

## CURRICULUM VITAE OF MAURIZIO PERUZZINI

Last name	<b>Peruzzini</b>
First name	<b>Maurizio</b>
Nationality	Italian

### Address:

- Office: ICCOM CNR, Via Madonna del Piano, 10  
50019 Sesto Fiorentino (Florence), Italy  
tel. +39-055-5225289;  
fax +39-055-5225203;  
e-mail [mperuzzini@iccom.cnr.it](mailto:mperuzzini@iccom.cnr.it)  
e-mail (PEC) [maurizio.peruzzini@aruba.pec.it](mailto:maurizio.peruzzini@aruba.pec.it)  
home page: <http://www.iccom.cnr.it/peruzzini/>

Education: Doctor in Chemistry 110/110 *magna cum laude*, University of Florence, June 1979.  
Research Advisors: Professor Luigi Sacconi and Professor Piero Stoppioni.

### Experience and Academic Carrier:

**July 1979 - November 1981:** University of Florence, Department of Chemistry. Assistant.  
Research interests: synthetic coordination and organometallic chemistry.

**November 1981 - March 1986:** University of Florence, Department of Chemistry. Research Assistant. Research interests: synthetic coordination and organometallic chemistry. Organophosphorus and organoarsenic chemistry. Transition metal clusters incorporating naked main group atoms and units as ligands.

**April 1986 - present:** Istituto di Chimica dei Composti Organometallici, ICCOM CNR, formerly Istituto per lo Studio della Stereochimica ed Energetica dei Composti di Coordinazione del Consiglio Nazionale delle Ricerche, ISSECC CNR.

- **Researcher** (1986 – 1996),
- **Senior Researcher** (1996 – 2001; first classified in a national competition for the position of “Primo Ricercatore” (Senior Researcher) of CNR)
- **Research Director** (2001 – 2020; first classified in a national competition for the position of “Dirigente di Ricerca” (Research Director) of CNR)
- **Associate Researcher** (2020 – present)

**February 2011 – October 2013:** *Deputy Director*, Istituto di Chimica dei Composti Organometallici, (ICCOM CNR)

**October 2013 – January 2017:** *Director*, Istituto di Chimica dei Composti Organometallici, (ICCOM CNR, first classified in a national competition for the position. Headquarter: Sesto Fiorentino (FI); Research Stations: UOS in Pisa and Bari; URT in Trieste and Camerino; permanent staff (2016) about 75 people (54 researchers), temporary staff (average) about 40 people (Postdocs Associates, Grant holders, PhD and Master students, Visiting Scientists) and more than 40 research associates from eight Universities)

**February 2017 – February 2020:** *Director*, Dipartimento Scienze Chimiche e Tecnologie dei Materiali, DSCTM CNR, first classified in a national competition for the position.

**March 2020 – April 2020:** *Acting Director*, Dipartimento Scienze Chimiche e Tecnologie dei Materiali, DSCTM CNR, appointed by the President of CNR

**Primary interests in chemistry:**

- Activation and functionalization of elemental Phosphorus.
- 2D-Materials derived from Black Phosphorus (Phosphorene)
- Activation of small inorganic and organic molecules.
- Transition-metal hydrides.
- Molecular Hydrogen complexes.
- Materials for H-storage.
- Carbon dioxide capture and valorisation
- Metal promoted functionalization of terminal alkynes.
- Selective transformations of vinylidenes and allenylidenes.
- Water soluble organometallic complexes.
- C-H bond activation in hydrocarbons and oxoderivatives.
- Homogeneous catalysis.
- Hydrodesulfurisation reaction of thiophenic molecules.
- Characterization of organometallic compounds through multinuclear 1D- and 2D-NMR spectroscopy.
- High-pressure NMR Spectroscopy (HPNMR).

**Publications:** Author of **429 scientific publications** (136 American Chemical Society / 61 Royal Society of Chemistry), **5 patents** and **579 presentations** at International (380) and National (199) Chemical Meetings

**Web of Science**

**ISI Ranking:** **h-index 57** (WOS); results found 417; sum of times cited 12676; average citation per article 30.4 (as at July, 26<sup>th</sup> 2020). **h-index 57** (SCOPUS); results found 389; sum of times cited 12570; average citation per article 32.31 (as at July, 26<sup>th</sup> 2020).

**ResearcherID:** <http://www.researcherid.com/rid/M-1705-2014>

**ORCID:** <http://orcid.org/0000-0002-2708-3964>

**Awards:** **Prize "Raffaele Nasini" 1993**, gold medal awarded by the Division of Inorganic Chemistry of the *Società Chimica Italiana*

**SCF French-Italian Prize, 2011**, Lectureship Prize awarded by the *Société Chimique de France* at Université Claude Bernard, Lyon-Villeurbanne, June 8<sup>th</sup> 2012 (advertised in *Angew. Chem. Int. Ed.* **2011**, *50*, 11838 – 11839)

**"Fiorino di Argento 2016"**, prize "Ambassador of Florence", awarded by "*Firenze Convention Bureau*", Firenze, Palazzo Vecchio, February 2<sup>nd</sup> 2017.

**"Stanislao Cannizzaro" Gold Medal 2020**, gold medal awarded by the *Società Chimica Italiana*

**Honours:** **Foreign Corresponding Member** (*Membro Correspondente Estrangeiro*) of the *Academia das Ciências de Lisboa*, Lisbon, Portugal (since 2017)

**Fellow of the John van Geuns Foundation** (1996 and 2000) at the van't Hoff Institute of Chemistry, University of Amsterdam, Amsterdam, The Netherlands

**Fellow of the Hans Vielberth Stiftung** (2007, 2012 and 2019) at the Naturwissenschaftliche Fakultät IV, Chemie und Pharmazie, Universität Regensburg, Regensburg, Germany

**Editor:** Editor of the books:

“*Recent Advances in Hydrides Chemistry*”, published by Elsevier SA (Amsterdam, The Netherlands), 578 pages, January **2002**; ISBN 10: 0-444-50733-7; ISBN 13: 978-0-444-50733-4; (together with Rinaldo Poli, Université de Bourgogne, Dijon, France)

“*Phosphorus Compounds: Advanced Tools in Catalysis and Material Sciences*”, Series Catalysis by Metal Complexes, Vol. 37; published by Springer Verlag (Heidelberg, Germany), 469 pages, July **2011**; ISBN 978-90-481-3816-6; (together with Luca Gonsalvi, ICCOM CNR, Sesto Fiorentino, Italy)

**Guest Editor:** *Coordination Chemistry Reviews* (Elsevier SA), Volumes 185/186 (May, **1999**; 838 pages) and 190/192 (October, **1999**; 1285 pages), (together with Ivano Bertini, University of Florence, Italy).

*European Journal of Inorganic Chemistry* (Wiley VCH), 10<sup>th</sup> Year-Anniversary issue, July **2007**; issue 18/2007, pp 2513 – 2985, (together with Karl Kirchner, Technical University of Vienna, Vienna, Austria)

*Inorganica Chimica Acta* (Elsevier SA), “*Advances in transition metal catalysis*”, Volume 431 (May 24<sup>th</sup>, **2015**; 302 pages), together with Maria Caporali (ICCOM – CNR).

*Inorganica Chimica Acta* (Elsevier SA), “*Special Volume: Protagonists in Chemistry Dedicated to Prof. Carlo Mealli*”, Volume 470 (January 30<sup>th</sup>, **2018**; 444 pages), together with Andrea Ienco (ICCOM – CNR).

*Molecules* (MDPI; ISSN 1420-3049), *Topical Collection "Early-Career Researchers in Chemistry"*, to be published in 2021. Collection Coeditors Antonella Curulli (ISMN – CNR, Italy), Eugenio Aprea (University of Trento, Italy), Francesca Cardona (University of Florence, Italy), Ioanna Chinou (University of Athens, Greece), James Gault (University of Windsor, Canada), Lakshmi Kotra (University of Toronto, Canada);

#### Member of Editorial Boards:

- Member of the *Editorial Board* of the *European Journal of Inorganic Chemistry* (Wiley-VCH, Weinheim, Germany), 2007 - 2012
- Member of the *Editorial Advisory Board* of *Organometallics* (American Chemical Society), 2006 - 2008
- Member of the *International Advisory Board* of the *European Journal of Inorganic Chemistry* (Wiley-VCH, Weinheim, Germany), 2002 – 2006
- Member of the *Editorial Board* of *Inorganica Chimica Acta* (Elsevier SA, Amsterdam, NL), 2013 –
- Member of the *Editorial Board* of *ChemistrySelect* (Wiley-VCH, Weinheim, Germany), 2015 –

#### Member of Editorial Boards (online web journals)

- Member of the *Editorial Board* of *Hydrogen* (Open Access Journal – MDPI; since 2020)
- Member of the *Editorial Board* of *Inorganics* (Open Access Journal – MDPI; since 2019)
- Member of the *Editorial Board* of *Molecules* (Open Access Journal – MDPI; Organometallic Chemistry Section; since 2019)
- Member of the *Editorial Board* of *The Open Conference Proceedings Journal* (Bentham Science Publisher; since 2014)
- Member of the *Editorial Board* of *Physical and Chemical News* (Best Editions, Morocco; since 2004)
- Member of the *Editorial Advisory Board* of *Current Catalysis* (Bentham Science Publisher; 2012 – 2018)
- Member of the *Editorial Advisory Board* of *Current Inorganic Chemistry* (Bentham Science Publisher; 2009 – 2018)
- Member of the *Editorial Board* of the *Research Letters in Inorganic Chemistry* (Hindawi Publishing Corporation; 2007 – 2010); later *International Journal of Inorganic Chemistry* (Hindawi Publishing Corporation; 2010 – 2017)
- Member of the *Editorial Board* of *Green and Sustainable Chemistry* (Scientific Research Publishing Inc; 2011 – 2012)
- *Regional Editor* of *The Open Catalysis Journal* (Bentham Science Publisher; 2010 – 2015)
- Member of the *Editorial Board* of *The Open Catalysis Journal* (Bentham Science Publisher; 2008 – 2009)
- Member of the *Editorial Board* of *The Open Inorganic Chemistry Journal* (Bentham Science Publisher; 2007 – 2009)

## INTERNATIONAL ACTIVITY

- **Recipient** (PI) of an **ERC ADVANCED GRANT** for the project “*Phosphorene functionalization: a new platform for advanced multifunctional materials*” (**PHOSFUN**) (2015 - 2019) (**Horizon-2020**). Panel PE5 - Synthetic Chemistry and Materials; Proposal ID 670173. Host institution CNR - ICCOM. Participants: ICCOM-CNR (Florence, Italy), NANO-CNR (Pisa, Italy), ISMN-CNR (Bologna, Italy). Total Budget *ca.* 2.000.000 €.
- Recipient (PI) of an **ERC PROOF OF CONCEPT GRANT** for the project “*Exfoliated black phosphorus for biomedical applications*” (**PHOSMED**) (2020 – 2022) (**Horizon-2020**). Proposal ID 963933. Host institution CNR - ICCOM. Participants: ICCOM-CNR (Florence, Italy), IPCB-CNR (Naples, Italy). Total Budget. 150.000 €.
- **Coordinator** of the **MARIE CURIE RESEARCH TRAINING NETWORK**, project MRTN-CT-2003-503864, “*Transition Metal Chemistry and Catalysis in Aqueous Media*” (**AQUACHEM**) (2003 – 2007) (**6<sup>th</sup> RFP**). Participants: ICCOM-CNR (Florence, Italy), LCC-CNRS (Toulouse, France), University of Debrecen (Debrecen, Hungary), The Hebrew University of Jerusalem (Jerusalem, Israel), Universitat Autònoma de Barcelona (Barcelona, Spain), University of York (York, UK), University of Erlangen-Nürnberg (Erlangen, Germany), Instituto Superior Técnico (Lisbon, Portugal), University of Almería (Almería, Spain), INEOS-RAS (Moscow, Russia). Total budget *ca.* 1.900.000 €.
- **Coordinator** of the **MARIE CURIE INTERNATIONAL INCOMING FELLOWSHIPS (IIF)** FP7-PEOPLE-IIF-2008-236423 “*New modular self-assembled homogeneous catalysts for asymmetric synthesis in water*” (**MODUCAT**) (2009 – 2012) (**7<sup>th</sup> RFP**). Participants: ICCOM CNR (Florence, Italy), INEOS-RAS, Russia. Total budget 163.074 €.
- **Coordinator** of the **EC Project (INCO-COPERNICUS ERBIC15CT960746)** “*New Chlorine Free Technology of Organophosphorus Compounds Based on Catalytic Reactions of Elemental Phosphorus*” (1997 - 2000) (**4<sup>th</sup> RFP**). Participants: ISSECC-CNR (Florence, Italy), LCC-CNRS (Toulouse, France), ITPA (Vilnius, Lithuania), IOCE-NAS (Almaty, Kazakhstan). Total budget *ca.* 400.000 €.
- **Coordinator** of the **INTAS** project 00-00018 “*Towards an ecoefficient functionalization of white phosphorus*” (2001 – 2004). Participants: ISSECC-CNR (Florence, Italy), University of Kaiserslautern (Germany), University of Almería (Spain), IOCE-NAS (Almaty, Kazakhstan), Arbuzov Institute-RAS (Kazan, Russia), Institute of Chemistry-MAS (Chisinau, Moldova). Total budget *ca.* 90.000 €.
- **Coordinator** of the **NATO** Project (NATO-RUSSIA COLLABORATIVE LINKAGE GRANT: CPB.NR.NRCLG 983375) “*Degradation of White Phosphorus Residues*” (2008 – 2010) in collaboration with Oleg Sinyashin, IOPC-Russian Academy of Sciences (Kazan, Russia). Total budget 18.000 €
- **Coordinator** of the **NATO** project (Collaborative Linkage Grant on Physical and Engineering Science and Technology; PST.CLG.978521) “*Ecoefficient Synthesis of Heterocycles via Water Soluble Metal Unsaturated Carbenes*” (2001 – 2003). Participants: (ISSECC CNR, Florence, I; University of Almería, Spain; Université de Monastir (Tunisia); Université Abdelmalek Essaadi, Tetouan, Morocco. Total budget *ca.* 10.000 €.
- **Coordinator** of the **NATO** Project (Priority Area on High Technology; HTECH-CRG 972135) “*<sup>2</sup>H-Relaxation as a tool to study hydrogen transfer reactions*” (1998 – 2000) in collaboration with Vladimir Bakhmutov, Academy of Sciences of Russia (Moscow, Russia). Total budget *ca.* 6.000 €
- **Working Group Leader** of the **COST Chemistry Action D17 Working Group** 003/00 “*C-C Bond Formation Mediated by Transition Metal Complexes: Fundamental Studies and Mechanistic Aspects*” (2000 – 2006). Participants: (ISSECC CNR, Florence, I; Université de Rennes-1, Rennes, France; Universidad de Sevilla, Sevilla, Spain; Technische-Universität Wien, Wien, Austria; ENICHEM, Novara, Italy; Università di Pisa, Pisa, Italy; University of Poznan Poland; University of Almería, Spain, University of Izmir, Turkey).
- **Working Group Leader** of the **COST Chemistry Action CM0802** “*European Phosphorus Sciences Network (PhoSciNet)*” (2008 - 2012); **Working Group 004/09** “*Novel high potential phosphorus compounds for non-*

*typical applications*” (2009 – 2012). Participants: 31 research teams from Italy (ICCOM CNR, UNI Florence, Polytechnic Bari), Germany (UNI Regensburg, UNI Braunschweig, UNI Stuttgart, UNI Leipzig, UNI Bonn, UNI Erlangen-Nürnberg, UNI Münster), France (UNI Toulouse, EPF Palaiseau), United Kingdom (UNI Cardiff, UNI Bristol, UNI St Andrews, UNI Cambridge, UNI Durham), Romania (UNI Cluj-Napoca), Switzerland (ETH Zürich, EPFL Lausanne), Spain (UNI Ciudad Real, UNI Almeria, UNI Oviedo), The Netherlands (UNI Amsterdam), Greece (UNI Athens), Poland (Gdansk Technical UNI) Ireland (UNI Dublin).

- **Coordinator** of the **bilateral Project** between CNR (Rome) and the Russian Academy of Sciences (Moscow) “*Making and breaking of homo- and heteronuclear bonds via stoichiometric and catalytic reactions mediated by transition metal complexes*” agreement (2005 – 2006; prolonged 2007). Participants: (ICCOM-CNR, Florence, I; ISTM-CNR, Milan, I; University of Ferrara, Ferrara, I; INEOS-RAS, Moscow, RUS; IOPC-RAS, Kazan, RUS; ICSO RAS, Novosibirsk, RUS.
- **Coordinator** of the **bilateral Project** between CNR (Rome) and the Russian Academy of Sciences (Moscow) “*Making and breaking of homo- and heteronuclear bonds via stoichiometric and catalytic reactions mediated by transition metal complexes*” agreement (2002 – 2003; prolonged 2004). Participants: (ICCOM-CNR, Florence, I; CSMR-CNR, Rome, I; CSSMSTBSO-CNR, Milan, I; TCMET-CNR, Padua, I; INEOS-RAS, Moscow, RUS; IOPC-RAS, Kazan, RUS; ICSO RAS, Novosibirsk, RUS.
- **Coordinator** of the **bilateral Project** between CNR (Rome) and the Russian Academy of Sciences (Moscow) “*Transition metal mediated homo- and heteronuclear bond cleavage and bond forming involving carbon*” agreement (1999 – 2001). Participants: (ISSECC-CNR, Florence, I; CSMR-CNR, Rome, I; CSSMSTBSO-CNR, Milan, I; TCMET-CNR, Padua, I; INEOS-RAS, Moscow, RUS; ICP-RAS, Chernogolovka, RUS.
- **Deputy Coordinator** of the GRUPPO DI RICERCA INTERNAZIONALE, GDRI, Agreement entitled “*Catalyse Homogène pour le Développement Durable (CH2D)*” (2008 – 2011; renewed 2012 – 2014; prolonged 2015) between CNRS (France), CNR (Italy) and RAS (Russia). Contribution from DPM CNR, 20.000 € (2008).
- **Responsible** of the **industrial contract** “*White phosphorus activation and functionalization*” between ICCOM CNR and the Dutch company **THERMPHOS INTERNATIONAL BV** (Vlissingen, The Netherlands) (2004/2005); renewed (2006/2008 and 2008/2011). Contribution from the industry, 246.000 €.
- **Responsible** of the **industrial contract** “*Catalytic synthesis of organophosphites and phosphates*” between ISSECC CNR and the German company **BASF AG** (Ludwigshafen, Germany) (2001); renewed as ICCOM CNR for the year 2002. Contribution from the industry, ca. 60.000 €.
- **Responsible** of the ICCOM-CNR Research Unit in the **INTEGRATED TRAINING NETWORK** project RFP7-PEOPLE-2012-ITN - 317404 “*A European Training Network for Sustainable Phosphorus Chemistry (SUSPHOS)*” (2013 – 2017) (**7<sup>th</sup> RFP**). Participants: VU University Amsterdam (Amsterdam, The Netherlands), ICCOM-CNR (Florence, Italy), Universität Leipzig (Leipzig, Germany), Freie Universität Berlin (Berlin, Germany), The University of St. Andrews (St. Andrews, Scotland), University of Bristol (Bristol, UK), Institut Catala d’Investigacio Quimica (Tarragona, Spain), Ecole Polytechnique (Palaiseau, France), ETH (Zurich, Switzerland), Thermphos International B.V. (Vlissingen, The Netherlands), Magpie Polymers SAS (France), DSM Innovative Synthesis BV (Heerlen, The Netherlands). Total budget 3.676.692,69 €.
- **Responsible** of the ICCOM-CNR Research Unit in the **RESEARCH TRAINING NETWORK** project HPRN-CT-2002-00176 “*New Chemistry and Catalysis with Hydride Compounds (HYDROCHEM)*” (2002 – 2006) (**5<sup>th</sup> RFP**). Participants: Université de Bourgogne (Dijon, France), ICCOM-CNR (Florence, Italy), University of York (York, UK), Universitat Autònoma de Barcelona (Barcelona, Spain), Shell International Chemicals B.V. (Amsterdam, The Netherlands), Università di Milano (Milan, Italy), INEOS-RAS (Moscow, Russia). Total budget 1.140.000 €.
- **Responsible** of the ICCOM-CNR Research Unit in the **INTAS** project 00-00179 “*Proton-transfer reactions in hydride chemistry orchestrated by unconventional hydrogen bonds*” (2001 – 2004). Participants: Université de Bourgogne (Dijon, France), ICCOM-CNR (Florence, Italy), INEOS-RAS (Moscow, Russia), Tbilisi State University (Tbilisi, Georgia), Rostov State University, (Rostov-on-Don, Russia). Total budget 90.000 €.

- **Responsible** of the ICCOM-CNR Research Unit in the **COST Chemistry Action D29 Working Group** 0009/03 “*Green Chemistry through Aqueous Organometallic Catalysis*” (2003 – 2007). Participants: (University of Debrecen, Debrecen, Hungary; ICCOM-CNR, Florence, Italy; LCC-CNRS, Toulouse, France; University of Almería, Almería, Spain; University of Lausanne, Lausanne, Switzerland; University of Paderborn, Paderborn, Germany; University of Athens, Athens, Greece; University of Durham, UK).
- **Responsible** of the ICCOM-CNR Research Unit in the project **GINSENG** “*Graphene Innovative 2D Materials for Sustainable Energetics and Catalysis*”, three years **Italy-China Bilateral Project sponsored by MAECI and NSFC** (2018 – 2020). Participants: University of Padua, University of Sassari, IPCB-CNR, ICCOM-CNR, IIT Genoa, Peking University, Chengdu Sichuan University, Shenyang Institute of Metal Research, Chinese Academy of Sciences (IMR, CAS).
- **Responsible** of the **bilateral project** between **CNR** and **RFBR** (Russian Foundation for Basic Research) “*Chemical hydrogen storage through ammoniaborane (AB): synthesis of ab dehydrogenation catalysts and combined spectroscopic/computational studies of the mechanism of hydrogen release*” (2015 – 2017), in collaboration with Elena Shubina, INEOS RAS, Moscow, Russian Federation. Total budget for CNR 120.000 €.
- **Responsible** of the **bilateral project** between **CNR** and **CONACYT** (Mexico) “*New ruthenium complexes containing polar groups derived from sugars and aminoacids: synthesis, characterization and their applications in biology, pharmacology and in ecoefficient catalysed processes*” (2002- 2004; renewed 2006 – 2008), in collaboration with Lena Ruiz Ramirez, UNAM, Universidad Autonoma de México, Mexico DF.
- **Responsible** of the **bilateral project** between **CNR** and **RAS** (Russian Academy of Sciences) “*Sustainable Catalytic Processes*” agreement (2008 – 2010; renewed 2011 – 2013). Participants: (ICCOM-CNR, Florence, I; INEOS-RAS, Moscow, RUS; IOPC-RAS, Kazan, RUS).
- **Responsible** of the **Galileo Program** (Integrated Action Program), between MIUR and MAE (France) “*Molecular detectors for heavy transition metals*” (2003; renewed for 2004), in collaboration with Stephane Rigaut, Université de Rennes 1, Rennes, France. Total budget 8.000 €
- **Responsible** of the project “*Photochemical Activation of Transition Metal Hydrides*” (2003) for the transnational access to the “*Plataforma Solar de Almería*” (PSA) under the ‘Improving Human Research Potential’ Programme’s ‘Access to Research Infrastructures’ Activity (5<sup>th</sup> RFP). Participants: ICCOM-CNR (Florence, Italy), University of Ferrara (Ferrara, Italy)
- **Financial Rapporteur** (2010 - 2012) of the **COST Chemistry Action CM0802 “European Phosphorus Sciences Network (PhoSciNet)”**; elected at the 3<sup>rd</sup> Management Committee Meeting, Budapest, March 26<sup>th</sup>, 2010.

## NATIONAL ACTIVITY

- Responsible (together with R. Chirone, IRC-CNR) of the MIUR (**MINISTRY OF UNIVERSITY AND RESEARCH, Rome, Italy**) Project “**Progetto Premiale 2014** – area “Efficient, clean and secure energy” (**MATER**: “*Materiali Innovativi e Tecnologie Efficienti per le Energie Rinnovabili*”). Participants: CNR (leading institution), INRIM, OGS, Science Park Trieste, INGV, Centro Fermi [Total funded budget *ca.* 5.460.000 €].
- **Coordinator and Responsible** of the integrated project “**FIRENZE HYDROLAB**”: “*Advanced Research Programme for the production, storage and utilization of hydrogen as energy carrier*” (2004 - 2006; renowned 2007 - 2009). Participants: ICCOM CNR (Florence, Italy), IFAC CNR (Florence, Italy), University of Florence (Italy), LENS (Florence, Italy). Funded by the ‘*Ente Cassa di Risparmio di Firenze*’. Contribution from the Bank Foundation, 790.000 € (2004); 480.000 € (2005); 562.000 € (2006); 420.000 € (2007); 450.000 € (2008); 200.000 € (2009) [Total budget: 2.902.000 €]

- **Coordinator and Responsible** of the integrated project “**FIRENZE HYDROLAB**”<sup>2</sup> (2012 - 2015). Participants: ICCOM CNR (Florence, Italy), University of Florence (Italy), LENS (Florence, Italy). Funded by the ‘Ente Cassa di Risparmio di Firenze’. Contribution from the Bank Foundation, 45.000 € (2012); 25.000 € (2013); 75.000 € (2014); 70.000 € (2015) [Total budget: 215.000 €]
- **Coordinator** of the MATTM (**MINISTRY OF ENVIRONMENT, Rome, Italy**) project **PIRODE** (“Hydrogen production from renewables and its release on demand through chemical storage”) (2010 – 2012). Participants: DPM CNR (Rome, Italy), M2M Engineering Sas (Napoli, Italy), S&h Software and Hardware Snc (Peschiera Borromeo, MI, Italy), AGEAS (Salerno, Italy). Total budget *ca.* 805.000 €.
- **Coordinator** of the MIUR (**MINISTRY OF UNIVERSITY AND RESEARCH, Rome, Italy**) Project “**Progetto Premiale 2012 – Line 1: Efficient, clean and secure energy**” (“Integrated and eco-sustainable technologies for the production, storage and use of the energy”) (2012). Participants DSFTM CNR, DSCTM CNR, DIITET CNR (Rome, Italy). Total funded budget *ca.* 600.000 €.
- **Recipient** of a charity fund of Fondazione *Ente Cassa di Risparmio di Firenze* to acquire a Dual Beam Electron Microscopy for nanofabrication and characterization of nanostructures and nanomaterials. Total budget 350.000 € (2014). Cofunding from CNR (Rome) 250.000 € (2015/2016).
- **Responsible** of the **industrial contract** N° 1400054353 “A process for CO<sub>2</sub> capture with alcoholic solutions of amines” (“Processo di cattura della CO<sub>2</sub> con soluzioni alcoliche di ammine”) with the Italian company **ENEL SpA** (Rome, Italy) (2013). Contribution from the industry, 40.000 €.
- **Responsible** of a Research Unit in the **PROGETTI DI RICERCA DI INTERESSE NAZIONALE (PRIN)** project 20154X9ATP – Bando MIUR **2015**; “Towards a Sustainable Chemistry: Design of Innovative Metal-Ligand Systems for Catalysis and Energy Applications” (2017 – 2020). Coordinator A. Albinati (University of Milan). Total Budget 550.374 €; research budget for CNR 46.520 €.
- **Responsible** of a Research Unit in the **PROGETTI DI RICERCA DI INTERESSE NAZIONALE (PRIN)** project 2009LR88XR – Bando MIUR **2009**; “Phosphorus activation by organometallics and related sustainable catalytic applications” (2010 – 2012). Coordinator A. Albinati (University of Milan). Research budget for CNR 67.953 €.
- **Responsible** of a Research Unit in the **PROGETTI DI RICERCA DI INTERESSE NAZIONALE (PRIN)** – Bando MIUR **2007**; “Unconventional activation and functionalization of phosphorus compounds in low oxidation states and their use in stoichiometric and catalytic processes” (2008 – 2010). Coordinator A. Albinati (University of Milan). Research budget for CNR 130.000 €.
- **Responsible** of the ICCOM-CNR Research Unit in the Executive Project “Photobiological Production of Purified Hydrogen from vegetal wastes (**BIOIDRO**)” (2006) funded by Regione Toscana. Participants; University of Florence, Florence Italy, ICCOM-CNR, Florence, Italy; Fondazione Sacconi, Florence, Italy; Quadrifoglio SpA, Florence, Italy; Fanfani – Bandinelli Srl, Florence, Italy; Total budget 40.125 €.
- **Responsible** of the ICCOM-CNR Research Unit in the Executive Project **VECOPREBIO** “vernici ecosostenibili per la prevenzione del biodeterioramento”, prot. n. 0000014 del 08/01/2016, within the call “Bando Regione Toscana FESR 2014-2020 – Bando n. 2 Progetti di ricerca e sviluppo delle PMI” (2016) funded by Regione Toscana. Total budget for CNR 37.200 €.

## RESPONSIBILITIES:

### (a) International Organizations

- **Member elected** of the **Executive Board** of **EUROCHEMISTRY** (<http://euro-chemistry.org/>) (Elected by the EUROCHEMISTRY General Assembly, 23<sup>rd</sup> October, 2010 - Madrid Spain) (2010 – 2012).

- **Member** of the **Management Committee** of the **COST Chemistry Action CM1302** “*European Network on Smart Inorganic Polymers (SIPs)*”, appointed by the COST National Coordinator for Italy, Mrs. Maria Uccellatore, MIUR, Rome (2013 – 2016).
- **Member** of the **Management Committee** of the **COST Chemistry Action CM0802** “*European Phosphorus Sciences Network (PhoSciNet)*”, appointed by the COST National Coordinator for Italy, MIUR, Rome (2008 – 2013).
- **Chair** of the **Nominating Committee** for the elections of the **IUPAC Interdivisional Committee on Green Chemistry for Sustainable Development (ICGCSD)** for the 2020 – 2021 term.

## **(b) National Research Council (CNR)**

**Director** of the **CNR “Department of Chemical Sciences and Technologies of Materials”**, DSCTM CNR (Appointed by the CNR President on February 1<sup>st</sup>, 2017) (2017 – 2020)

**Director** of the **CNR “Istituto di Chimica dei Composti Organometallici”**, ICCOM CNR (Appointed by the CNR President on October 16<sup>th</sup>, 2013) (2013 – 2017).

**Deputy Director** of the **CNR “Department of Chemical Sciences and Technologies of Materials”**, DSCTM CNR (Appointed by the CNR President on February 28<sup>th</sup>, 2020) (March – April 2020)

**Deputy Director** of the **CNR “Istituto di Chimica dei Composti Organometallici”**, ICCOM CNR (Appointed by the CNR President on February 4<sup>th</sup>, 2011) (2011 – 2013).

**Deputy Director (“Vicario”)** of the **CNR “Dipartimento Progettazione Molecolare”** (Appointed by the Director of DPM CNR on September 10<sup>th</sup>, 2008) (2008 – 2011).

**Project Leader at CNR - “Dipartimento Progettazione Molecolare”** (Appointed by the CNR President on August 3, 2006) (2006 – 2010; prolonged to – 2011):

- *Dipartimento di progettazione molecolare*  
2006: *Project PM03 - Progettazione di molecole e sistemi nanostrutturati con proprietà catalitiche.*  
2007 – 2010: *Project PM03 - Prodotti e processi innovativi per una chimica sostenibile.*

**Chair elected of the Governing Board (Presidente del Consiglio Direttivo) of Ce.M.E. (Center for Electron Microscopy)** of the CNR Research Area of Florence (2015 – 2020).

**Member of the Board of Directors (CdA) of the ENERGEA Society (Società Consortile a Responsabilità limitata “ENERGEA”)** representing CNR (Appointed by the general assembly of “ENERGEA Srl” on May 20<sup>th</sup>, 2015) (2015 – 2018).

**Deputy Representative of CNR in the International Union of Pure and Applied Chemistry – IUPAC** (Appointed by the CNR President on February 12<sup>th</sup>, 2019) (2019 – 2022).

**Chairman of the National Committee** for the participation of CNR to the **International Union of Pure and Applied Chemistry – IUPAC** (Appointed by the CNR President on April 16<sup>th</sup>, 2019) (2019 – 2022).

**Titular Representative** for CNR at the **European Association for Chemical and Molecular Sciences (EuChemS)**, appointed by the CNR President on February 28<sup>th</sup>, 2020) (2020 – 2022)

**Member of the National Committee** for the participation of CNR to the **IUPAC: International Union of Pure and Applied Chemistry** (Appointed by the CNR President on May 31<sup>st</sup>, 2013) (2013 – 2014).

**Coordinator** of the CNR Task Force for the global initiative “**Mission Innovation**” (2016 – 2020)

**Coordinator for the CNR activities** in the Area “Energia” for the Call MIUR PON “**Cluster Tecnologici Nazionali CTN - ENERGIA**” (2012).



**Member of the Governing body** (*Comitato di indirizzo strategico*; representing CNR) established following the **Cooperation Agreement** between CNR and SCI (*Società Chimica Italiana*); (Appointed by the CNR President on April 23<sup>rd</sup>, 2015 (2015 – 2016).

**Member of the Governing body** (*Comitato di indirizzo*; representing CNR) established following the **Cooperation Agreement** between CNR and SCI (*Società Chimica Italiana*); (Delegate of the CNR President appointed on May 2018 (2018 – 2021).

**Member of the Governing body** (representing CNR) in the **Cluster Tecnologico Nazionale Energia – CTNE** (Appointed by the Assembly of CTNE Associates, March 21<sup>st</sup>, 2013 – Rome, Italy) (2013 – 2014).

**Member of the Joint Committee** (*Comitato Paritetico di Indirizzo*) between CNR and the **University of Camerino** (Appointed by the CNR President on March 2015 (2015 – ).

**Member of the Governing body** (*Comitato di indirizzo strategico*; representing CNR) established following the **Cooperation Agreement** between DSCTM CNR and C.I.R.M.S.B. (**Consorzio Interuniversitario di Ricerca in Chimica dei Metalli nei Sistemi Biologici**); (Appointed by the Director of DSCTM on June 13<sup>th</sup>, 2014 – Rome, Italy) (2014 – 2017).

**Coordinator** of the **CNR technical task-force** for the **ENEL - CNR framework agreement** (2013).

**Coordinator** of the **CNR technical task-force** for the **CNR interdepartmental project “Energy”** (2014).

Member of the **Experts’ Committee** for the **Short-Term-Mobility program of CNR** (representing the “Dipartimento Scienze Chimiche e Tecnologia dei Materiali”). Appointed by the CNR President on February 22, 2013. (2013 - 2017)

Member of the **Experts’ Committee** for the CNR - Call 2015 for granting two **International Joint Laboratories**, (Area chemistry and multifunctional materials). Appointed by the Director of the Office for the International Relations of CNR on May 15, 2015.

**Responsible** of the **Operational Agreement** “*Valorizzazione del glicerolo per mezzo di catalisi chimica per la produzione di 1,3-propandiole e/o acido lattico*” between CNR – “**Dipartimento Progettazione Molecolare**” and the Italian Company “**Finanziaria MOSSI & GHISOLFI Srl**” (2007–2010). Total budget *ca.* 572.000 €.

**Responsible of the CNR - “Dipartimento Progettazione Molecolare” Working Group** on “*Sustainability and Energy*” (2008 – 2010).

Member of the **Consulting Council** of the “**Dipartimento Progettazione Molecolare**” (2009 - 2011)

Member of the **Consulting Council** of the “**Dipartimento Scienze Chimiche e Tecnologia dei Materiali**” (2012 – 2017)

Member of the **Scientific Committee** of the “*Accademia dei Meccanismi Molecolari*”, CNR – DSCTM and CNR – ISOF, Bologna (2018 - ...)

Member of the **Working Group IAR** (*Internazionalization of Research Activities*) of the “**Dipartimento Progettazione Molecolare**” (2010 - 2011)

**Responsible of the research projects at ICCOM CNR (“Nuova gestione per commesse”):**

- *Dipartimento di progettazione della funzionalità molecolare*  
*Progettazione di molecole e sistemi nanostrutturati con proprietà catalitiche*  
*Nuovi materiali per produzione, purificazione e storage di idrogeno (PM-P02-ISTM-C5 / PM-P02-ICCOM-M2.*  
*Value 611.903 €) – (2005 – 2006)*

**Responsible of research projects at ISSECC CNR (1991 – 2002):**

- “*Dihydrogen Metal Complexes: Synthesis, Characterisation and Reactivity*” (1991–1994)

- “*Synthesis and characterisation of transition metal organometallic complexes capable of promoting reactions of C-C and C-H bond formation and cleavage*” (1995 – 1997)
- “*Synthesis, characterization and reactivity of transition-metal hydrides*” (1999 – 2000)
- *Selective Activation of Strategic Small Molecules by Organometallic Derivatives of Transition Metals*” (1998 – 2002)
- **Member elected** of the “Board of the Institute” (Consiglio di Istituto) of the ICCOM-CNR (2002 – 2005; prolonged 2005 – 2007)
- **Member elected** of the “Scientific Board” (Consiglio Scientifico) of the ISSECC-CNR (1992 – 1996; re-elected 1996 – 2002)

### (c) Italian Government (Presidenza del Consiglio dei Ministri)

- **Member** (representing CNR) of the **Commission for the “decarbonisation of the economy”** (2015 – 2017). Responsible of working group 2: Critical survey of energy technologies (with Gaetano Borrelli, ENEA)

### (d) Ministry of Instruction, University and Research (MIUR)

- **Member of the Consulting Board** of the *HORIZON 2020 challenge ‘Energy’* (appointed by the Representative of the Ministry (MIUR) on the Challenge ‘Energy’), October, 2013. (2013 – 2020).
- **Admitted** with the highest rank (excellent) in the **National Scientific Qualification (art. 16 of the law 30 December 2010, n. 240) as full Professor (Professore Universitario di Prima Fascia) in the sector 03/B1 – “Principles of Chemistry and Inorganic Systems” – Call 2012 (DD n° 222/2012) (2013 – 2017)** (Abilitazione Scientifica Nazionale per l’accesso al ruolo di Professore Universitario di Prima Fascia - Settore Concorsuale 03/B1 – Fondamenti delle Scienze Chimiche e Sistemi Inorganici (SSD CHIM/03 - Chimica Generale ed Inorganica)).

### (e) Ministry of Foreign Affairs and International Cooperation (MAE)

- **Member** (representing CNR) of the **Mixed Commission for the Industrial, Scientific and Technologic Cooperation Agreement between Italy and Israel** (2015 – 2016).

### (f) Italian Chemical Society (SCI)

- **Coordinator** of the **Scientific Commission of the Italian Chemical Society** (Società Chimica Italiana) (2017 – 2019). Appointed by the Central Council of SCI.
- **Chair elected** of the Executive Board of the **Division of Inorganic Chemistry** of the Italian Chemical Society (Società Chimica Italiana) (2009 – 2011).
- **Member elected** of the Executive Board of the **Division of Inorganic Chemistry** of the Italian Chemical Society (Società Chimica Italiana) (2003 – 2005; re-elected 2006 – 2008).
- **Member elected** of the Executive Board of the **Interdivisional Group “Chemistry of the Renewable Energies”** (Chimica delle Energie Rinnovabili – ENERCHEM) (2013 – 2015; re-elected 2016 - 2018).
- **Member** of the Constituent Executive Board of the **Interdivisional Group “Chemistry of the Renewable Energies”** (Chimica delle Energie Rinnovabili – ENERCHEM) (2012). Appointed by the Central Council of SCI.

- **Italian representative** (Delegate of the Italian Chemical Society) in the **Working Party “Chemistry and Energy” of EuCheMS** (European Association for Chemical and Molecular Sciences) (2007 – present).
- **Member of the Consulting Committee** of the Italian Chemical Society on the issue of **“Energy & Chemistry”** (2008 – present).
- **Member of the Commission for the International Affairs** (*Commissione Affari Internazionali*) of the Italian Chemical Society (2012 – 2014)
- **Member of the Italian Delegation** at the 45<sup>th</sup> **IUPAC General Assembly** and Council (Glasgow, UK, August – 2009)
- **Member of the Italian Delegation** at the 47<sup>th</sup> **IUPAC General Assembly** and Council (Istanbul, TY, August – 2013)
- **Chairman of the Italian Delegation** at the 50<sup>th</sup> **IUPAC General Assembly** and Council (Paris, F, July – 2019)
- **Responsible of the PNR Working Group** on **“Product and process innovation in chemistry”** (appointed by the President of SCI) (2010)
- **Member of the Scientific Committee** of the **“Premio Città di Firenze per le Scienze Molecolari”** organized by the Italian Chemical Society (since 2002)
- **Member of the SCI Committee** for the **“International Year of Chemistry”** (appointed by the President of SCI) (2011)
- **Member of the SCI Committee** for the preparation of the regulation for the **“Innovation Team Award”** (**“Premio di innovazione di squadra”**) (2010)
- **Member of the SCI Committee** for the assignment of the first **“Innovation Team Award”** (**“Premio di innovazione di squadra”**) (2011)
- **Delegate of the President** of the Division of Inorganic Chemistry of Italian Chemical Society in the Executive Board of the GICO (Interdivisional group of Organometallic Chemistry) of the Italian Chemical Society (2003 – 2008).

#### **(g) Regional Board of Tuscany**

- **Member of the Technological Governmental Board** (*Comitato di Indirizzo Tecnologico*) of the **Technological District** of Tuscany on **Energy and Green Economy** (appointed by the Regional Board on April 27<sup>th</sup>, 2015)
- **Member of the Technological Governmental Board** (*Comitato di Indirizzo Tecnologico*) of the **Technological District** of Tuscany on **Renewable Energies** (appointed by the Regional Board on August 1<sup>st</sup>, 2011) (2011 – 2014)
- **Member of the Technological-Scientific Board** (CTS, *Comitato Tecnico-Scientifico*) for the areas **“Hydrogen Technologies”** and **“CO<sub>2</sub> Technologies”** of the **“Innovation Pole for Technologies on Renewable Energies and Energy efficiency”** (**PIERRE: Polo di Innovazione per le tecnologie sulle Energie Rinnovabili ed il Risparmio Energetico**) of the Tuscany Region (2011 - 2014)
- **CNR Representative in the working group** **“Antenna di Bruxelles”** for the area **“New Materials & Nanomaterials”** (since 2012)

#### **(h) Others**

- MP has been appointed for the years 2002 – 2004 (renewed 2005 – 2007 and 2008 – 2010; prolonged 2011 - ...) as **member of the Board of Directors** (CdA) of the “**Luigi Sacconi**” **Foundation** (Firenze, Italy). Since November 2008 he took the role of **Vice President**, and then (November 2012) he was elected **President** of the Foundation
- **Member of the Technical-Scientific Board** (*Comitato Tecnico-Scientifico*) of the **C.R.E.A.** Research Center Energy and Environment (**Centro di Ricerca Energia e Ambiente Soc. Cons. a r.l.**) at **Colle di Val d’Elsa** (appointed by the Rector of the University of Siena, July 17<sup>th</sup>, 2012)
- MP has been member of the **Working Group AIRI** (*Associazione Italiana per la Ricerca Industriale*) - priority “**Chemistry**” - for the preparation of the book “*Priority Technologies for the Industry*” (7<sup>th</sup> Ed, 2009; 8<sup>th</sup> Ed, 2013; 9<sup>th</sup> Ed, 2015).
- MP has been member of the **Working Group AIRI** (*Associazione Italiana per la Ricerca Industriale*) - priority “**Energy**” - for the preparation of the book “*Priority Technologies for the Industry*” (9<sup>th</sup> Ed, 2015).
- MP has been member of the **Scientific and Technical Evaluation Committee** (Comitato di valutazione tecnico scientifico) of the **AIRI “Oscar Masi” Prize 2011** dedicated to the “*Process and product innovation in Chemistry*”
- MP is member of the **Steering Committee** of **AIRI/nanotech IT**, the technological division of AIRI aimed at promoting nanotechnologies and their industrial applications (since 2017)
- Since 2010 MP has been appointed as a member of the **Scientific and Technical Board**, for the area “Hydrogen of **Energethica SrL**, a private organization to disseminate the use of renewable and sustainable energy”
- MP has been appointed as Member of the “**Collegio Docenti di Dottorato**” of the Department of Chemistry of the **University of Florence** (2010 - 2013)
- MP has been appointed as Member of the “**Collegio Docenti di Dottorato**” of the Department of Biotechnology, Chemistry and Pharmacy of the **University of Siena** (since 2013)
- MP has been appointed since 2006 as the CNR-representative in the “Comitato di Indirizzo dei corsi di laurea di area chimica” of the **University of Florence** (Legge Riforma universitaria n° 270/04); Renewed November 2015.
- MP has been appointed as Member of the **Steering Committee** of the Master Degree in "Advanced Molecular Sciences" of the **University of Florence**, Department of Chemistry “Ugo Schiff”
- MP has been Member of the Commission to evaluate the candidature of Prof. D. Gatteschi (University of Florence) to the rank of Emeritus Professor (May, 2016).

## Memberships:

- Member of the **Italian Chemical Society** (*Società Chimica Italiana*), Division of Inorganic Chemistry, since 1982.
- Member of the **Interdivisional group of “Organometallic Chemistry”** of the Italian Chemical Society – GICO, since its institution, 1990.
- Member of the **Interdivisional group “Chemistry of the Renewable Energies”** of the Italian Chemical Society – ENERCHEM, since its institution, 2012.
- Member of the **National Group of Foundations and History of Chemistry** (*Gruppo Nazionale di Fondamenti e Storia della Chimica*), since 2019.
- Member of the **American Chemical Society**, Division of Inorganic Chemistry, since 2003.

- Member of the *International Union of Pure and Applied Chemistry (IUPAC)*, (2014 - 2015)
- Member (invited) of the *European Science Foundation (ESF), College of Expert Reviewers* (2018 - ...)

### Reviewing Activities:

- MP has been appointed (2008) as **Member of the External Evaluation Panel** (Area Chemistry; Panel EEC 8.1) of the Strategic Plans of **CSIC (Consejo Superior de Investigaciones Científicas)**, Madrid (Spain), for the years 2010 – 2013.
- MP has been appointed by **AERES (Agence d'évaluation de la recherche et de l'enseignement supérieur** – Paris, France) as a **Member of the Visiting Committee** to assess the research activity of *Centre International de Recherche aux Frontières de la Chimie (RTRA – CIRFC)* at **Strasbourg University** (2013).
- MP has been invited to join the **College of Expert Reviewers** (Area Chemistry) of the **European Science Foundation (ESF)**, Strasbourg (France), since 2018.
- MP has served as **Expert Evaluator** for the **European Research Council** 'ERC Advanced Grant – 2012 and 2016' and 'ERC Consolidator Grant – 2017' in the field of 'Synthetic chemistry and materials', panel PE5.
- MP has served as an **Expert Evaluator** for **INTAS**, [INTAS, Brussels, Belgium (INTAS Call 2000, INTAS Open Call 2003, Kazakhstan-INTAS Collaborative Call 2004, INTAS Open Call 2005, INTAS Young Scientist Fellowships 2003, 2004, 2005 and 2006)], for the **COST Chemistry Actions** (EC, Brussels) and for the DG Research – Directorate L (Science, Research & Development) of the European Commission.
- He was member of the **Board of Experts** of the **CIVR** (Committee for Research Evaluation – 2005; Panel C03 - Chemistry) and of the register of reviewers of the **MIUR** (Research and University Ministry of Italy; Panel C03 – Chemistry). He has served as reviewer for MIUR of projects submitted to **PRIN 2008** (MIUR, panel CHIM03) and **FIRB 2010** ('Futuro in Ricerca 2010'). He served as referee for the Evaluation of research products: a) **VQR 2004-2010**) on behalf of **ANVUR** (panels: GEV 02, *Physical Sciences*; GEV 03, *Chemical Sciences*; b) **VQR 2011-2014**) on behalf of **ANVUR** (Agenzia Nazionale per la Valutazione del sistema Universitario e della Ricerca).
- He has been member of the **Board of Experts Evaluation Panel** for the Poles of Innovation of the **“Piedmont Region”** (POR FESFR 2007/2013).
- He has served as **member of the Referee Panel** for the following institutions:
  - **TAMOP 4.2.1/B-09/1/KONV-2010-0007** European Research grant on the Molecular Sciences Focus Area of the University of **Debrecen (Hungary)** (2012)
  - International bilateral projects presented at **CNR (Rome, Italy)**
  - **Eurocores** projects: evaluation of the research activity of CNR research teams (Rome, Italy) (2012 - 2013)
  - Projects presented at the **University of Florence (Florence, Italy)**
  - Projects presented at the **University of Padua (Padua, Italy)**
  - Projects presented at the **University Ca' Foscari of Venice (Venice, Italy)**
  - Projects presented at the **Nanyang Technological University (Singapore)**
  - Projects presented at the IDEX program “Attractivity Chairs 2013” of the **Université de Toulouse (Toulouse, France)**

He has been referee for the following international and national institutions and agencies:

- **National Science Foundation** (Washington, DC, USA)
- **Petroleum Research Fund of the American Chemical Society** (Washington, DC, USA)

- **French National Research Agency (ANR, Paris, France)** for joint French-German projects
- **French National Research Agency (ANR, Paris, France)** for the program *Blanc SIMI 7 2012*
- **German Research Foundation (DFG, Germany)** for joint French-German projects
- **Volkswagen Foundation (Hannover, Germany)**
- **Israel Science Foundation (ISF, Jerusalem, Israel)**
- **Netherlands Organisation for Scientific Research (NWO) - Division for Chemical Sciences (CW), (The Hague, The Netherlands)**
- **Research Foundation - Flanders (FWO, Brussels, Belgium)**
- **Competence Center Energy and Mobility (CCEM) – Villigen, Switzerland**
- **Swiss National Science Foundation (SNSF), fellowships programme for advanced researchers, Bern, Switzerland**
- **Austrian Science Fund, Department for Natural and Technical Sciences (FWF, Vienna, Austria)**
- **Fonds National de la Recherche** for AFR program (Aides à la formation recherche), **Luxemburg**
- **Hungarian Scientific Research Fund (OTKA), Hungary**
- **National Research, Development and Innovation Office, (NRDI), Hungary**
- **Agency for Science, Technology and Research (A\*STAR), Singapore**
- **President's Science and Technology Awards, Singapore**
- **Research Grants Council (RGC), Hong Kong**
- **Review Committee of the Hong Kong University of Science and Technology (Hong Kong)**
- **The Millennium Science Initiative, Ministry of Economy, Development and Tourism of Chile (Chile)**
- **FONDECYT, Fondo Nacional de Desarrollo Científico y Tecnológico, National Commission for Scientific and Technological Research (CONICYT), Chile**
- **TUBITAK Science Award (Turkey)**
- **Ministry of Education, Youth and Science** for bilateral research programs of the Bulgarian Academy of Sciences (Sofia, Bulgaria)
- **Georgian National Science Foundation (Tbilisi, Georgia)**
- **Rustaveli Foundation (Tbilisi, Georgia)**
- **Academia Europæa (Prizes for Young Russian Scientists, Russia)**
- **Academic Council, Qassim University (Al-Qassim, Saudi Arabia)**
- **The Academy of Sciences for the Developing World (TWAS, Trieste, Italy)**
- **Provincia Autonoma di Trento, Comitato per la ricerca e l'innovazione della Provincia Autonoma di Trento, valutazione progetti di ricerca industriale (2018) (Trento, Italy)**

**Referee of the following international journals (72):**

- **AMERICAN CHEMICAL SOCIETY (14):**  
Chemical Reviews; Accounts of Chemical Research; Journal of the American Chemical Society; ACS Catalysis; Journal of Physical Chemistry Letters; Organic Letters; Inorganic Chemistry; Journal of Organic Chemistry; Organometallics; Crystal Growth & Design; Environmental Science & Technology; Energy & Fuels; Industrial & Engineering Chemistry Research; ACS Omega
- **ROYAL SOCIETY OF CHEMISTRY (11):**  
Chemical Society Reviews; Energy & Environmental Science; Chemical Sciences; Chemical Communications; Journal of the Chemical Society, Dalton Transactions; Organic & Biomolecular Chemistry; Crystal Engineering Communications; Physical Chemistry Chemical Physics (PCCP); New Journal of Chemistry; RSC Advances; Catalysis Science & Technology
- **WILEY-VCH (12):**  
Angewandte Chemie International Edition; ChemSusChem; Chemistry a European Journal; Advance Synthesis and Catalysis; Chemistry Select, Chemistry an Asian Journal; ChemCatChem; European Journal of Organic Chemistry; European Journal of Inorganic Chemistry; Applied Organometallic Chemistry; Heteroatom Chemistry; Journal of Heterocyclic Chemistry
- **ELSEVIER SA (18):**  
Coordination Chemistry Reviews; Applied Catalysis A: General; Journal of Colloid and Interface; Tetrahedron Letters; Journal of Molecular Catalysis; International Journal of Hydrogen Energy; Materials Science & Engineering C; Spectrochimica Acta; Arabian Journal of Chemistry; Journal of Molecular Structure; Journal of Cleaner Production; Journal of CO<sub>2</sub> Utilization; Journal of Organometallic Chemistry; Inorganic Chemistry Communications; Catalysis Communications; Inorganica Chimica Acta; Polyhedron; Comptes Rendus Chimie;
- **NATURE PUBLISHING GROUP (1):**

- Scientific Reports
- **SPRINGER VERLAG (3):**  
Topics in Catalysis, Catalysis Letters, Medicinal Chemistry Research
  - **THIEME VERLAG (2):**  
Synletters; Synthesis
  - **TAYLOR & FRANCIS (4):**  
Journal of Coordination Chemistry; Synthetic Communications; Spectroscopy Letters; Phosphorus, Sulfur, Silicon and the Related Elements
  - **OTHERS (6):**  
Canadian Journal of Chemistry (*NRC*, Canada); Gazzetta Chimica Italiana (*SCI*, Rome, I); Journal of the Brazilian Chemical Society (*BCS*, Brazil); Journal of the Chemical Society of Pakistan (*CSP*, Pakistan); Chimica Oggi/Chemistry Today (*TEKNOSCIENZE*, Milan, I); Physical and Chemical News (*BEST Editions*, Morocco).
  - **Referee of the following online web journals (12):** Arkivoc; Current Catalysis; Current Organic Chemistry; Current Inorganic Chemistry; European Journal of Chemistry; Molbank (MDPI); Molecules (MDPI); International Journal of Inorganic Chemistry; International Journal of Organic Chemistry; The Open Catalysis Journal; The Open Inorganic Chemistry Journal; Research Letters in Inorganic Chemistry.

**Referee of book Chapters** for ELSEVIER (“*Recent Advances in Hydride Chemistry*”) and WILEY (“*Iridium Complexes in Organic Chemistry*”; “*Encyclopedia of Catalysis, 2<sup>nd</sup> Ed.*”)

Referee of **concept/proposal for new books** for WILEY-VCH, TAYLOR & FRANCIS and SPRINGER-VERLAG.

Referee of submitted contributions to the **5<sup>th</sup> International Youth Conference on Energy 2015** (Pisa, Italy)

## Lectureships and Academic Activities:

### Visiting Professor:

1. University of Rennes, **France** (1990)
2. University of Almería, **Spain** (2001)
3. University of Vigo, **Spain** (2007)
4. Conference Universitaire de Suisse Occidentale, Commission Scientifique pour l’Enseignement du 3<sup>E</sup> Cycle en Chimie, *Ecole Polytechnic Federale de Lausanne, University of Neuchatel, University of Basel*, **Switzerland** (2008)
5. University of La Laguna, Tenerife, Canary Islands, **Spain** (2009)
6. University of Strasbourg, **France** (2012)

### Visiting Scientist:

1. Instituto Venezolano de Investigaciones Cientificas (IVIC – Caracas, **Venezuela**) (1993)
2. van't Hoff Institute of Chemistry, University of Amsterdam, Amsterdam, **The Netherlands**; fellow of the John van Geuns Foundation (1996 and 2000)
3. Russian Academy of Sciences, Nesmeyanov Institute of Organoelement Compounds (INEOS – Moscow, **Russia**) (1999 and 2004)
4. Polish Academy of Sciences, Center of Molecular and Macromolecular Studies (CMMS, Łódź, **Poland**) (2001)
5. Universidad Autonoma de México, UNAM – Mexico D.F., **Mexico** (2004 and 2008)
6. Russian Academy of Sciences, Arbuzov Institute of Organic Physical Chemistry (IOPC – Kazan, **Russia**) (2007)
7. Naturwissenschaftliche Fakultät IV, Chemie und Pharmazie, Universität Regensburg, Regensburg, **Germany**, fellow of the Hans Vielberth Stiftung (2007, 2012 and 2019)
8. Institute of natural resources, Tomsk Polytechnic University, (TPU, Tomsk, **Russia**) (2015)

### Invited Lecturer :

1. *University of Rennes*, Rennes – 1990 (**France**)
2. *University of Bari*, Bari – 1991 (**Italy**)
3. *University of Ferrara*, Ferrara – 1992 (**Italy**)
4. *Instituto Venezolano de Investigaciones Cientificas, IVIC*, Caracas – 1993 (**Venezuela**)

5. *University of Siena*, Siena – 1994 (**Italy**)
6. *University of Padova*, Padua – 1994 (**Italy**)
7. *Northern Arizona University*, Flagstaff, AZ – 1995 (**USA**)
8. *University of Leiden*, Leiden – 1996 (**The Netherlands**)
9. *van't Hoff Institute of Chemistry, University of Amsterdam*, Amsterdam – 1996 (**The Netherlands**)
10. *University of Sevilla*, Seville – 1996 (**Spain**)
11. *Laboratoire de Chimie de Coordination, CNRS*, Toulouse – 1996 (**France**)
12. *European Commission, DG XII RTD*, Brussels – 1998 (**Belgium**)
13. *University of Almería*, Almería – 1999 (**Spain**)
14. *Kazakh Academy of Science, Institute of Organic Catalysis and Electrochemistry, IOCE*, Almaty – 1999 (**Republic of Kazakhstan**)
15. *Russian Academy of Sciences, Nesmeyanov Institute of Organoelement Compounds, INEOS*, Moscow – 1999 (**Russian Federation**)
16. *Eidgenössische Technische Hochschule, ETH*, Zürich – 2000 (**Switzerland**)
17. *Institute of Molecular Chemistry, University of Amsterdam*, Amsterdam – 2000 (**The Netherlands**)
18. *University of Florence, Department of Environmental Law*, Florence – 2000 (**Italy**)
19. *Ammoniak Laboratorium, BASF AG*, Ludwigshafen – 2000 (**Germany**)
20. *University of Kaiserslautern*, Kaiserslautern – 2000 (**Germany**)
21. *Department of Chemistry, University of Rome, “La Sapienza”*, Rome – 2000 (**Italy**)
22. *Polish Academy of Sciences, Center of Molecular and Macromolecular Studies*, Łódź – 2001 (**Poland**)
23. *Department of Organometallic Chemistry, Adam Mickiewicz University*, Poznań – 2001 (**Poland**)
24. *Faculty of Chemistry, University of Wrocław*, Wrocław – 2001 (**Poland**)
25. *Department of Chemistry, University of Warsaw*, Warsaw – 2001 (**Poland**)
26. *Department of Chemistry, University of Huelva*, Huelva – 2001 (**Spain**)
27. *Department of Chemistry, University of Cadiz*, Cadiz – 2001 (**Spain**)
28. *Consejo Superior de Investigaciones Científicas*, Seville – 2001 (**Spain**)
29. *University of Perugia*, Perugia – 2002 (**Italy**)
30. *Institute of Applied Synthetic Chemistry, Vienna University of Technology*, Vienna – 2002 (**Austria**)
31. *Department of Chemistry, University of Granada*, Granada – 2003 (**Spain**)
32. *University of Florence, Department of Organic Chemistry*, Florence – 2003 (**Italy**)
33. *University of Parma, Department of Chemistry*, Parma – 2004 (**Italy**)
34. *University of Venice, Department of Chemistry*, Venice – 2005 (**Italy**)
35. *University of Vigo, Department of Inorganic Chemistry*, Vigo – 2005 (**Spain**)
36. *Polytechnic of Bari, Department of Water Engineering and Chemistry*, Bari – 2006 (**Italy**)
37. *University of Burgos*, Burgos – 2006 (**Spain**)
38. *University of Valladolid*, Valladolid – 2006 (**Spain**)
39. *Russian Academy of Sciences, Arbuzov Institute of Organic Physical Chemistry, IOPC*, Kazan – 2007 (**Russian Federation**)
40. *University of Regensburg, Institut für Anorganische Chemie*, Regensburg – 2007 (**Germany**)
41. *Ludwig Maximilians Universität München, Department of Chemistry and Biochemistry*, Munich – 2007 (**Germany**)
42. *Istituto di Chimica del Riconoscimento Molecolare, ICRM CNR*, Milano – 2008 (**Italy**)
43. *University of Messina, Department of Chemistry*, Messina – 2008 (**Italy**)
44. *University of Catania, Scuola Superiore di Catania*, Catania – 2008 (**Italy**)
45. *Gruppo di Lavoro AIRI Tecnologie Prioritarie-Chimica, Vinavil SpA “Polimeri per l’Industria”*, Milano – 2008 (**Italy**)
46. *Ecole Polytechnic Federale de Lausanne*, Lausanne – 2008 (**Switzerland**)
47. *University of Neuchâtel, Institut de Chimie*, Neuchâtel – 2008 (**Switzerland**)
48. *University of Basel, Département de Chimie*, Basel – 2008 (**Switzerland**)
49. *University of Padova, Department of Chemistry*, Padua – 2008 (**Italy**)
50. *University of Bari, Scuola di Dottorato in Scienze Chimiche, Department of Pharmaceutical Chemistry*, Bari – 2009 (**Italy**)
51. *University of La Laguna, Department of Inorganic Chemistry*, Tenerife, Canary Islands – 2009 (**Spain**)
52. *Dipartimento di Chimica, University of Rome, “La Sapienza”*, Rome – 2009 (**Italy**)
53. *Inorganic Chemistry Colloquium, Ludwig Maximilians Universität München, Chemistry Department*, Munich – 2009 (**Germany**)
54. *Department of Chemistry, University of California at Riverside*, Riverside (CA) – 2010 (**USA**)
55. *Dipartimento di Scienze e Tecnologie Chimiche, University of Udine*, Udine – 2010 (**Italy**)



56. *University of 7<sup>th</sup> November at Carthage, Higher Institute of Sciences and Technology of Environment*, Borj Cedria – 2010 (**Tunisia**)
57. *Department of Chemistry, The Chinese University of Hong Kong*, Hong Kong – 2010 (**Hong Kong**)
58. *Department of Chemistry, The Hong Kong University of Science and Technology*, Hong Kong – 2010 (**Hong Kong**)
59. *Dipartimento di Chimica Industriale, University of Bologna*, Bologna – 2010 (**Italy**)
60. *School of Advanced Studies, University of Camerino*, Camerino (MC) – 2010 (**Italy**)
61. *Leibniz Institute for Catalysis at the University of Rostock (LIKAT)*, Rostock – 2011 (**Germany**)
62. *Université Claude Bernard Lyon 1, Lyon-Villeurbanne* – 2012 (**France**)
63. *Laboratoire de Chimie de Coordination*, delivering of the “*Paul Sabatier Lecture*”, Toulouse – 2012 (**France**)
64. *Institut de Chimie, Université de Strasbourg*, Strasbourg – 2012 (**France**)
65. *Université Pierre et Marie Curie, Paris VI, Jussieu, Paris* – 2012 (**France**)
66. *University of Regensburg, Institut für Anorganische Chemie*, delivering of the “*Hans Vielberth Stiftung Lecture*”, Regensburg – 2012 (**Germany**)
67. *University of Bari, Doctoral School in Chemical and Molecular Sciences, Department of Chemistry*, Bari – 2012 (**Italy**)
68. *Institut de Chimie, Université de Strasbourg*, Strasbourg – 2012 (**France**)
69. *University of Trieste, Department of Chemical and Pharmaceutical Sciences*, Trieste – 2013 (**Italy**)
70. *University of Artois, Unité de Catalyse et de Chimie du Solide (UCCS)*, Lens – 2014 (**France**)
71. *Institute of Chemistry of Organometallic Compounds – National Research Council, ICCOM CNR UOS Pisa*, Pisa – 2015 (**Italy**)
72. *Institute of Natural Resources, Tomsk Polytechnic University (TPU)*, Tomsk – 2015 (**Russia**)
73. *Charles University, Department of Inorganic Chemistry, Faculty of Science*, Prague – 2017 (**Czech Republic**)
74. *Departamento de Química Inorganica, Universidad de Zaragoza, and Instituto de Síntesis Química y Catalisis Homogenea (ISQCH), CSIC*, Zaragoza – 2017 (**Spain**)
75. *State Key Laboratory of Coordination Chemistry, Nanjing University, Chinese Academy of Sciences*, Nanjing – 2017 (**People Reublic of China**)
76. *The State Key laboratory of Organometallic Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences*, Shanghai – 2017 (**People Reublic of China**)
77. *Suzhou Research Institute of LICP, The State Key Laboratory for Oxo Synthesis and Selective Oxidation, Chinese Academy of Sciences*, Suzhou – 2017 (**People Reublic of China**)
78. *University of Regensburg, Institut für Anorganische Chemie*, delivering of the “*Hans Vielberth Stiftung Lecture*”, Regensburg – 2019 (**Germany**)
79. *Ariel University, The Department of Chemical Sciences*, Kiryat Hamada Ariel, West Bank – 2019 (**Israel**)
80. *Chalmers University of Technology, 2D-TECH Center*, Gothenburg – 2020 (**Sweden**). Webinar

**Plenary, Keynote and Session Lecturer (invited):**

1. *1<sup>st</sup> Italian-Portuguese-Spanish Meeting in Inorganic Chemistry*, Gandia, **Spain** 1990 (SL)
2. *X<sup>th</sup> FEChem Conference on Organometallic Chemistry*, Crete, **Greece**, 1993 (SL)
3. *XX<sup>th</sup> Conferenza Nazionale di Chimica Inorganica*, Villasimius, Cagliari, **Italy**, 1993 (PL)
4. *IV<sup>th</sup> Eurasia Conference on Chemical Sciences*, Kuala Lumpur, **Malaysia**, 1994 (KNL - Minisymposium organizer)
5. *XXXI<sup>st</sup> International Conference on Coordination Chemistry*, Vancouver, **Canada**, 1996 (SL)
6. *II<sup>nd</sup> International Symposium on Inorganic Phosphate Materials*, Nagoya, **Japan**, 1996 (SL)
7. *XIX Congresso Interdivisionale della Società Chimica Italiana*, Riccione, **Italy**, 1996 (SL)
8. *Workshop INEOS-98 "Organometallic Chemistry on the Eve of the 21<sup>st</sup> Century"*, Moscow, **Russian Federation**, 1998 (SL)
9. *INCO Copernicus Review Meeting*, Brussels, **Belgium**, 1998 (KNL)
10. *PRE-OMCOS Symposium on Organometallics and Catalysis*, Rennes, **France**, 1999 (SL)
11. *II<sup>nd</sup> Italian-Korean Meeting on Inorganic Chemistry*, Florence, **Italy**, 2000 (SL)
12. *II<sup>nd</sup> Singapore International Conference*, Singapore, **Singapore**, 2001 (SL)
13. *New Approaches in Organometallic and Coordination Chemistry. Look from 21<sup>st</sup> Century*”, Nizhny Novgorod, **Russian Federation**, 2002 (SL)
14. *Workshop Meeting of the COST Action D17*, University of Warwick, Coventry, **UK**, 2002 (KNL)
15. *225<sup>th</sup> American Chemical Society National Meeting*, New Orleans, LA, **USA**, 2003 (KNL)
16. *XXI Congresso della Società Chimica Italiana*, Turin, **Italy**, 2003 (PL)

17. *Royal Society of Chemistry 6<sup>th</sup> Dalton Discussion on Organometallic Chemistry and Catalysis*, York, **UK**, 2003 (KNL)
18. *XXXIII Congresso Nazionale di Risonanze Magnetiche*, Bressanone, **Italy**, 2003 (SL)
19. *VIII<sup>th</sup> Eurasia Conference on Chemical Sciences*, Hanoi, **Vietnam**, 2003 (KNL, Minisymposium Organizer)
20. *"Modern Trends in Organoelement and Polymer Chemistry"*, Moscow, **Russian Federation**, 2004 (SL)
21. *XVI<sup>th</sup> International Conference on Phosphorus Chemistry*, Birmingham, **UK**, 2004 (SL)
22. *5<sup>th</sup> International School on Molecular Catalysis, ISMC5*, Poznan, **Poland**, 2005 (SL)
23. *Meeting on Urban European Mobility*, Florence, **Italy**, 2005 (SL)
24. *5<sup>th</sup> International School on Organometallic Chemistry, ISOC5*, Camerino (MC), **Italy**, 2005 (PL)
25. *XXX<sup>th</sup> Biannual Conference of the Spanish Royal Society of Chemistry*, Lugo, **Spain**, 2005 (SL)
26. *La strategia dell'Ente Cassa di Risparmio di Firenze per la promozione e il finanziamento della ricerca scientifica; conferenza di presentazione di alcuni progetti in occasione della XVI Settimana della Cultura Scientifica*, Firenze, **Italy**, 2006 (PL)
27. *XXII<sup>nd</sup> International Conference on Organometallic Chemistry*, Zaragoza, **Spain**, 2006 (SL)
28. *IV<sup>th</sup> KIMIC-Korea-Italy Meeting on Inorganic Chemistry*, Malcesine (VR), **Italy**, 2006 (SL)
29. *"Pianeta Galileo" 2006, Consiglio Regionale della Toscana*, Pisa, **Italy**, 2006 (KNL)
30. *Seminario REACH: Metodi alternativi di valutazione chimica della tossicità in prodotti industriali ai fini del superamento dei test sugli animali*, CNR, Rome, **Italy**, 2007 (KNL)
31. *IX<sup>th</sup> FIGIPAS Meeting in Inorganic Chemistry*, Vienna, **Austria**, 2007 (SL)
32. *Synthesis and Methodologies in Inorganic Chemistry (SAMIC 2007)*, Bressanone (BZ), **Italy**, 2007 (PL)
33. *Kick-off meeting of the GDRI "Catalyse Homogène pour le Développement Durable (CH2D)"*, Rennes, **France**, 2008 (KNL)
34. *Energetica Congress: Idrogeno un futuro possibile*, Florence, **Italy**, 2008 (SL)
35. *Hydrogen Show 2008: hi.tech.expo. 7<sup>th</sup> Int'l exhibition on hydrogen and fuel cells*, Milan, **Italy**, 2008 (SL)
36. *Workshop "Entra nella rete Energetica: vantaggi per le imprese toscane"*, Florence, **Italy**, 2009 (SL)
37. *4° Salone dell'Energia rinnovabile e sostenibile: "La filiera dell'idrogeno"*, Genoa, **Italy**, 2009 (SL)
38. *Kick off meeting of the Working Groups of the COST Action CM0802 PhoSciNet*, Florence, **Italy**, 2009 (KNL)
39. *PRIN-2007 1<sup>st</sup> Meeting "Nuove strategie per il controllo delle reazioni metallo assistite: interazioni non convenzionali di frammenti molecolari"*, Bologna, **Italy**, 2009 (SL)
40. *Meeting AISPEC-Federchimica/CNR: "Ricerca Pubblica e Privata nella Chimica Fine e Specialistica"*, Federchimica, Milano, **Italy**, 2009 (SL)
41. *V<sup>th</sup> KIMIC-Korea-Italy Meeting on Inorganic Chemistry*, Pohang, **South Korea**, 2009 (SL)
42. *II<sup>nd</sup> Symposium Latinoamericano de Química de Coordinación y Organometálica (SiLQCOM)*, Maracaibo, **Venezuela**, 2009 (SL)
43. *IEA-HIA, Hydrogen Implementing Energy: Task 21, Biohydrogen Expert Meeting*: Florence, **Italy**, 2010 (KNL)
44. *9<sup>th</sup> ENERGETHICA Congress: "Amministrare una città sostenibile"*: Genoa, **Italy**, 2010 (SL)
45. *Meeting: "Le innovazioni del prossimo futuro: Tecnologie Prioritarie per l'Industria"*, AIRI - Associazione Italiana per la Ricerca Industriale, Tecnopolo Tiburtino, Rome, **Italy**, 2010 (SL)
46. *First annual meeting of the Working Groups of the COST Action CM0802 PhoSciNet*, Budapest, **Hungary**, 2010 (KNL)
47. *"La chimica di base al servizio del territorio"*, Bari, **Italy**, 2010 (SL)
48. *II<sup>nd</sup> International Conference on Hydrogen Energy (ICHE10)*, Hammamet, **Tunisia**, 2010 (PL)
49. *Scuola Nazionale di Chimica Organometallica per Dottorandi*, Bertinoro, **Italy**, 2010 (PL)
50. *"Science and Society" - "Energy and Future"*, Series of meetings of "Amici di Groppoli" Association, Villa Groppoli – Masotti, Pistoia, **Italy**, 2010 (PL)
51. *CNR/CNRS Workshop "Homogeneous Catalysis for Sustainable Development"*, Rome, **Italy**, 2010 (SL)
52. *3° Workshop Internazionale del programma T.A.C.E.C. (Towards A Carbon Efficient Chemistry)*, Milan, **Italy**, 2010 (SL)
53. *24<sup>th</sup> International Conference on Organometallic Chemistry (ICOMC 2010)*, Taipei, **Taiwan**, 2010 (SL)
54. *Second annual meeting of the Working Groups of the COST Action CM0802 PhoSciNet*, Münster, **Germany**, 2011 (KNL)
55. *Second PhoSciNet training School "From Fundamental Phosphorus Chemistry to Applications"*, Münster, **Germany**, 2011 (PL)
56. *Meeting on "New Trends in Research & Innovation"*, Rome, **Italy**, 2011 (SL)
57. *Workshop "Innovazione e ricerca per risolvere il problema energia: I risultati del progetto FIRENZE-HYDROLAB (2004 – 2009)"*, Accademia dei Georgofili, Firenze, **Italy**, 2011 (PL)

58. GECOM – CONCOORD 2011, *Congrès de Chimie de Coordination, Chimie Organométallique et Catalyse*, Merlimont, **Francia**, 2011 (PL)
59. XIX<sup>th</sup> EuCheMS Conference on Organometallic Chemistry (XIX EuCOMC), Toulouse, **France**, 2011 (PL)
60. Forum: “L’energia: una priorità per il nostro paese, per il suo sviluppo competitivo e sostenibile”, Rotary Club Felsinei, Bologna, **Italy**, 2011 (KNL)
61. Convegno “Mostra delle Idee”, Etna Expo, Centro Commerciale Etnapolis, Catania, **Italy**, 2011 (PL)
62. Convegno “Un tributo a Luigi Sacconi nel Centenario della nascita: Riunione allievi Scuola di Chimica Inorganica”, CERM, Università di Firenze, **Italy**, 2011 (KNL)
63. International Green Catalysis Symposium & Advanced Spring School on Green Catalysis, Université de Rennes, **France**, 2012 (SL)
64. 12<sup>th</sup> Eurasia Conference on Chemical Sciences. EuAsC<sub>2</sub>S-12, Corfu, **Greece**, April 2012 (SL)
65. Workshop of the Ministry of Environment (MATTM, Rome, I) “I “100 Progetti” Ricerca ed Innovazione per lo sviluppo dell’energia sostenibile e dell’efficienza energetica”, Politecnico di Milano, **Italy** 2012 (IL)
66. SPRING Meeting 2012 “Designing metal containing molecular fragments for advanced chemical applications”, Bertinoro, **Italy**, May 2012 (SL)
67. 15<sup>th</sup> International Congress on Catalysis 2012, 15 ICC, Munich, **Germany**, July 2012 (KNL)
68. 19<sup>th</sup> International Conference on Phosphorus Chemistry, Rotterdam, **The Netherlands**, July 2012 (PL)
69. 25<sup>th</sup> International Conference on Organometallic Chemistry (ICOMC 2012), Lisbon, **Portugal**, September 2012 (SL)
70. CNR meets SERBIA, Belgrade, **Serbia**, November 2012 (IL)
71. CNR – SABIC Workshop, Rome, **Italy**, January 2013 (IL)
72. Phoscinet: Final Conference@10<sup>th</sup> European Workshop on Phosphorus Chemistry, Regensburg, **Germany**, March 2013 (SL)
73. Workshop: La Società Chimica Italiana: missione, organizzazione, prospettive, Rome, **Italy**, July 2013 (IL)
74. 1<sup>o</sup> Workshop Toscano sull’Idrogeno e Tecnologie Collegate, Florence, **Italy**, July 2013 (IL)
75. IUPAC 44<sup>th</sup> World Chemistry Congress, The Turkish Chemical Society, Istanbul, **Turkey**, August 2013 (KNL)
76. GDCh-Wissenschaftsforum Chemie 2013, The German Chemical Society, Darmstadt, **Germany**, September 2013 (PL)
77. 247<sup>th</sup> American Chemical Society National Meeting, Dallas, TX, **USA**, March 2014, ACS Awards: Symposium in Honor of Guy Bertrand (KNL)
78. XLI International Conference on Coordination Chemistry (ICCC-41), Singapore, **Singapore**, July 2014 (SL)
79. 1<sup>st</sup> joint CSIC-CNR workshop “Nanotechnology and Energy”, Madrid, **Spain**, November 2014 (IL)
80. International Workshop “Metals, water and Sun” 2015, Almeria, **Spain**, May 2015 (PL)
81. VI Razuvaev Lectures - “Organometallic and Coordination Chemistry: Achievements and Challenges”, Nizhny Novgorod, **Russian Federation**, September 2015 (PL)
82. Giornata DSCTM 2015, “Sharing knowledge and expertise for a better society”, Cetraro (CS), **Italy**, October 2015 (KNL)
83. 5<sup>th</sup> Symposio Latinoamericano de Química de Coordinación y Organometálica (SiLQCOM-2015), Agra dos Reis, RJ, **Brazil**, October 2015 (SL, closing lecture)
84. ECOMONDO, The Green technology Expo, Rimini, **Italy**, Novembre 2015 (IL)
85. Korea – Italy Bilateral Symposium on “Beyond Graphene”, Seoul, **South Korea**, May 2016 (IL)
86. COGICO-2016, 12<sup>th</sup> National Conference of the Interdivisional Group of Organometallic Chemistry, Genoa, **Italy**, June 2016 (PL)
87. XLII International Conference on Coordination Chemistry (ICCC-42), Brest, **France**, July 2016 (IL)
88. Final meeting of the ITN project RFP7-PEOPLE-2012-ITN - 317404 “A European Training Network for Sustainable Phosphorus Chemistry (SUSPHOS)”, Amsterdam, **The Netherlands**, January 2017 (PL)
89. Italian ERC Chem Day, celebration of the 10<sup>th</sup> anniversary of the European Research Council, Accademia dei Lincei, Rome, **Italy**, March 2017 (IL)
90. 14<sup>th</sup> European Workshop on Phosphorus Chemistry (EWPC-14), Cluj-Napoča, **Romania**, March 2017 (PL)
91. International Conference on Phosphorus, Boron and Silicon (PBSi-2017), Paris, **France**, July 2017 (PL)
92. XXVI Congresso Nazionale della Società Chimica Italiana  
Eventi satellite di interesse generale: Grafene e sue possibili applicazioni industriali  
Paestum (SA), **Italy**, September 2017 (IL)

93. *XLIII International Conference on Coordination Chemistry (ICCC-43)*, Sendai, **Japan**, July 2018 (KNL)
94. *Symposium in honor of Professor Ernesto Carmona*, Sevilla, **Spain**, October 2018 (KNL)
95. *International Conference on Phosphorus, Boron and Silicon (PBSi-2018)*, Barcelona, **Spain**, December 2018 (PL)
96. *Nasini Workshop: Past, Present and Future of Inorganic Chemistry in Italy: a Path Defined by the Winners of The Nasini Prize*, CNR, Aula Marconi, Rome, **Italy**, February 2019 (IL)
97. *XXXVII Biannual Conference of the Spanish Royal Society of Chemistry (Reunión Bienal RSEQ)*, San Sebastián, **Spain**, May 2019 (KNL)
98. *5<sup>th</sup> EUCHEMS Inorganic Chemistry Conference, EICC-5*; Moscow, **Russian Federation**, June 2019 (PL)
99. *XXI Mendeleev Congress on General and Applied Chemistry*, Saint Petersburg, **Russian Federation**, September 2019 (KNL)
100. *XVIII Convegno Nazionale di Storia e Fondamenti della Chimica*, Rome, **Italy**, October 2019, (IL)
101. *Israel-Italy 2D Materials Workshop*, Bar-Ilan's Institute of Nanotechnology and Advanced Materials (BINA), Bar Ilan University, Tel Aviv, **Israel**, November 2019 (KNL)

**Plenary, Keynote and Session Lecturer (declined invitations):**

1. *3<sup>rd</sup> Symposium Latinoamericano de Química de Coordinación y Organometálica (SiLQCOM-2011)*, La Serena, **Chile**, July 2011 (SL)
2. *5<sup>th</sup> IDECAT/ERIC-JCAT Conference on Catalysis*, Bertinoro (FC), **Italy**, September 2011 (SL)
3. *CSC2013 - Conference of the Canadian Society for Chemistry*, Québec City, **Canada**, May 2013 (SL)
4. *4<sup>th</sup> Symposium Latinoamericano de Química de Coordinación y Organometálica (SiLQCOM-2013)*, Huatulco, **Mexico**, October 2013 (SL)
5. *21<sup>st</sup> International Conference on Phosphorus Chemistry (ICPC-21)*, Kazan, **Russian Federation**, June 2016 (KNL)
6. *"Frontiers on Organometallic Chemistry - 2016" (FOMC – 2016)*, Thiruvananthapuram, Kerala, **India**, December 2016 (KNL)
7. *International Symposium on Green Catalysis*, Rennes, **France**, March 2017 (KNL)
8. *Frontier Forum on Nanoscience – 2017*, Dubrovnik, **Croatia**, May 2017 (SL)
9. *Korea – Italy workshop "Membrane Technology for Climate Change"*, Daejeon, **South Korea**, June 2017 (SL)
10. *XVII International Chugaev Conference on Coordination Chemistry*, Nizhny Novgorod, **Russian Federation**, October 2017 (PL)
11. *Ibero American Chemistry Congress and XXIX Peruvian Chemistry Congress*, Lima, **Peru**, October 2018 (PL)
12. *Cluster of International Conferences: Topical Problems of Modern Chemistry, CHEMSHIP-2019*, Nizhny Novgorod, **Russian Federation**, September, 2019 (PL)

**Lecturer (oral presentations):**

1. *XVI<sup>th</sup> Congresso Nazionale di Chimica Inorganica*, Ferrara, **Italy**, 1983
2. *XI<sup>th</sup> International Conference on Phosphorus Chemistry*, Tallinn, Estonia, **USSR**, 1989
3. *IX<sup>th</sup> FECEM Meeting on Organometallic Chemistry*, Heidelberg, **Germany**, 1991
4. *XV<sup>th</sup> International Conference on Organometallic Chemistry*, Warsaw, **Poland**, 1992
5. *I Congresso del Gruppo Interdivisionale di Chimica Organometallica della Società Chimica Italiana*, Camerino, **Italy**, 1992
6. *III<sup>rd</sup> Eurasia Conference on Chemical Sciences*, Bangkok, **Thailand**, 1992
7. *IX<sup>th</sup> International Symposium on Homogeneous Catalysis*, Jerusalem, **Israel**, 1994
8. *II<sup>nd</sup> Meeting on Selective Processes and Catalysis*, Athens, **Greece**, 1995
9. *III Congresso del Gruppo Interdivisionale di Chimica Organometallica della Società Chimica Italiana*, Siena, **Italy**, 1996
10. *XXV Congresso della Divisione di Chimica Inorganica della Società Chimica Italiana*, Alessandria, **Italy**, 1997
11. *1<sup>st</sup> Meeting on "New 'Chlorine Free' Technology of Organophosphorus Compounds Based on Catalytic Reactions of Elemental Phosphorus"*, Florence, **Italy**, 1997
12. *II<sup>nd</sup> Meeting on "New 'Chlorine Free' Technology of Organophosphorus Compounds - Based on Catalytic Reactions of Elemental Phosphorus"*, Almaty, **Kazakhstan**, 1999
13. *XXXIV<sup>th</sup> International Conference on Coordination Chemistry*, Edinburgh, **UK**, 2000
14. *VI<sup>th</sup> FIGIPS Meeting in Inorganic Chemistry*, Barcelona, **Spain**, 2001
15. *XX<sup>th</sup> International Conference on Organometallic Chemistry*, Corfu, **Greece**, 2002
16. *Kick-off Meeting "HYDROCHEM RTN project"*, Milan, **Italy**, 2002
17. *"Andalusia meets Europe"*, COST WG-D17-003 meeting, Almería, **Spain**, 2003
18. *XXXII Congresso della Divisione di Chimica Inorganica della Società Chimica Italiana*, Roma, **Italy**, 2004

19. 1<sup>st</sup> year Meeting “AQUACHEM MC-RTN project”, Lisbon, **Portugal**, 2005
20. *Green Chemistry: a Solution for the World* joint to “Andalusia Meets Europe II”, Almeria, **Spain**, 2005
21. COST WG-D17-003 final meeting, Vienna, **Austria**, 2006
22. 234<sup>th</sup> American Chemical Society National Meeting, Boston, MA, **USA**, 2007
23. Zing Conference – “Organometallics at the centre”, Cancun, **Mexico**, 2008
24. XL International Conference on Coordination Chemistry, Valencia, **Spain**, 2012
25. Kick-off meeting of the ITN project RFP7-PEOPLE-2012-ITN - 317404 “A European Training Network for Sustainable Phosphorus Chemistry (SUSPHOS)”, Regensburg, **Germany**, March 2013
26. XLII Congresso della Divisione di Chimica Inorganica della Società Chimica Italiana, Rende, Cosenza, **Italy**, 2014
27. 27<sup>th</sup> International Conference on Organometallic Chemistry (ICOMC 2016), Melbourne, **Australia**, July 2016
28. XLIV Congresso Nazionale della Divisione di Chimica Inorganica della Società Chimica Italiana, Padua, **Italy**, 2016

#### Member of International Scientific Committees and Boards:

1. **Chairman**, XLIV International Conference on Coordination Chemistry (ICCC-44), Rimini, **Italy**, July 2020; **postponed to August 2022 (planned)**
2. Member of the **International Advisory Board** of the XLIV International Conference on Coordination Chemistry (ICCC-44), Rimini, **Italy**, July 2020; **postponed to August 2022 (planned)**
3. Member of the **International Scientific Committee** (ISC) of the CHEM2DMAT conference, Bologna, **Italy**, August/September 2021.
4. Member of the **Advisory Board** of the International School of Chemistry: Chemistry for Everyday Life (ISC-2020), Camerino (MC), **Italy**, September 2020; *web edition*.
5. **Chair** of the Organizing and Scientific Committee of the **Avogadro Colloquia 2019** “Elements of the Periodic Table for Energy”, Rome, **Italy**, December 2019
6. **Chairman** of the International Conference on Phosphorus, Boron and Silicon (PBSi-2019), Rome, **Italy**, December 2019
7. Member of the **International Advisory Board**, 12<sup>th</sup> International School on Organometallic Chemistry, Camerino (MC), **Italy**, September 2019
8. Member of the **Scientific Committee** of the symposium “2D semiconductors: applications and perspectives” at the European Materials Research Society (E-MRS) 2019 Spring Meeting, Nice, **France**, May 2019
9. Member of the **Scientific Committee** of the Workshop “Advanced Inorganic Materials Green and Unconventional Synthesis Approaches and Functional Assessment” (AIM 2018), Padua, **Italy**, September 2018
10. Member of the **International Advisory Board** of the XLIII International Conference on Coordination Chemistry (ICCC-43), Sendai, **Japan**, July 2018
11. **Chairman**, XXVIII International Conference on Organometallic Chemistry (ICOMC-28), Florence, **Italy**, July 2018
12. Member of the **International Advisory Board** of the XXVIII International Conference on Organometallic Chemistry (ICOMC-28), Florence, **Italy**, July 2018
13. Member of the **International Advisory Board** of the 6<sup>th</sup> International Conference “Novel Functional Carbon Nanomaterials” of the 8th Forum on New Materials (CIMTEC 2018), Perugia, **Italy**, June 2018
14. Member of the **International Advisory Board**, 11<sup>th</sup> International School on Organometallic Chemistry, San Benedetto del Tronto (AP), **Italy**, September 2017
15. Member of the **National Scientific Committee**, EUROPACAT 2017, Florence, Italy, August/September 2017
16. Member of the **International Advisory Board** of the Colloquium Spectroscopicum Internationale (CSI-XL), Pisa, **Italy**, June 2017
17. **Co-Chairman** of the 2<sup>nd</sup> International Forum on Ceramics and Ceramic-related Materials: Ceramics for Energy - CEN '17, Museo Internazionale delle Ceramiche, Faenza (RA), **Italy**, June 2017
18. Member of the **International Advisory Board** of the XLII International Conference on Coordination Chemistry (ICCC-42), Brest, **France**, July 2016
19. Member of the **International Advisory Board**, 10<sup>th</sup> International School on Organometallic Chemistry, Camerino, **Italy**, September 2015

20. **Co-Chairman** of the *Workshop Ceramics for Energy*, Museo Internazionale delle Ceramiche, Faenza (RA), **Italy**, May 2015
21. **Chairman** of the *First International Conference on Sustainable Phosphorus Chemistry (ICSPC-1)*, Florence, **Italy**, December 2014
22. Member of the **Organizing Committee**, *10<sup>th</sup> Spanish-Italian Symposium on Organic Chemistry (SISOC-X)*, Florence, **Italy**, July 2014
23. Member of the **International Advisory Board**, *Symposium FE “Advances in Photocatalytic Materials for Energy and Environmental Sustainability”* of the *Forum on New Materials*, Montecatini, **Italy**, June 2014
24. Member of the **Scientific Committee**, *9<sup>th</sup> International School on Organometallic Chemistry*, Camerino, **Italy**, August 2013
25. Member of the **Standing Committee** of the *Latin American Symposium of Coordination and Organometallic Chemistry – SiLQCOM (Comité Permanente del Simposio Latinoamericano de Química de Coordinación y Organometálica)*; (Italian representative) since October 2011.
26. Member elected (Italian representative) of the **International Advisory Board (IAB)** of the *International Homogeneous Catalysis Symposia ISHC*, since June 1<sup>st</sup>, 2011 to 2018.
27. Member of the **Scientific Committee**, *8<sup>th</sup> International School on Organometallic Chemistry*, Camerino, **Italy**, August 2011
28. Member of the **Comité Científico Internacional (Scientific International Committee)** of the *3<sup>er</sup> Symposium Latinoamericano de Química de Coordinación y Organometálica (SiLQCOM-2011)*, La Serena, **Chile**, July 2011
29. Member of the **Scientific Committee**, *International Conference on Sciences and Technologies of the Environment for a Sustainable Development*, Hammamet, **Tunisia**, October 2011
30. Member of the **Scientific Committee**, *CNR/CNRS Workshop “Homogeneous Catalysis for Sustainable Development”*, Rome, **Italy**, June 2010
31. Member of the **Scientific Committee**, *II<sup>nd</sup> International Conference on Hydrogen Energy (ICHE10)*, Hammamet, **Tunisia**, May 2010
32. Member of the **Scientific Committee**, *4<sup>ème</sup> Édition du Congrès International de la Physique des Interactions Rayonnement - Matière (PIRM IV)*, Dakhla, Morocco, April 2010
33. Member of the **Scientific Committee**, *7<sup>th</sup> International School on Organometallic Chemistry*, Camerino, Italy, September 2009
34. Member of the **International Advisory Board**, *7<sup>th</sup> International School on Organometallic Chemistry*, Camerino, Italy, September 2009
35. Member of the **International Scientific Committee**, *10<sup>th</sup> FIGIPAS Meeting in Inorganic Chemistry*, Palermo, Italy, July 2009
36. Member of the **Scientific Committee**, *International Workshop on Distributed Energy Systems. The role of Chemical Sciences and Technology*, Milano, Italy, April 2009
37. **Chairman** of the *Kick off meeting of the COST Action CM0802 PhoSciNet Working Groups*, Florence, Italy, March 2009
38. **Chairman**, *6<sup>th</sup> European Workshop on Phosphorus Chemistry (EWPC-6)*, Florence, Italy, March 2009
39. Member of the **Management Committee** (CM0802 IT) as Italian Representative in the *COST Action CM0802 “European Phosphorus Sciences Network (PhoSciNet)”* (2008 - 2012)
40. Member of the **Core Group** of the *COST Action CM0802 “European Phosphorus Sciences Network (PhoSciNet)”* (2008 - 2012)
41. **Co-Chairman**, *16<sup>th</sup> International Symposium on Homogeneous Catalysis (ISHC-16)*, Florence, Italy, July 2008
42. Member of the **Organizing Committee** of the workshop *“Catalysis in Aqueous Media”*, Toulouse, France, November, 2007
43. Member of the **International Advisory Board**, *6<sup>th</sup> International School on Organometallic Chemistry*, Camerino, Italy, September 2007
44. Member of the **International Scientific Committee**, *9<sup>th</sup> FIGIPAS Meeting in Inorganic Chemistry*, Vienna, Austria, July 2007
45. Member of the **Organizing Committee**, *IDECAT Conference Series “Catalysis for Sustainable Energy Production”*, Sesto Fiorentino (Florence), Italy, November 2006
46. Member of the **Scientific Committee** of the *Workshop Experiment & Theory in Transition Metal Chemistry: A Meeting Point*, Bellaterra, Barcelona, Spain, September 2006
47. Member of the **International Advisory Committee**, *5<sup>th</sup> International Symposium on Inorganic Phosphate Materials '05. ISIPM 2005*, Kasugai, Aichi, Japan, September 2005

48. Member of the **International Scientific Committee**, 8<sup>th</sup> FIGIPAS Meeting in Inorganic Chemistry, Athens, Greece, July 2005
  49. Member of the **International Advisory Board**, XIV<sup>th</sup> International Conference on Chemistry of Phosphorus Compounds, Arbuzov Institute/RAS, Kazan, Russia, June 2005
  50. Member of the **Organizing Committee** of the 12<sup>th</sup> International Symposium on Relations between Homogeneous and Heterogeneous Catalysis, Fiesole (FI), Italy, July 2005.
  51. Member of the **International Advisory Board**, XX<sup>th</sup> International Conference on Organometallic Chemistry, Corfu, Greece, July 2002.
  52. Member of the **International Advisory Board**, Eurasia Conferences on Chemical Sciences, (since 2002).
  53. **Co-chairman** with Rinaldo Poli, “Recent Advances in Transition Metal Hydride Chemistry” (Eurohydrides 2000, Dijon, France, September 2000, 110 participants)
  54. **Scientific Secretary**, XXXIII International Conference on Coordination Compounds (33<sup>rd</sup> ICC, Florence, August 1998, Chairman Ivano. Bertini, 1650 participants).
  55. **Secretary**, International Symposium on Molecular Reaction Mechanisms Involving Transition Metals (Florence, October 1994, 250 participants).
  56. MP is member of the **Planning Committee** of the International Conference on Coordination Compounds (1996 – 2000 and 2012 – ...).
- Member of the Local Organizing Committee (Responsible for the one-day-symposium “Hydrogen Economy and Catalysis”), 12<sup>th</sup> International Symposium on the Relations between Homogeneous and Heterogeneous Catalysis (ISHHC-12, Florence, July 2005)
  - Member of the Local Organizing Committee (Jubilee Celebration Committee), 10<sup>th</sup> International Conference on Bioinorganic Chemistry (ICBIC-10, Florence, August 2001)
  - Member of the Local Organizing Committee, 1<sup>st</sup> International Conference on Bioinorganic Chemistry (ICBIC-1, Florence, June 1983)

#### Member of National Scientific Committees and Boards:

1. **Chairman of the Scientific and Organizing Committee**, 4<sup>th</sup> Avogadro Colloquia 2019 “Elements of the Periodic Table for Energy”, Rome, Italy, December 2019
2. **Chairman of the Organizing Committee** of the National School of Bioinorganic Chemistry directed to PhD students, Rome, Italy, February 2019
3. Member of the **Scientific Committee** of the Academy for Molecular Mechanisms 2019, Bologna, Italy, January 2019
4. **Chairperson** (together with Corrado Spinella) of the Conference “Materials.it” jointly organized by the DSCTM CNR and DSFTM CNR, Bologna, October 2018.
5. Member of the **Steering Committee** of the conference “Nanoinnovation 2018”, Rome, Italy, September 2018
6. Member of the **Organizing Committee** of the COGICO-2018, 13<sup>th</sup> National Conference of the Interdivisional Group of Organometallic Chemistry, Florence, Italy, July 2018
7. Member of the **Scientific Committee** of the 1<sup>st</sup> Italian School on Renewable Energies, Florence, Italy, February 2018
8. Member of the **Steering Committee** of the conference “Nanoinnovation 2017”, Rome, Italy, September 2017
9. **Chairperson** of the workshop “Phosphorene and 2D-Companions”, Rome, Italy, May 8<sup>th</sup> 2017
10. **Chairperson** of the workshop “Phosphorene day”, Florence, Italy, July 17<sup>th</sup> 2015
11. Member of the **Scientific Committee** of the XLII National Conference on Inorganic Chemistry, Rende, Cosenza, Italy, September 2014
12. Member of the **Scientific Committee** of the NanotechItaly 2013, Venice, Italy, November 2013
13. Member of the **Scientific Committee** of the XLI National Conference on Inorganic Chemistry, Parma, Italy, September 2013
14. Member of the **Scientific Committee** of the “XXXII Congresso Interregionale delle Sezioni Toscana, Umbria, Marche ed Abruzzo” of the Italian Chemical Society, TUMA-2013, Florence, Italy, July 2013
15. Member of the **Scientific Committee** of the meeting “Arte e scienza: estetica e verità della materia”, 6<sup>o</sup> Ed. “Inquietudini nella modernità”, Florence, Italy, December 2012

16. Member of the **Scientific Committee** of the XL National Conference on Inorganic Chemistry, Sestri Levante, Italy, September 2012
17. Member of the **Scientific Committee** of the COGICO-2012, 10<sup>th</sup> National Conference of the Interdivisional Group of Organometallic Chemistry, Padua, Italy, June 2012
18. Member of the **Scientific Committee** of the XXIV National Conference of the Italian Chemical Society (Lecce, Italy) September 2011
19. Member of the **Scientific Committee** of the 2<sup>nd</sup> National School of Bioinorganic Chemistry, Siena, Italy, July 2011
20. **Chairman** of the workshop “Idrogeno: quale futuro?” on the occasion of the ENERGETHICA Congress 2011”, Turin, Italy, April 2011
21. Member of the **Scientific Committee** of the XXXVIII National Conference on Inorganic Chemistry, Trieste, Italy, September 2010
22. **Chairman** of COGICO-9, 9<sup>th</sup> National Conference of the Interdivisional Group of Organometallic Chemistry, Florence, Italy, June 2010
23. Member of the **Scientific Committee** of the National School of Organometallic Chemistry for PhD students, Bertinoro, Italy, May 2010
24. Member of the **Organizing Committee** of the workshop “Idrogeno: L’esperienza Fiorentina di HYDROLAB incontra la rete nazionale di ENERGETHICA”, Sesto Fiorentino, Italy, November 2009
25. Member of the **Scientific Committee** (Area Inorganic Chemistry) of the XXIII National Conference of the Italian Chemical Society, Sorrento, Italy, July 2009
26. Member of the **Scientific Committee** of the XXXVII National Conference on Inorganic Chemistry, Sorrento, Italy, July 2009
27. Member of the **Scientific Committee** of the XXXVI National Conference on Inorganic Chemistry, Lecce, Italy, September 2008
28. Member of the **Scientific Committee** of the XI National School on Bioinorganic Chemistry for PhD Students, Napoli, Italy, September 2008
29. Member of the **Scientific Committee** of the X National School on Organometallic Chemistry for PhD Students, Camerino, Italy, September 2007
30. Member of the **Scientific Committee** of the XXXV National Conference on Inorganic Chemistry, Milan, Italy, September 2007
31. Member of the **Scientific Committee** of the IX National School on Chemistry of Inorganic Materials for PhD Students, Arcavacata, Rende, Cosenza, Italy, November 2006
32. Member of the **Panel of Delegates (Inorganic Chemistry)** of the XXII National Conference of the Italian Chemical Society, Florence, Italy, September 2006
33. Member of the **Scientific Committee** of the XXXIV National Conference on Inorganic Chemistry, Florence, Italy, September 2006
34. Member of the **Scientific Committee** of the X National School on Bioinorganic Chemistry for PhD Students, Catania, Italy, September 2005
35. Member of the **Scientific Committee** of the XXXIII National Conference on Inorganic Chemistry, Siena, Italy, July 2005
36. Member of the **Scientific Committee** of the XXXII National Conference on Inorganic Chemistry, Rome, Italy, September 2004
37. Member of the **Scientific Committee** of the IX National School on Organometallic Chemistry for PhD Students, Venice, Italy, July 2004

MP has served as **Chairman of Scientific Sessions** at the following **international conferences and meetings**:

1. *European - Japanese symposium on selective processes and catalysis involving small molecules* (Rennes, France, 1994)
2. *34<sup>th</sup> International conference on coordination chemistry* (Edinburgh, UK, 2000)
3. *EC High-level scientific conferences: EURO-Hydrides 2000* (Dijon, France, 2000)
4. *Kick-off meeting of the COST Action D17 WG003/00* (Pisa, Italy, 2001)
5. *11<sup>th</sup> Singapore International Chemical Conference* (Singapore, 2001)
6. *Mid-Term and workshop Meeting of the COST Action D17* (Warwick, UK, 2002)
7. *XX<sup>th</sup> International Conference on Organometallic Chemistry* (Corfu, Greece, 2002)
8. *Kick-off meeting of the NATO Collaborative Linkage Grant on Physical and Engineering Science and Technology; PST.CLG.978521* (Florence, Italy, 2002)
9. *“Andalusia meets Europe”, COST WG-D17-003 meeting* (Almería, Spain, 2003)



10. VIII<sup>th</sup> Eurasia Conference on Chemical Sciences (Hanoi, Vietnam, 2003)
11. Kick-off meeting of the AQUACHEM MRTN-CT-2003-503864 Network (Florence, Italy, 2004)
12. "Modern Trends in Organoelement and Polymer Chemistry" (Moscow, Russian Federation, 2004)
13. 1<sup>st</sup> year meeting of the AQUACHEM MRTN-CT-2003-503864 Network (Lisbon, Portugal, 2005) 5<sup>th</sup> International School on Molecular Catalysis, ISMC5 (Poznan, Poland, 2005)
14. 5<sup>th</sup> International School on Organometallic Chemistry, ISOC5 (Camerino, Italy, 2005)
15. NATO Advanced Study Institute: New methodologies and techniques in organic chemistry - Sustainable development in a secure environment (Pontignano, Siena, Italy, 2005)
16. "Green Chemistry: a Solution for the World" joint to "Andalusia Meets Europe II" (Almeria, Spain, 2005)
17. Experiment & Theory in Transition Metal Chemistry: A Meeting Point, (Bellaterra, Barcelona, Spain, 2006)
18. IDECAT Conference Series 'Catalysis for Sustainable Energy Production', (Sesto Fiorentino, Italy, 2006)
19. IX<sup>th</sup> FIGIPAS Meeting in Inorganic Chemistry, (Vienna, Austria, 2007)
20. Final Meeting of the AQUACHEM MRTN-CT-2003-503864 Network (Toulouse, France, 2007)
21. ISHC-XVI, XVI International Symposium on Homogeneous Catalysis, (Florence, Italy, 2008)
22. 6<sup>th</sup> European Workshop on Phosphorus Chemistry, EWPC-6, (Florence, Italy, 2009)
23. Kick off meeting of the Working Groups of the COST Action CM0802 PhoSciNet, (Florence, Italy, 2009)
24. 10<sup>th</sup> FIGIPAS Meeting in Inorganic Chemistry (Palermo, Italy, July 2009)
25. 7<sup>th</sup> International School on Organometallic Chemistry, Camerino, Italy, September 2009
26. CNR/CNRS Workshop "Homogeneous Catalysis for Sustainable Development" (Rome, Italy, 2010)
27. Third year meeting of the GDRI "Catalyse Homogène pour le Développement Durable (CH2D)", (Rome, Italy, 2010)
28. Scientific day dedicated to Professor Pierre H. Dixneuf "From Organometallics to Catalysis" (Rennes, France, November 19, 2010)
29. ICSU Day One-day symposium before the General Assembly of the International Council for Science (ICSU): "From Elementary Chemical Processes to Complex Biological Structures for the Benefit of Life and Human Health", (Aula Magna, Università degli Studi di Firenze, Firenze, Italy, September 23, 2011)
30. 4<sup>th</sup> Working Group Meeting COST Action CM0802 European PhosphorusSciences Network (Phoscinet), (Rennes, France, March 21, 2012)
31. 25<sup>th</sup> International Conference on Organometallic Chemistry (ICOMC 2012), (Lisbon, Portugal, September 4, 2012)
32. 44<sup>th</sup> IUPAC World Chemistry Congress (Istanbul, Turkey, August 12, 2013)
33. 7<sup>th</sup> Annual Meeting of the "Groupe de Recherche International" (GDRI), Homogeneous Catalysis for Sustainable Development (Paris, France, June 16, 2014)
34. First International Conference on Sustainable Phosphorus Chemistry (ICSPC-1) (Florence, Italy, December 4, 2014)
35. International Workshop Ceramics for Energy (Faenza (FC), Italy, May 14, 2015)
36. 5<sup>th</sup> International Youth Conference on Energy 2015, IYCE '15 (Pisa, Italy, May 28, 2015)
37. Razuvaev Lectures VI. Organometallic and Coordination Chemistry: Achievements and Challenges (Nizhni Novgorod, Russian Federation, September 20, 2015)
38. XLII International Conference on Coordination Chemistry ICC-42 (Brest, France, July 06, 2016)
39. 27<sup>th</sup> International Conference on Organometallic Chemistry ICOMC 2016 (Melbourne, Australia, July 2016)
40. 2<sup>nd</sup> International Forum on Ceramics and Ceramic-related Materials: Ceramics for Energy - CEN '17, (Faenza (FC), **Italy**, June 07, 2017)
41. International Conference on Phosphorus, Boron and Silicon (PBSi-2017), Paris, **France**, July 2017 (PL)
42. 28<sup>th</sup> International Conference on Organometallic Chemistry ICOMC 2018 (Florence, **Italy**, July 2018, Chairman of the opening plenary lecture delivered by Matthias Beller)
43. XLIII International Conference on Coordination Chemistry (ICCC-43), Sendai, **Japan**, July 2018
44. XV<sup>th</sup> Eurasia Conference on Chemical Sciences, Rome, **Italy**, 2018
45. 22<sup>nd</sup> International Conference on Organic Syntheses (22-ICOS), Florence, **Italy**, September 2018, (Chairman of the plenary lecture delivered by Erik M. Carreira)
46. Accademia dei Lincei Conference on "Solar driven chemistry: towards new catalytic solutions for a sustainable world", Accademia dei Lincei, Rome, **Italy**, October 19, 2018 (Chairman of the plenary lectures delivered by Gary Brudvig and Marcella Bonchio)
47. International Conference on Phosphorus, Boron and Silicon (PBSi-2018), Barcelona, **Spain**, December 2018.
48. 2019 Spring Meeting of the European Materials Research Society (E-MRS), Nice, **France**, May 2019 (Chairman at the symposium: 2D semiconductors: applications and perspectives)

49. *International Conference on Microplastic Pollution on the Mediterranean Sea (μ-MED)*, Capri (NA), **Italy**, September 2019
50. *International Conference on Phosphorus, Boron and Silicon (PBSi-2019)*, Rome, **Italy**, December 2019 (Chairman of the plenary lectures delivered by Hansjörg Grutzmacher and Sylviane Sabo-Etienne)
51. *Avogadro Colloquia 2019 “Elements of the Periodic Table for Energy”*, **Italy**, December 2019 (Chairman of the opening session “Elements of the Periodic Table in Energy Production”).
52. *International School of Chemistry: Chemistry for Everyday Life (ISC-2020)*, Camerino (MC), **Italy**, September 2020, web edition, (Chairman of the opening session and lecture by the Nobel laureate Jean-Marie Lehn).

MP has served as **Chairman of Scientific Sessions** at the following **national conferences and meetings**:

1. *XXI Congresso della Società Chimica Italiana* (Torino, Italy, 2003)
2. *L'Idrogeno come vettore energetico: stato della ricerca e progetto Firenze Hydrolab (XIV Settimana della cultura scientifica in Toscana)* (Florence, Italy, 2004)
3. *XXXII National Conference on Inorganic Chemistry*, (Rome, Italy, 2004)
4. *L'idrogeno come vettore energetico: stato della ricerca e progetto Firenze Hydrolab (XV Settimana della cultura scientifica in Toscana)* (Scandicci, Italy, 2005)
5. *XXXIII National Conference on Inorganic Chemistry*, (Siena, Italy, 2005)
6. *XII International Symposium on relations between homogeneous and heterogeneous catalysis* (Fiesole, Italy, 2005)
7. *L'idrogeno come vettore energetico: stato della ricerca e progetto Firenze Hydrolab (XVI Settimana della cultura scientifica in Toscana)* (Florence, Italy, 2006)
8. *XXII National Conference of the Italian Chemical Society* (Florence, Italy, 2006)
9. *XXXV National Conference of Inorganic Chemistry*, (Milan, Italy, 2007)
10. *COGICO-2008, VIII Congresso del Gruppo Interdivisionale di Chimica Organometallica*, (Perugia, Italy, 2008)
11. *XXXVI National Conference of Inorganic Chemistry*, (Lecce, Italy, 2008) (Chair of the Sacconi Medal Lecture 2008 delivered by Robin N. Perutz)
12. *XXIII National Conference of the Italian Chemical Society* (Sorrento, Italy, July, 2009) (Chair of the Annual General Assembly of the Italian Chemical Society)
13. *XXXVII National Conference of Inorganic Chemistry* (Sorrento, Italy, July, 2009) (Chairman of the Lecture awarding the Nasini Medal 2009 to Alberto Credi)
14. *“Giornate Scientifiche” of the CNR Department of Molecular Design, Project PM.P03*, (Montelibretti, RM, Italy, November, 2009)
15. *COGICO-9, IX Congresso del Gruppo Interdivisionale di Chimica Organometallica*, (Florence, Italy, June, 2010) (Chairman of the “Senior GICO Award Lecturship” delivered by Rinaldo Poli)
16. *XXXVIII National Conference of Inorganic Chemistry* (Trieste, Italy, September, 2010) (Chairman of the Public Lecture delivered by Vincenzo Balzani)
17. *Joint Lectureship Società Chimica Italiana – Société Chimique de France (SCI – SCF)* (Firenze, Italy, November 2010) (Chairman of the lecture delivered by Mir Wais Hosseini)
18. *Workshop “Idrogeno: quale futuro?”*, the *ENERGETHICA Congress 2011* (Turin, Italy) April 2011
19. *Workshop “Innovazione e ricerca per risolvere il problema energia: I risultati del progetto FIRENZE-HYDROLAB (2004 – 2009)”* (Accademia dei Georgofili, Firenze, Italy, April 21, 2011)
20. *ICCOM Day 2011; first scientific meeting of the ICCOM CNR Researchers*, (Area Ricerca CNR, Sesto Fiorentino, Italy, May 10, 2011)
21. *XXXIX National Conference of Inorganic Chemistry* (Lecce, Italy, September, 2011) (Chairman of the “Paolo Chini Memorial Lecture” 2009 delivered by Claudio Bianchini)
22. *COGICO-10, X Congresso del Gruppo Interdivisionale di Chimica Organometallica*, (Padua, Italy, June 5, 2012) (Chairman of the Opening plenary lecture delivered by Steve Nolan)
23. *Human health: the role of biological inorganic chemistry* (Sesto Fiorentino, Italy, June 12, 2012)
24. *La sfida della sostenibilità e delle nuove energie in Toscana: la proposta del CNR all'industria della nostra regione* (Area della Ricerca CNR, Sesto Fiorentino, Italy, June 15, 2012)
25. *“XXXII Congresso Interregionale delle Sezioni Toscana, Umbria Marche ed Abruzzo” of the Italian Chemical Society, TUMA-2013* (Florence, Italy) July 2013
26. *XLI National Conference on Inorganic Chemistry*, (Parma, Italy) September 2013 (Chairman of the Sacconi Medal Lecture 2013 delivered by Pierre Braunstein)

27. “Chemistry & Materials for Life”, *Celebrative Conference of the 90<sup>th</sup> year of CNR*, Rome, November 2013 (Chairman of the Opening Plenary Lecture delivered by David Cole-Hamilton)
28. ENEL – CNR Workshop: “Energia e Innovazione: Una sfida per il Pubblico e il Privato”, Rome, May 2014
29. XXV National Conference of the Italian Chemical Society, (Rende, Cosenza, Italy) September 2014 (Chairman of the Sacconi Medal Lecture 2014 delivered by Roland Lill)
30. XLII National Conference on Inorganic Chemistry, (Rende, Cosenza, Italy) September 2014 (Chairman of the ENERCHEM Session)
31. Sacconi Memorial Lecture 2014, Firenze, Italy October 2014, (Chairman of the lecture delivered by Luisa De Cola)
32. Knowledge Integration for Advanced & Sustainable Systems, DSCTM CNR Annual Conference, Rome, Italy, November 10<sup>th</sup> 2014
33. Sacconi Spring Seminar 2015, Firenze, Italy March 2015, (Chairman of the lecture delivered by Nicola Armaroli)
34. CNR workshop “Fosforene day”, Firenze, Italy, July 17<sup>th</sup> 2015
35. XLIII National Conference of Inorganic Chemistry, (Camerino, Macerata, Italy) September 2015 (Chairman of the Sacconi Medal Lecture 2015 delivered by Tobin Marks)
36. Giornata DSCTM 2015, “Sharing knowledge and expertise for a better society”, Cetraro (CS), Italy, October 2015.
37. ENERCHEM-1, the 1<sup>st</sup> National Meeting of the Interdivisional Group ENERCHEM (Florence, Italy) February 2016
38. Sacconi Memorial Lecture 2015/2016, Firenze, Italy February 2016, (Chairman of the lecture delivered by Vincent Pecoraro)
39. Sacconi Spring Seminar 2016, Firenze, Italy May 2016, (Chairman of the lectures delivered by Hansjoerg Gruetzmacher and Matthias Driess)
40. COGICO-2016, 12<sup>th</sup> National Conference of the Interdivisional Group of Organometallic Chemistry, Genoa, Italy, June 2016 (Chairman of the Bonati Prize 2016, Plenary lecture delivered by Gabriele Manca)
41. XLIV National Conference of Inorganic Chemistry, Padova, Italy, September 2016 (Chairman of the Sacconi Medal Lecture 2016 delivered by Zijian Guo)
42. Sacconi Spring Seminar 2017, Firenze, Italy April 2017, (Chairman of the lecture delivered by Istvan Horvath)
43. Workshop “Phosphorene and 2D-Companions”, Rome, Italy, May 8<sup>th</sup> 2017 (Chairman of the Plenary lecture delivered by Vincenzo Palermo)
44. Workshop “Le nuove frontiere dei Materiali Ceramici”, Faenza (FC), July 7<sup>th</sup> 2017
45. XLV National Conference of Inorganic Chemistry, Paestum (SA), Italy, September 2017 (Chairman of the Sacconi Medal Lecture 2017 delivered by Guy Bertrand)
46. XLVI National Conference of Inorganic Chemistry, Bologna, Italy, September 2018 (Chairman of the Sacconi Medal Lecture 2018 delivered by Clare Gray)
47. DSCTM – CNR Conference 2018, Assisi (PG), Italy, September 2018 (Chairman of the Keynote lecture delivered by Luigi Nicolais)
48. DSCTM – CNR Conference 2019, Bressanone/Brixen (BZ), Italy, October 2019 (Chairman of the Post-dinner speech delivered by Chryssostomos Chatgililoglu)
- 49.

Member of the Committee for awarding the best oral communication and the best Chairperson at the following Conference:

- X<sup>th</sup> European Workshop on Phosphorus Chemistry (EWPC-10), Regensburg, Germany, 2013

Member of the Committee for awarding the best poster contribution at the following Conferences:

- XIX<sup>th</sup> EuCheMS Conference on Organometallic Chemistry (XIX EuCOMC), Toulouse, France, 2011
- I<sup>nd</sup> Symposium Latinoamericano de Química de Coordinación y Organometálica (SiLQCOM), Maracaibo, Venezuela, 2009
- 10<sup>th</sup> FIGIPAS Meeting in Inorganic Chemistry (President of the Commission, Palermo, Italy, July 2009);
- ISHC-XVI, XVI International Symposium on Homogeneous Catalysis, (Florence, Italy, 2008);

Member of the Committee for awarding the best oral presentation at the following Conferences:

- *Conference-School for Young Researchers “Challenges and Achievements of Modern Organometallic and Coordination Chemistry”* Nizhni Novgorod, Russian Federation, September 2015

**Ph. D. Thesis Supervisor:**

- Dr. Leonardo Giusti, Industrial Doctorate sponsored by ItalMatch SpA and CNR, University of Siena (2019 - ...)
- Dr Matteo Vanni, University of Siena, Italy (2018 - ...)
- Dr Salvatore Interlandi, University of Siena, Italy (2015 - 2016) – abandoned after one year
- Dr Fuencisla Delgado Calvo, University of Florence, Italy (2013 – 2015)
- Dr Francesco Barzagli, University of Florence, Italy (2013 - 2015)
- Dr Vincenzo Mirabello, University of Florence, Italy (2009 – 2012)
- Dr Barbara Di Credico, University of Florence, Italy (2007 – 2010)

**Ph. D. Thesis Advisor:**

- Dr. Giulio Bresciani, University of Pisa, Italy (2020)
- Dr. Raquel Puerta Oteo, University of Zaragoza, Spain (2017) (President of the PhD Jury)
- Dr Franco Scalambra, University of Almeria, Spain (2016) (President of the PhD Jury)
- Dr Maria Talavera Nevado, University of Vigo, Spain (2014) (President of the PhD Jury)
- Dr Hanna Dib, Laboratoire de Chimie de Coordination du CNRS, Université Paul Sabatier, Toulouse, France (2013)
- Dr Wejia Gan, Ecole Polytechnic Federal de Lausanne, EPFL Lausanne, Switzerland (2012)
- Dr Mar Rodríguez Rocha, University of Vigo, Spain (2011)
- Dr Beatriz Gonzalez del Castillo, University of La Laguna, Tenerife, Spain (2010)
- Dr Christiane A. Rotter, Ludwig Maximilians Universität, München, Germany (2009)
- Dr Adrian Chaplin, Ecole Polytechnic Federal de Lausanne, EPFL Lausanne, Switzerland (2007)
- Dr Maria del Carmen Rodriguez Martinez, University of Vigo, Spain (2006)
- Dr Sonia Mañas Carpio, University of Almería, Spain (2003)
- Dr Vanessa Landaeta Perera, Instituto Venezolano de Investigaciones Cientificas, Caracas, Venezuela (2003) (deputy member)

**Ph. D. Thesis External Advisor:**

- Dr Döherte Mellmann, Leibniz-Institut für Katalyse e.V. an der Universität Rostock, Germany (2014)
- Dr Ryan James Gilbert-Wilson, The University of New South Wales, Australia (2012)
- Dr Maria Isabel Bartolomé Ramos, University of Zaragoza, Spain (2010)
- Dr José María Muñoz Molina, University of Huelva, Spain (2010)
- Dr Serin L. Dabb, The University of New South Wales, Sydney, Australia (2008)
- Dr María Dolores Gálvez López, University of Murcia, Spain (2005)
- Dr Joaquín Andrés López Serrano, University of Murcia, Spain (2003)
- Dr Jelena Tamuliene, ITPA, Vilnius, Lithuania (2000)
- Dr Graham Purches, University of Sydney, Australia (1999)

**Thesis Supervisor:**

- Mr Matteo Vanni, (Pisa, Italy), Tesi di laurea Magistrale, University of Pisa (2016/2017)
- Mr Cesar Alejandro Urbina, Universidad Simon Bolivar, Caracas, Venezuela (2008)
- Miss Anita Castellucci, University of Ferrara, Italy (2004)
- Miss Chiara Ciardi, University of Florence, Italy (2002)
- Miss Elisabetta Guidoboni, University of Ferrara, Italy (1998)
- Mr Luca Chiti, University of Florence, Italy (1987)
- Mr Giovanni Baldi, University of Florence, Italy (1985)

**Fixed -Term Research Assistant (*Ricercatore a tempo determinato*)**

- Dr Gabriele Manca (Firenze, Italy), RTD grant on theoretical modelling of phosphorene reactivity, (2016-2019); 41 months.
- Dr Manuel Serrano Ruiz, (Almeria, Spain), RTD grant on phosphorene chemistry 2016-2019); 41 months.

**Post-Doctoral Grant Supervisor:**

- Dr Lapo Luconi (Firenze, Italy), research grant on “*Chemical hydrogen storage through ammoniaborane (AB): synthesis of ab dehydrogenation catalysts*”, CNR – RFBR (Russian Foundation for Basic Research) agreement (2016 – 2017), 12 months.
- Dr Stefano Todisco (Bari, Italy), research grant on “*Chemical hydrogen storage through ammoniaborane (AB): synthesis of ab dehydrogenation catalysts*”, CNR – RFBR (Russian Foundation for Basic Research) agreement (2015 – 2016), 12 months.
- Dr Gabriele Manca (Firenze, Italy), research grant on theoretical modelling of phosphorene reactivity, (2015; 6 months)
- Dr Manuel Serrano Ruiz, (Almeria, Spain), postdoctoral research grant on phosphorene chemistry (2014 – 2016; 24 months)
- Dr Gabriele Manca (Firenze, Italy), FIRENZE HYDROLAB-2: research grant on H-storage materials, (2013 - 2014; 12 months)
- Dr Rafal Grubba (Gdansk University of Technology, Gdansk, Poland), COST Chemistry Action CM0802 PHOSCINET (2012; 1 month)
- Dr Aleksander Khalsin (INEOS RAS, Moscow), European Community, MARIE CURIE INTERNATIONAL INCOMING FELLOWSHIPS (IIF) project FP7-PEOPLE-IIF-2008-236423 “*New modular self-assembled homogeneous catalysts for asymmetric synthesis in water*” (MODUCAT) (2010 – 2012; 24 months)
- Dr Barbara Di Credico (Firenze, Italy), FIRENZE HYDROLAB: research grant on H-storage materials, (2010 - 2011; 12 months)
- Dr Simone Alidori (ETH, Zürich, Switzerland), COST Chemistry Action CM0802 PHOSCINET (2009; 1 month)
- Dr Cristina Tiozzo (Firenze, Italy), GDRI, “*Catalyse Homogène pour le Développement Durable (CH2D)*” CNR/CNRS agreement (2009, 6 months)
- Dr Dmitry Yakhvarov (IOPC – RAS, Arbuzov Institute of Organic and Physical Chemistry, Kazan, Russia), CNR/RAS bilateral agreement (2008, 1 month)
- Dr Maria Caporali (Firenze, Italy), REGIONE TOSCANA, (2007 – 2008; 14 months)
- Dr Mikael Erlandsson (Stockholm University, Stockholm, Sweden), European Community, MARIE CURIE RESEARCH TRAINING NETWORK project MRTN-CT-2003-503864, “*Transition Metal Chemistry and Catalysis in Aqueous Media*” (AQUACHEM) (2007; 5 months)
- Dr Ambroz Almasy (University of Debrecen, Hungary), European Community, MARIE CURIE RESEARCH TRAINING NETWORK project MRTN-CT-2003-503864, “*Transition Metal Chemistry and Catalysis in Aqueous Media*” (AQUACHEM) (2007; 1 month)
- Dr Dmitry Yakhvarov (IOPC - RAS, Arbuzov Institute of Organic and Physical Chemistry, Kazan, Russia), THERMPHOS International, Vlissingen, The Netherlands, (2006; 2 months)
- Dr Mikael Erlandsson (Stockholm University, Stockholm, Sweden), “Stiftelsen Bengt Lundqvists Minne” Foundation, Stockholm, Sweden (2006 – 2007; 12 months).
- Dr Raluca Malacea (LCC-CNRS, Toulouse, France) European Community, RESEARCH TRAINING NETWORK project HPRN-CT-2002-00176 “*New Chemistry and Catalysis with Hydride Compounds*” (HYDROCHEM) (2006; 3 months).
- Dr Maria Caporali (Firenze, Italy), THERMPHOS International, Vlissingen, The Netherlands, (2006 – 2007, 2008 – 2011; 53 months)
- Dr Sylvain Bosquain (Caen, France), FIRENZE HYDROLAB: research grant on H-storage materials, (2006; 2 months)
- Dr Andrea Rossin (Torino, Italy), FIRENZE HYDROLAB: research grant on H-storage materials, (2005 – 2009; 48 months)
- Dr Markus Ehses (Saarbrücken, Germany): research grant from the DFG-CNR bilateral collaboration, Deutsche Forschungsgemeinschaft DFG, (DFG no. 418 ITA 111/2/05 - Bonn, Germany) “*Main Group Element Functionalisation of Phosphorus in the Co-ordination Sphere of Transition Metal Complexes*”, (2005, 1 month)
- Dr Evgenii Gutsul (INEOS - RAS, Moscow, Russia), INTAS YS Call 2004, Brussels, Belgium (2005; 6 months. 2006; 2 months)
- Dr Erwan Le Roux (Lyon, France), European Community, RESEARCH TRAINING NETWORK project HPRN-CT-2002-00176 “*New Chemistry and Catalysis with Hydride Compounds*” (HYDROCHEM) (2005 – 2006; 12 months)
- Dr Dina N. Akbayeva (Almaty, Kazakhstan), THERMPHOS International, Vlissingen, The Netherlands, (2004 – 2005; 12 months)

- Dr Vanessa Landaeta Perera (IVIC, Caracas, Venezuela), European Community, MARIE CURIE RESEARCH TRAINING NETWORK project MRTN-CT-2003-503864, “*Transition Metal Chemistry and Catalysis in Aqueous Media*” (AQUACHEM) (2004 – 2005; 12 months)
- Dr Sonia Mañas Carpio (Almeria, Spain) “Ministerio de Ciencia y Tecnología”, Madrid, Spain (2004 – 2005; 12 months)
- Dr Dmitry Yakvharov (IOPC - RAS, Arbuzov Institute of Organic and Physical Chemistry, Kazan, Russia), INTAS YS Call 2003, Brussels, Belgium (2004; 5 months. 2005; 3 months)
- Dr Sylvain Bosquain (Caen, France), European Community, RESEARCH TRAINING NETWORK project HPRN-CT-2002-00176 “*New Chemistry and Catalysis with Hydride Compounds*” (HYDROCHEM) (2004 – 2006; 24 months)
- Dr Sandra Gomez Bolaño (Vigo, Spain), Xunta de Galicia, Vigo, Spain (2003 – 2004; 12 months)
- Dr Dina N. Akbayeva (Almaty, Kazakhstan), CNR-NATO Outreach fellowships 219.34 (2003 – 2004; 6 months)
- Dr Andrew D. Phillips (Toronto, Canada), European Community, RESEARCH TRAINING NETWORK project HPRN-CT-2002-00176 “*New Chemistry and Catalysis with Hydride Compounds*” (HYDROCHEM) (2003 – 2004; 12 months)
- Dr Dina N. Akbayeva (Almaty, Kazakhstan), BASF AG, Ludwigshafen, Germany (2001 and 2002; 24 months)
- Dr Asunción Muñoz (Burgos, Spain), “Universidad de Burgos”, Burgos, Spain (2002; 2 months)
- Dr Pablo Luis Lorenzo (University of La Laguna, Spain), “Gobierno Autonomo de Canarias”, Tenerife, Spain (2001; 2 months)
- Dr Natalia V. Belkova, (INEOS - RAS, Moscow, Russia) INTAS, Brussels, Belgium (2000; 2 months)
- Dr Isaac de los Rios (Cadiz, Spain), “Ministerio de Ciencia y Tecnología”, Madrid, Spain (1999 – 2000 and 2000 – 2001; 24 months)

#### Doctoral grants supervisor:

- Mr Mark Bispinghoff (ETHZ, Zürich, Switzerland), European Community, INTEGRATED TRAINING NETWORK project RFP7-PEOPLE-2012-ITN - 317404 “*A European Training Network for Sustainable Phosphorus Chemistry* (SUSPHOS)” (2014; 1.0 month).
- Mr Sebastian Heinel (Regensburg, Germany), COST Chemistry Action CM0802 PHOSCINET (2013; 1 month)
- Mr Francesco Barzagli (Florence, Italy), PhD from the University of Florence: research grant on carbon dioxide capture by non-aqueous solution of amines (2013 – 2015)
- Mr Vincenzo Mirabello (Florence, Italy), PhD from the University of Florence: research grant on white phosphorus activation (2009 – 2011, 36 months)
- Miss Barbara Di Credico (Florence, Italy), FIRENZE HYDROLAB: research grant on H-storage materials, (2007 – 2009, 24 months)
- Miss Chiara Dinoi (University of Toulouse, France) COST-D29 Action (2006; 1 month)
- Mr Rafael Huirache Acuña (Centro de Investigación en Materiales Avanzados, S.C.; Chihuahua, México) CONACYT, Mexico (2006, 2 months)
- Ms Inocenta Mallqui Ayala (University of Almería, Spain) European Community, MARIE CURIE RESEARCH TRAINING NETWORK project MRTN-CT-2003-503864, “*Transition Metal Chemistry and Catalysis in Aqueous Media*” (AQUACHEM) (2006 – 2007; 18 months)
- Mr Raluca Malacea (LCC-CNRS, Toulouse, France) European Community, RESEARCH TRAINING NETWORK project HPRN-CT-2002-00176 “*New Chemistry and Catalysis with Hydride Compounds*” (HYDROCHEM) (2005; 1.5 month).
- Ms Inocenta Mallqui Ayala (University of Almería, Spain) European Community, MRTN-CT-2003-503864, AQUACHEM (2005; 1.5 month)
- Mr Paul Servin (LCC-CNRS, Toulouse, France) European Community, MRTN-CT-2003-503864, AQUACHEM (2005; 1 month)
- Mr Chaker Lidrissi (University of Almería, Spain) COST-D17 Action (2005; 1 month)
- Mr Julien Andriès (University of Rennes, France) Program “Galileo” (2003; 2 months)
- Miss Chiara Ciardi (University of Almería, Spain) (2003 - 2006; 12 months)
- Miss Rimane Aoun (University of Rennes, France) COST-D17 Action (2002; 3 months)
- Miss Sonia Mañas Carpio (University of Almería, Spain) (2001 and 2002; 4 months)
- Mr Mustapha Saoud (University of Almería, Spain) (2000, 2002 and 2005; 6 months)
- Miss Vanessa Landaeta Perera (IVIC, Caracas, Venezuela) (2000 and 2002; 10 months)

- Mr Guido Schmitt (University of Kaiserslautern, Germany) Deutschen Forschungsgemeinschaft: program Graduiertenkolleg (*“Phosphorus as a link between different chemical disciplines”*) (1999; 6 months)

**Other grants supervisor:**

- Mr Francesco Barzagli, (Florence, Italy), CNR, Department of Molecular Design; research grant on *“Removal of carbon dioxide by chemical methods based on the use of amines”* (2010/2012; 24 months)
- Mr Cesar Alejandro Urbina (Universidad Simon Bolivar, Caracas, Venezuela), Ministry of Foreign Affairs, Rome, Italy, (2008, 6 months)
- Mr Fabrizio Zanobini (Florence, Italy), FIRENZE HYDROLAB: research grant on H-storage materials, (2007, 8 months; renewed 2008/2011, 36 months)
- Miss Antonella Guerriero (Florence, Italy), FIRENZE HYDROLAB: research grant on H-storage materials, (2007, 4 months)

**Visiting scientists hosted (official grants):**

- Prof. **Chi Ming Che**, Dept. of Chemistry; The University of Hong Kong, **Hong Kong**, CNR Short Term Mobility program **2004**; Common project: *“Organic oxidation reactions promoted by transition metal oxo- and peroxo complexes”*
- Prof. **Antonio Romerosa**, Área de Química Inorgánica, Facultad de Ciencias Experimentales, Universidad de Almeria, Almeria, **Spain**; CNR Short Term Mobility program **2006**; Common project: *“Study of Water Soluble ruthenium carbenes useful for the development of metathesis in water and/or aqueous/biphasic systems”*
- Prof. **Jorge Bravo**, Departamento de Química Inorgánica, Universidad de Vigo, Vigo, **Spain**; CNR Short Term Mobility program **2008**; Common project: *“Ruthenium and Rhodium Compounds with Water-Soluble Phosphines. Applications on Biphasic Catalysis”*
- Prof. **Paul J. Dyson**, Ecole Polytechnique Fédérale de Lausanne (EPFL), Lausanne, **Switzerland**; CNR Short Term Mobility program **2009**; Common project: *“Catalysis in ionic liquids”*
- Prof. **Donald A. Krogstad**, on Sabbatical leave from Dept. of Chemistry, Concordia College, Moorhead, Minnesota, **USA**; Petroleum Research Fund, ACS and Fulbright Research Scholarships USA, **2009 – 2010**; Common project: *“The development and study of water-soluble bifunctional PX (X=N,O) ligands for green catalysis: Chemistry to protect the planet”*
- Prof. **Elena Shubina**, A. N. Nesmeyanov Institute of Organoelement Compounds – Russian Academy of Sciences (INEOS RAS), Moscow, **Russian Federation**; CNR Short Term Mobility program **2010**; Common Project: *“Chemical models for sustainable catalysis in water”*
- Prof. **Manfred Scheer**, Naturwissenschaftliche Fakultät IV, Chemie und Pharmazie, Universität Regensburg, Regensburg, **Germany**; Short Term Mobility program **2011**. Common Project: *“Organometallic arsenides and tioarsenides and their application to material sciences”*

Languages: Italian, English