General Chemistry Course for the second year of Physics (Bachelor)

Inorganic Chemistry for the second year of Chemistry (Bachelor)

Magnetic Resonance Course for the Master Degree in Chemistry

Invited Lecturer at International and National Advanced Schools:

2018 International EPR School Marseille and Carry-Le-Rouet (France)

2017 National NMR School (University of Torino, Italy)

2016 International Joint School "Smart Nanomaterials and X-ray Optics 2016 Modeling, Synthesis and Diagnostics" (Kaliningrad, Russia)

2012 International EuCheMS-SCI School on "Synthesis and Characterization of Novel Nano-Sized Inorganic Materials" (University of Bari, Italy)

2009 International COST Winter School "Methods to Characterize Oxide Surfaces" (Fritz-Haber-Institut der Max-Planck-Gesellschaft, Berlin, Germany)

2009 National Electron Paramagnetic Resonance School (University of Firenze, Italy)

2003 National Electron Paramagnetic Resonance School (University of Urbino, Italy)

INTERNATIONAL COOPERATION:

Prof. Sabine Van Doorslaer Dpt. of Physics University of Antwerp, Belgium.

Prof. Zbigniew Sojka, Dpt. of Chemistry, University of Krakow, Poland.

Prof. Damien Murphy, School of Chemistry University of Cardiff, UK.

ORGANIZATION OF INTERNATIONAL MEETINGS:

2021 International School on Inorganic Materials - Società Chimica Italiana

2021 Chemistry at the Surface - International Workshop

2016 Xth Conference of the European Federation of EPR groups (EFEP)(Local organizer)

2010 Annual Meeting of the COST Action D41 "Inorganic Oxides: Surfaces and Interfaces" Torino, October 7-9, 2010

2008 COST Action D41 WG2 Meeting "Inorganic Oxides: Surfaces and Interfaces" Verbania, April 10-11, 2008

OTHERS:

External examiner for PhD defense at the Dpt. of Physics University of Antwerp, Belgium and University of Lille, France, University of Manchester, UK.

Member of the scientific board of division of Inorganic Chemistry of the Italian Chemical Society (SCI)

Past Coordinator of the PhD Programme in Chemical and Material Sciences of the University of Torino.