

Curriculum vitae et studiorum

Claudio Bianchini

Education

Doctor in Chemistry, University of Firenze, November 1973 (110/110 cum laude)

PhD training with Prof. K. J. Klabunde at the Chemistry Dept. of the Kansas State University (Manhattan, USA), 1981.

Positions held

February 2001 at present managing director of the company ENERGY C.L.A.B. srl that operates in the field of technology transfer and scientific consultancy.

January 2002-February 2011 Director of the Institute of Chemistry of Organometallic Compounds, ICCOM-CNR, Firenze, Italy (ICCOM-CNR, www.iccom.cnr.it).

December 89-December 2001 Director of the Istituto per lo Studio della Stereochimica ed Energetica dei Composti di Coordinazione (ISSECC), CNR, Firenze, Italy

June 91-December 2009 Director of Research at ISSECC.

June 88-June 91 First-class Researcher at ISSECC.

July 77-June 88: Researcher at ISSECC (Director Prof. L. Sacconi).

May 76-July 77: Pharmaceutical Industries "A. Menarini", Via Sette Santi 3, Firenze. Assistant Director of the Chemical Laboratories.

July 75-May 76: University of Firenze, Department of Chemistry, bourse-holder.

April 74-July 75: Active duty, Lieutenant, Italian Army.

Scientific Activity, Recent Experience and Principal Research Projects

Author of more than **480** publications in qualified international journals or specialized books, **47** patents and more than **240** presentations in international chemical meetings. Plenary lecturer at all relevant congresses and workshops in inorganic and organometallic chemistry, catalysis and electrocatalysis.

Research fields: Homogeneous and heterogeneous catalysis; Electrocatalysts and membranes for fuel cells; Hydrogen production by reforming and electrolysis; Hydrodesulfurization and hydrodenitrogenation catalysis; Oligomerization, polymerization and copolymerization catalysis; Asymmetric synthesis and catalysis; New materials; solid-gas organometallic reactions, heterogenization of molecular catalysts, NMR and high-pressure NMR and IR spectroscopies.

Awards and Honors

- Fellowship of the Institute of Advanced Study of the Indiana University (USA) (1991).
- 1991 Award "Per un futuro intelligente" sponsored by the federation of the Italian chemical industries (Federchimica) (Milano, Italy).
- 1992 P. Van Geuns lecturer (University of Amsterdam, The Netherlands).
- 1998 Arthur D. Little Award in Inorganic Chemistry (MIT, USA)
- 2001 Seaborg Memorial Lecture (Berkeley University, USA).
- Recipient of the 2006 G.I.C.O. Senior Award (Interdivisional group of Organometallic Chemistry of the Italian Chemical Society), Parma 2006.
- Paolo Chini Memorial Lecture 2011.

Relevant Leading Scientific Positions and Professional Activities

- Vice-coordinator and Member of the Executive Committee of the Network of Excellence (NoE) "Integrated Design of Catalytic Nanomaterials for a Sustainable Production" (IDECAT), (2005-) contract NMP 3-CT-2005-011730 (<http://idecat.unime.it>).
- Member of the Board of Directors of the European Institute of Catalysis (ERIC) (2009-)
- Series Editor of «Catalysis by metal complexes», Springer (2008-)

- Scientific responsible for the project “Sustainable production of hydrogen by electrochemical and photobiological processes” EBH2 :Electro-bio-hydrogen”, Progetti integrati di ricerca por ob. 3 Toscana 2000/2006 action d4.
- Scientific responsible of a research Unit for the project “Concentrated photo-voltaics for CombinEd SolAR Energy system (CESARE)”, Regione Toscana-MAE-MIUR (2008-2010).
- Chairman of the COST Action D17 “Oligomers, polymers and copolymers via metal catalysis” (1999-2006), <http://www.unil.ch/cost/chem>.
- Responsible of a research unit within the project “Inorganic and hybrid nanosystems for the development and innovation of fuel cells” MIUR, FISR (2005-2009).
- Responsible of a research unit within the project “Nanostructured new materials and polymeric films for flexible packaging with reduced environmental impact and tailored properties towards chemical and physical agents”, MIUR, FIRB (NANOPACK) (2005-2008).
- Responsible for a research unit in the STREP project (6FP) “Designed Nanostructured Hybrid Polymers: Polymerisation Catalysis and Tecton Assembly” (NANOHYBRID) (2005-2007).
- Coordinator of the Research Training Network (EC) "Polymerization by single-site metal catalysis" (2000-2003).
- Chairman of the COST Action D17 “Oligomers, polymers and copolymers via metal catalysis” (1999-2003).
- Chairman of the “International Symposium on the Relations between Homogeneous and Heterogeneous Catalysis (ISHHC12), 18-22 Luglio 2005, Firenze, (www.ishc12.it) and of the International Symposia on Homogeneous Catalysis (ISHC XVI) Florence, July 2008.
- Visiting Scientist/Professor at the following Universities or research centers: University of Rennes (Rennes, France) (1983, 1986, 1989, 1992); Indiana University (Bloomington, USA) (1991); EXXON research center (Annandale, N. Y., USA) (1990); DuPont Experimental Station (Wilmington, USA) (1994); University Louis Pasteur, Strasbourg (France) (2008).
- External reviewer of the Energy Biosciences Institute (EBI), USA (2007-)
- Titular member of the Board of the IUPAC Inorganic Division (2004-2007)
- Member of the Editorial Board of the Open Inorganic Chemistry Journal (2007-) and of the Open Catalysis Journal (2008-)
- Member of the Editorial Boards of the European journal ChemSusChem and ChemCatChem (Wiley-VCH) (2007-)
- European Acquisition Editor of ChemTracts-Inorganic Chemistry (2006-)
- Member of the Editorial Board of the Journal of Molecular Catalysis A: Chemical (2003-).
- Member of the International Advisory Editorial Board of Dalton Transactions (Royal Society of Chemistry) (2000-2006).
- Member of the Advisory Boards of "Organometallics" (Journal of the American Chemical Society for Organometallic Chemistry) (1989-93); "Gazzetta Chimica Italiana" (1989-1997); New Journal of Chemistry (1997-2000).
- Member of the Institute for Advanced Study of the Indiana University (USA) (1991).
- Member of the Italian Chemical Society and of the American Chemical Society.
- IUPAC Fellow (2008-)