

CV of Claudio Pettinari

Personal Informations

Date of birth: **May 8th, 1964**. Place of birth: **Camerino**. Home Address: Via Farnese 24, 62032 Camerino (MC). E-mail: claudio.pettinari@unicam.it - prorettore@unicam.it . Work address: Chemical Sciences Department, Via S. Agostino 1, 62032 Camerino MC. Tel. office: +39 0737 402234. Mobile: +39 320 4381102. Fax: +39 0737 637345/402338. Fiscal Code: PTTCLD64E08B474O

Actual position

Full Professor of General and Inorganic Chemistry (**School of Pharmacy**), University of Camerino (MC).
Vice-Rector of University of Camerino from Nov 2011 to Oct 2017.

Training, Formation and Qualification, Responsibilities, Visiting professor.

- 1) **School-leaving certificate** (July 1983) Lyceum G. Varano of Camerino.
- 2) Five-Years **Degree in Chemistry**, obtained in February, 15th **1989** with marks **110/110 “cum laude”** at the University of Camerino (MC) by discussing a thesis entitled Copper(I) adducts of poly(pyrazolyl)alkanes, supervisor: Prof. Flavio Bonati).
- 3) **Research contract** with the University of Camerino from **June 7th to November 30th, 1989**. **School of NMR Spectroscopy** in Inorganic Chemistry at Santa Vittoria d'Alba (June-July 1990).
- 4) **Training period** at “Strutturistica Chimica” Institute CNR in Montelibretti Roma from June to July 1994 for learning of Advanced Techniques based on X-ray diffraction under the supervision of Dr. Francesco Caruso.
- 5) **Training periods at the Saragozza University (under the supervision of Prof. Luis Oro)** July-Sept 1999, July-September 2001, within the Framework of the Azione Integrata Project Camerino-Saragozza).
- 6) **Visiting Professor:** i) Programma Socrates-Erasmus-Tempus, Università di Galati-Romania –M. Rodica Dinica, November 1999; ii) TS Socrates Erasmus, University of Sevilla - Ernesto Carmona-, May 2002); iii) TS Socrates-Erasmus, University of Strasbourg – Pierre Braunstein, June-July 2005; iv) TS Socrates-Erasmus, University di Tolosa, November 2007; v) TS Socrates-Erasmus, Instituto Superior Tecnico, Lisboa, 2008; vi) Azione Integrata Project, University of Sevilla, April 2009; vii) ERASMUS, 2011, University of Granada; viii) University of Delaware and South-Carolina (2011). ix) TS Socrates-Erasmus, University of Paris VI – Giovanni Poli, May 2012; ix) TS Socrates-Erasmus, University of Barcellona – Patrick Gamez, May 2013; x) TS Socrates-Erasmus, University of Strasbourg – Pierre Braunstein, June-July 2014; xi) TS Socrates –Erasmus, University of Strasbourg June 2015; xii) Leiden, Elisabeth Bouwman, March 2016.
- 7) **Member of the Advisory Board of Centro de Quimica Estrutural** (Instituto Superior Tecnico, Univ. de Lisboa).
- 8) **Member of the Advisory Board for CNR-Departments evaluation (Chemistry Panel, 2014-2015)**
- 9) **Rector Delegate (International Relations)** from Jan, 2008 to Nov, 2011.
- 10) **Member of the Italian Mission (Technological Transfer TRIP) to Denver, Cleveland and Pittsburgh Universities and research centres (Nov 2009).**
- 11) **Rector Delegate for the coordination of Internationalization Activities** from Dec, 2005 to Nov, 2007
- 12) **Rector Referent for Internationalization of the University of Camerino from Jan 2008 to Nov 2011.**
- 13) **Responsible for the course in Pharmacy (Cl. 14S)** From Oct 1st , 2002 to Oct 31st, 2004 and from Nov 2009 to Nov 2011.
- 14) **Responsible for the course “Scientific Information on Drugs” (Cl. 24)** since Nov 1st, 2004.
- 15) **Member of CIPISF** (Italian Conference of the Presidents of courses: Scientific Information on Drugs) since Nov, 1st 2004.
- 16) **CIPISF President** (Italian Conference of the Presidents of courses: Scientific Information on Drugs) since June, 23rd 2007.
- 17) **Member of the council of G.I.C.O** (Interdivisional Group of Organometallic Chemistry) from Jan 2004 to Dec 2009.
- 18) **Member of the council of Inorganic Chemistry Division (DCI)** from Jan 2009 to Dec 2015.

- 19) **Director of the International School of Organometallic Chemistry (ISOC series)** in 2007, 2009, 2011, 2013, 2015 and 2017 (<http://d7.unicam.it/isoc/home>).
- 20) **Member of the Administration committee of UNIFABRIANO** from 2012 to 2015.
- 21) **Member of the scientific committee of the consortium UNIADRION** (consortium of Universities of Adriatic Sea).
- 22) **Secretariat of the Conference N-donor ligand in Catalysis, Organometallic and Coordination Chemistry.**
- 23) **Responsible for the Camerino CNR ICCOM unit**
(<http://www.iccom.cnr.it/index.php/it/istituto/sedi/camerino>).
- 24) **UNICAM Representative in INSTM.**
- 25) **Rector delegate for Marche SMART specialization strategy.**
- 26) **Member of the Marchigiani nel Mondo Committee from 2010-2015**
- 27) **Member of the International Cooperation Marche Region committee from 2010 to 2015.**

Research Activity

Prizes

- **Winner of the Bonati Prize in 1998** for Young Researcher in Organometallic Chemistry (under 35 years)
- **Winner of the “Nasini” Medal in 2004** for the best researcher active in Inorganic Chemistry under 40 years (Both prizes are National offered by SCI; Claudio Pettinari is actually the only Italian researcher winner of both prizes.
- **Doctor Honoris Causa in Chemistry from University of Galati** in Sept 2012.
- **Camerte dell’Anno 2013** (prize offered by the Camerino town).
- **Elected Member of the Academy of Science of Lisbon from 2015.**
- **Distinguished Fellow Award of the Centro de Quimica Estrutural of Lisbon.**

Research description

Claudio Pettinari is author and coauthor of **370 papers** (from Google Scholar h-index = 41, 8132 citations; from SCOPUS h-index = 40, 7126 citations, from Web of Science: h-index = 38, 6100 citations) in international peer-review journals (**336 reported in WEB of Science, see attached list; 345 documents** in SCOPUS), including at least **15** high-level invited reviews, and more than **200 communications** to international and national congresses and workshops. He is also author of **3 books, 4 national and 3 international patents**. The research activity of Claudio Pettinari has been mainly carried out in the field of coordination chemistry of N-, O and S-donor heterocycles, and/or of ancillary ligands as phosphines and diphosphines toward main groups, transition and rare earth metals and in the field of organometallic chemistry of Sn, Rh, Ir, Pd and Ru. In the last period much attention has been also directed to the preparation of new polyfunctional materials and MOFs by using secondary building units derived from previously developed molecular species as trimeric triangular copper(pyrazolate) synthons. The coordinating behaviour of the following classes of ligands has been exhaustively investigated by Claudio Pettinari: **pyrazoles**, triazoles, imidazoles, mercaptomidazoles, triorganophosphines, diphosphines, pyrazolones, bis(acyl)pyrazolones, poly(azolyl)metallates, poly(azolyl)alkanes, poly(azolyl)acetates, poly(azolyl)borates, oxazolines, chiral sulfoxides and imines, phenanthroline and pyridine derivatives. Also for this reasons, he is actually considered as one of the most experts at international level in the field of N-donor heterocyclic and β -diketonate ligands, and after Trofimenko dead, Claudio Pettinari is considered as a reference point for the **scorpionate ligands chemistry**. He also has developed a number of homo- and hetero-scorpionate molecules, useful ligands for the stabilization of metals in unusual oxidation state, or able to give unexpected coordination numbers, sometimes defined as “innocent ligands” suitable to block the metal coordinations sites, allowing the interaction of the metal center, toward fixed orientations, with small molecules relevant from the biological and industrial point of view.

Claudio Pettinari also has designed and synthesised new **β -diketones** able to induce higher stability and volatility to their metal complexes. Some of the species synthesised have been investigated jointly with Padova CNR researchers for their thermoelectric and luminescence properties.

Claudio Pettinari is also considered as one of the most experts in the field of tin(IV) and organotin(IV) derivatives and of their possible uses and applications. He has reported relevant studies on their solution behavior and solid-state structures as also on their uses as biological models in bioinorganic and bio-organometallic chemistry.

Thanks to the cooperation with Istituto Nazionale Tumori (Milan) he developed a number of metal complexes based on gold, silver and copper as acceptors and triorganophosphines as ligands, or based on titanium and ruthenium as acceptors and heterocyclic pyrazolones as ligands. These species possess biological activity coupled with water-solubility and **three** patents on these subjects have been deposited.

In the last four years the interest of Claudio Pettinari has moved to new frontiers and emerging research fields as those represented by **MOFs** (Metal-Organic Frameworks) and **PCPs** (porous coordination polymers). MOFs or PCPs are a class of crystalline microporous hybrid solids built of inorganic units (isolated cations, clusters, chains, or layers) connected through polytopic linkers (e.g. polycarboxylate), defining pores of various shape and size. The potential applications of these hybrid solids lie in the area of gas storage and separation, catalysis, drug release, and so on. Compared to their purely inorganic counterparts (zeolites), the great variety offered by the organic chemistry allows the systematic modification of their chemical composition, of their pores surface and thus finally of their properties (very large surface area, sorption selectivity). In a number of papers Claudio Pettinari has reported simple strategy to build cyclic assemblies based on the combination of protected metal ions and symmetric bent polyazolate bridging ligands. The resulting assemblies possess cavities and surfaces able to give specific interactions with biorelevant species and sometimes also exhibit catalytic activities. Claudio Pettinari has been National Coordinator for a PRIN project devoted to this field.

More recently he also developed new precursors (based on Cu, Ru, Rh and Ir) able to catalyze in mild conditions the oxidation of alkanes to alkenes and alkynes, alcohols and aldehydes, in collaboration with the main European Research Groups active in the field, or palladium complexes able to catalyze olefin/CO polymerization processes. He is also actually involved in regional projects concerning advanced materials for furnitures and shoes.

Financial Resources and Coordinated Projects

Claudio Pettinari is actually the scientific coordinator of a number of research and mobility projects. He also successfully concluded a number of research projects. The most important are here reported in detail:

1. **Scientific Coordinator** of the european research project **"INTAS CALL 2000"** (INTAS-00-469): **New mono and heterometallic azolates as new materials and new material sources** (scientific cooperation between Universities of Camerino, Saragozza, Mosca e Novosibirsk-registrazione n. 326). Scientific Coordinator also of the Research Unit of Camerino.
2. **Scientific Coordinator** of a research project **MIUR of Scientific Cooperation** between Universities (COOPERLINK 2000) with Russian Federation (University of Camerino-University Lomonossov of Mosca) (a.a. 2000: **Synthesis and Spectroscopic Characterization of new Rh complexes containing N- and/or O-donor ligands as potential catalysts toward hydroformylation and hydrogenation reactions**).
3. **Scientific Coordinator** of a research project **MIUR of Scientific Cooperation** between Universities (COOPERLINK 2001) with Russian Federation (University of Camerino-University Lomonossov of Mosca) (a.a. 2001: **Synthesis and Spectroscopic Characterization of new Rh complexes containing N- and/or O-donor ligands as potential catalysts toward hydroformylation and hydrogenation reactions**).
4. **Scientific coordinator** of a research project funded by **Fondazione CARIMA** (Cassa di Risparmio della Provincia di Macerata) (2001): **Synthesis of new derivatives of TiO₂ as precursors in osteointegration of dental implants through MOCVD technique**.

5. **National Coordinator and Scientific Coordinator for the project PRIN 06: Polyfunctional Metal-Organic Hybrid Materials based on Polyazotate Ligands** (2006038447)
6. **Scientific Coordinator for the project PRIN 2010: BNZ3F2 project DESCARTES** of the Italian Ministry of the University and Research.
7. **Scientific Coordinator** of a project of **Cooperation** between Universities (ASSCIR 06) with Russian Federation (University of Camerino-University Lomonossov of Mosca) (a.a. 2006: **Synthesis and Spectroscopic Characterization of new Rh complexes containing N- and/or O-donor ligands as potential catalysts toward hydroformylation and hydrogenation reactions**).
8. **Scientific coordinator of three projects financed by Dipharma Francis (2005-2007):**
 - a. **New metal catalysts of hydration reactions of double and triple bonds.**
 - b. **Original synthesis of pharmaceutically active compounds-I.**
 - c. **Original synthesis of pharmaceutically active compounds-II.**
9. **Scientific Coordinator** of a project of **Cooperation** between Universities (ASSCIR 07) with Russian Federation (University of Camerino-University Lomonossov of Mosca) (a.a. 2007: **Synthesis and Spectroscopic Characterization of new Rh complexes containing N- and/or O-donor ligands as potential catalysts toward hydroformylation and hydrogenation reactions**).
10. **Coordinator of 2 Projects Indian Young Researchers (MIUR 2007 and 2008):** Nanoscience and Nanotechnologies.
11. **Scientific Coordinator of an Azione Integrata Italia-Spagna project (2007):** New polyfunctional porous metal-organic coordination polymers containing N-donor heterocyclic ligands and carboxylate counter-ions.
12. **Scientific Coordinator of a MIUR project International Cooperation (MIUR-2007) (UNICAM, Univ- of Lomonosov and Galati):** **Advanced Qualification and training of young researchers in the Chemistry of Polyfunctional innovative materials and of New sources for Energy and Environment.**
13. **Scientific Coordinator** of a project of **Cooperation** between Universities (ASSCIR 08) with Russian Federation (University of Camerino-University Lomonossov of Mosca) (a.a. 2008: **Formation of young researchers in the field of synthesis of new gold coordination compounds as anticancer drugs and new coordination polymers**).
14. **Coordinator of a Project Indian Young Researchers (MIUR 2008):** Nanoscience and Nanotechnologies.
15. **Coordinator of two projects IP ERASMUS LLP (2008-2009) (ACAOC 2009 e 2010):** Advanced Catalysis and Organometallic Chemistry. Network formed by 9 University- Sevilla, Grenada, Lisbona, Wroclaw, Galati, Tolosa, Aberdeen, Ioannina, Camerino.
16. **Coordinator of two projects IP ERASMUS LLP (2011-2012) (EUCHEME 2012 e 2013):** European Chemists for Energy, Material and Environment. Network formed by 10 University- Sevilla, Grenada, Lisbona, Wroclaw, Galati, Tolosa, Aberdeen, Pau, Camerino, Frankfurt.
17. **Scientific Coordinator of the project “GIOVANI-TECNOLOGI” Regione Marche (2008):** Design and synthesis of a family of new thermoplastic polyurethane materials with new biodegradation and biocompatibility features coupled to conventional properties, for biomedical applications.
18. **Representative and Member for Italy in the management committee of the COST Action CM1302: European Network on Smart Inorganic Polymers (SIPs)**

19. **Scientific Coordinator of the project “POR MARCHE FESR 2007- 2013 - INTERVENTO 1.1.1.04.02 “PROMOZIONE DELLA RICERCA INDUSTRIALE E DELLO SVILUPPO SPERIMENTALE IN FILIERE TECNOLOGICO-PRODUTTIVE” Regione Marche (2012):** Development of new materials for New Generation Hood.
20. **Scientific Coordinator of the project “POR MARCHE FESR 2015 - INTERVENTO 1.1.1.04.02 “PROMOZIONE DELLA RICERCA INDUSTRIALE E DELLO SVILUPPO SPERIMENTALE IN FILIERE TECNOLOGICO-PRODUTTIVE” Regione Marche (2016):** GHEC Green Healty and Easy to clean Coffee-machine. Materiali/trattamenti/soluzioni progettuali-tecnologiche per innovativa coffee-machine professionale brass-less con caratteristiche uniche di salubrità tazzina, sostenibilità e autopulibilità.
21. **Scientific Coordinator for UNICAM of the ERASMUS KA2 project** Development of a joint study program between higher education and vocational education and training: International Master’s Degree for the FUrnITURE sector.
22. **Scientific Coordinator (Camerino unit) for the PRIN project 20154X9ATP_002 Towards a Sustainable Chemistry: Design of Innovative Metal-Ligand Systems for Catalysis and Energy Applications.**

In addition in the last ten years Claudio Pettinari has participated to a number of project coordinated by other researchers. In detail:

- a) Fondazione CARIMA project (1999): Synthesis of New Sn, Pt, and Au derivatives with anticancer activity. Scientific Coordinator prof. Augusto Cingolani;
- b) Fondazione CARIMA project (2003): Synthesis of New Sn, Pt, and Au derivatives with anticancer activity. Scientific Coordinator prof. Augusto Cingolani;
- c) Fondazione CARIMA project (2005): Synthesis of New Sn, Pt, and Au derivatives with anticancer activity. Scientific Coordinator prof. Augusto Cingolani;
- d) Azione Integrata Italia-Spagna (Camerino-Saragozza, 1999-2000): Scientific coordinator prof. Augusto Cingolani.
- e) Project “Grande Rilevanza” MAE-MIUR: Biopatagonia (2008): Scientific coordinator prof Riccardo Ceccarelli (Casaccia, ENEA).
- f) PRIN 2000 (MM3027791_001): Selective synthesis of organic carbamate, carbonate and carboxylate derivatives trough sequential activation of carbon dioxide and other substrates. Scientific coordinator. Prof. Michele Aresta.

Patents

- a) PETTINARI C, CARUSO F., CINGOLANI A. (1999). Procedure for preparing polynuclear derivatives of Ti(IV) with 4-acyl-5-pyrazolonate ligands for antitumor application. IT 99RM0633, 50%
- b) CARUSO F., PETTINARI C (2002). Preparation of gold compounds simultaneously coordinated by mono- and bidentate phosphines having antitumor activity. WO 2003008427, 50%
- c) Italian Patent RM 2013A000382, deposited 28 06 2013, Title: Complessi Acilpirazolonici di Argento(I) incorporati in polietilene ad alta densità o in cloruro di polivinile con potente attività antibatterica.
- g) Italian Patent MI2013A0001359, deposited 07 08 2013, Title: Complessi di Rutenio con attività Chemioterapica antitumorale.

Editorial Activity

Claudio Pettinari is

- a) member of the Editorial Board of **Organometallics** (ACS) from 2014 to 2016;
- b) member of the Editorial Board of **Inorganica Chimica Acta** (Elsevier) since 2010;
- c) member of the Editorial Board of **Bioinorganic Chemistry and Applications** (Hindawi) since 2008;

- d) member of the Editorial Advisory Board of the **Open Inorganic Chemistry** journal since 2007;
 - e) member of the Editorial Advisory Board of **Materials** (MDPI) since 2016;
 - f) member of the Editorial Advisory Board **Materials Science and Engineering (Hindawi)** since 2017;
 - g) member of the editorial Review Board of the **Scientific Journal International** since 2007;
 - h) member of the Editorial Board of THE ANNALS OF THE “*Dunarea de Jos*” UNIVERSITY OF GALATI, Fascicle II, Mathematics, Physics, Chemistry, Informatics since 2008.
- i. <http://www.hindawi.com/58640537.html>
 - ii. http://www.elsevier.com/wps/find/journaleditorialboard.cws_home/504086/editorialboard
 - iii. http://www.scientificjournals.org/editorial_board.htm
 - iv. <http://www.bentham.org/open/toicj/EBM.htm>
 - v. <http://pubs.acs.org/userimages/ContentEditor/1233861392520/orgnd7-eab.pdf>

In addition he has been

1. **Guest editor** of a special issue of Journal Organometallic Chemistry dedicated to the “EuChem Conference on Nitrogen Ligands in Organometallic and Chemistry” held in Camerino.
2. **Guest editor** of a special issue of Journal Organometallic Chemistry entitled “Recent Advances in Organotin Chemistry”.
3. **Guest editor** of a special issue of Inorganica Chimica Acta dedicated to prof. Trofimenko.
4. **Guest editor** of a special issue of J. Organometallic Chemistry dedicated to ISOC 2011: **TAILORED ORGANOMETALLIC COMPLEXES WITH IMPROVED FUNCTIONS**.
5. **Guest editor** of a special issue of J. Organometallic Chemistry dedicated to ISOC 2013
6. **Guest editor of a special issue of Eur. J. Inorg. Chem. Dedicated to Scorpionates 50 years later**
7. **Invited speaker at ACS National congress in New Orleans 2003**
8. **Invited Speaker (Plenary Lecture) at Athens 2005-FIGIPAS**
9. **Plenary Lecture at Milano 2007 (Italian Chemistry Division congress)**
10. **Plenary Memorial Lecture at Garmish 2008 (Nitrogen donor ligand international Meeting)**
11. **Plenary Lecture at Torino 2010 (workshop on MOF)**
12. **Plenary Lecture at Organometallic School (Bertinoro, 2010)**
13. **Key-note Lecture at EUCOMC Toulouse 2011**
14. **Plenary Lecture at ICOMC Lisbon 2012.**
15. **Invited Speaker at XXXIV Reunion Bienal Real Sociedad de Quimica Espanola, Santander 2013.**
16. **Plenary Lecture at Bioinorganic Chemistry School (Pisa, November 2014)**

International Missions(member of delegations)

- a) Lisbon 2007 (ERASMUS anniversary)
- b) Denver, Pittsburgh, Cleveland (US embassy Mission for Italian Universities-Technological Transfer Trip)
- c) Buenos Aires (Consortium of Italian Universities for Argentina, CUIA delegation 2010)
- d) Buenos Aires (CUIA delegation 2011)
- e) Buenos Aires (CUIA delegation 2012)
- f) Buenos Aires (CUIA delegation 2013)
- g) Buenos Aires (CUIA delegation 2015)
- h) Pechino and Jinan (Regione Marche delegation)
- i) Porto Alegre (luglio 2013-COSMOB-Regione Marche: Lecture at SEBRAE)
- j) Florianopolis, Santa Caterina, Joao Pessoa (novembre 2013 COSMOB-Regione Marche: Lecture at SEBRAE)
- k) Florianopolis (March 2014, regione MARCHE-COSMOB)
- l) Brasilia (November 2014, regione Marche-COSMOB Plenary Lecture at SEBRAE meeting)
- m) Pechino- Jinan (Regione Marche October 2014)
- n) Moscow (Regione Marche March 2014)
- o) Pechino – Jinan - Qingdao –Zibo – Changsha (Regione Marche, Apr 2016)
- p) Teheran – Mazandaran (Regione Marche, Jul. 2016)

Scientific Congresses and Workshop Organization

- a) Member of the Organizing committee of CO.GI.CO '92, 1st Congress of the Interdivisional Group of Organometallic Chemistry, September 1992, Camerino.
- b) Member of Organizing Committee of XIII T.U.M (Tosco-Umbro-Marchigiana) held in Camerino from 12 to 13 may 1994.
- c) Member of the Organizing Committee of the the seven editions of ISOC (1997-2009) (International School of Organometallic Chemistry)
- d) **Chairman** of the last two editions of ISOC (2011, 2013).
- e) **Chairman** of the Organizing Committee of the 3rd EUCHEM Conference on Nitrogen Ligands in Organometallic Chemistry, Sept 8-12, 2004, Camerino.
- f) Member of the Scientific committee of the 4th EUCHEM Conference on Nitrogen Ligands in Organometallic Chemistry, Catalysis and Coordination Chemistry, Aug 25-28, 2008, Garmisch.
- g) Member of the Scientific committee of the 5th EUCHEM Conference on Nitrogen Ligands in Organometallic Chemistry, Catalysis and Coordination Chemistry, Set 4-8, 2011, Granada.
- h) Member of the Scientific committee of the 6th EUCHEM Conference on Nitrogen Ligands in Organometallic Chemistry, Catalysis and Coordination Chemistry, 2015, Beaune, France
- i) Member of the Scientific committee of CO.GI.CO 2004 (Cetraro), 2006 (Parma) and 2008 (Perugia), respectively, 6th , 7th and 8th Congress of the Interdivisional Group of Organometallic Chemistry.
- j) Chairman of the Organizing and Scientific Committee of the 1st International Workshop on New Hybrid Metal Organic Materials, Jan 16-18, 2009, Camerino.
- k) Member of the Scientific Committee of IX Symposium of Colloids and Surface Chemistry held in Galati (Romania, May 2008).
- l) Member of the Scientific committee of XXXVIII Congresso Nazionale della Divisione di Chimica Inorganica, 13-16 Sept 2010 (Trieste).
- m) Member of Scientific Committee of the Scuola Nazionale di Chimica Organometallica per dottorandi, 23-27 maggio 2010 Bertinoro (BO)
- n) Member of Scientific Committee of the Scuola Nazionale di Chimica Bioinorganica per dottorandi, 3-6 luglio 2011 Siena.
- o) Workshops Organisation in Buenos Aires (2011 and 2012): Functional Coordination Polymers.

Scientific Collaborations

Claudio Pettinari has collaborated and actually collaborates with many research groups from different national and international Universities and Research institutes.

1. Prof. Armando Pombeiro (Università di Lisbona)
2. Prof. Sergei I. Troyanov e A. Drodzov (Università Lomonossov di Mosca).
3. Prof. Luis Oro (Univ. of Zaragoza, Spain)
4. Dr. Franco Caruso, Dr. Riccardo Spagna, Dr.ssa Clara Marciante, Dr. Alberto Cassetta (CNR).
5. Prof.ssa Bruna Bovio (Università di Pavia).
6. Prof. Marcello Colapietro (Università la Sapienza, Roma).
7. Prof. ssa Miriam Rossi (Dep. of Chemistry, Vassar College, New York, USA).
8. Prof. ssa Eleonora Rivarola (Università di Palermo).
9. Dr. Marcello Crucianelli (Università dell'Aquila).
10. Dr. Carla Carfagna (Università di Urbino).
11. Dr. Andrea Mele (Politecnico di Milano).
12. Prof. Qingshan Li (Dipartimento di Scienze Farmaceutiche, Shanxi Medical Univerisity, R. P. Cinese)
13. Dr. ssa Rodica Dinica (Università di Galati, Romania)

14. Dr. Giovanni Battiston (area CNR-Padova).
15. Prof. Alexander Voloshin (UFA, Institute of Organic Chemistry, Ufa, Russia)
16. Dr. Gajdane Schrantz Krisztina (University of Szeged, Ungheria)
17. Prof. Luciano Pandolfo (Università di Padova)
18. Prof. Pietro Tagliatesta (Università di Tor Vergata Roma)
19. Prof. Magda Monari (Università di Bologna)
20. Dr. John Hanna (ANSTO Facilities, NMR Division, Australia)
21. Dr. S. Trofimenko (Du Pont, University of Delaware)
22. Prof. Ernesto Carmona (Università di Siviglia)
23. Prof. Dan Reger (University of South-Carolina)
24. Prof. Daniel Rabinovich (University of North-Carolina at Charlotte)
25. Prof. Norberto Masciocchi, Prof. A. Sironi (Università dell'Insubria + Uni Milano)
26. Prof. Daniela Pucci e Prof. Alessandra Crispini (Università della Calabria)
27. Prof. Eleuterio Alvarez (Univ. Sevilla)
28. Prof. Francesco Fanizzi (Università di Lecce)
29. Prof. Roberto Gobetto (Università di Torino)
30. Proff. Allan H. White and B. W. Skelton (University of Western Australia, Perth).
31. Prof. Alceo Macchioni (Università di Perugia)
32. Prof. Susumu Kitagawa (University of Tokio)
33. Dr. Maurizio Peruzzini (CNR Firenze)
34. Dr. Jack Harrowfield (ISIS – Strasbourg)
35. Prof. Konstantin Domasevitch (University of Kiev)
36. Dr. Stefano Stagni (Università di Bologna)
37. Dr. F. De Angelis (CNR Perugia)
38. Prof. Silvia Bordiga (Univ. Torino)
39. Prof. Graham Bowmaker (Auckland Univ)
40. Prof. Silvia Casassa (Torino University)
41. Prof. Luisa Martins (University of Lisbon)
42. Prof. Jeffrey Long (University of Berkeley)
43. Prof. V. Trofimenko (University of Delaware)
44. Prof. K. Domasevitch (university of Lviv)
45. Prof. Maurizio Peruzzini (CNR Firenze)
46. Prof. Tushar Basu Baul (Shillong University)
- 46 Prof. Tabassum Sartaj (Aligar Muslim University)
47. Prof. Cristian Serre (University of Versailles)
48. Dr. Andrei Potapov (Tomsk Polytechnic University)
49. Prof. Simona Galli (University of Insubria)
50. Franck Edelmann (Magdeburg University)
51. Paul Dyson (EPFL, CH)

Teaching Activity

Claudio Pettinari in the academic years 1992-93, 1993-94, 1994-95 and 1995-96 did tutorship in theoretical exercitations within the following courses:

- General and Inorganic Chemistry (Degree in Pharmacy).
- General and Inorganic Chemistry-I (Degree in Chemistry).
- General and Inorganic Chemistry-II (Degree in Chemistry).

Previous Teachings

Claudio Pettinari has been regular teacher of the following courses:

1. **General and Inorganic Chemistry** (Degree in Scientific Information on Drugs) in the academic years: 1996-1997, 1997-1998, 1998-1999, 1999-2000, 2000-2001.
2. **Inorganic Chemistry-II** (Degree in Chemistry) in the academic years: 1996-1997, 1997-1998, 1998-1999, 1999-2000, 2000-2001, 2001-2002, 2002-2003.
3. **Advanced Inorganic Chemistry** (Degree in Chemistry) in the academic year 1996-1997.

4. **Mathematics and Physics** (Physics Unit) (Degree in Scientific Information on Drugs) in the academic years 1998-1999 and 1999-2000.
5. **Mechanisms of Reaction in Inorganic Chemistry** (Degree in Chemistry) in the academic years: 1999-2000, 2000-2001, 2001-2002, 2002-2003, 2003-2004.
6. **General and Inorganic Chemistry** (Degree in Pharmacy) in the academic years: 2000-2001, 2001-2002, 2002-2003, 2003-2004, 2004-2005, 2005-2006, 2006-2007, 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015.
7. **Didactics of Chemistry** (Degree in Chemistry) in the academic years 2003-2004, 2004-2005, 2005-2006, 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012.
8. **General and Inorganic Chemistry** (Degree in Scientific Information on Drugs and Toxicology) in the academic years 2001-2002, 2002-2003, 2003-2004, 2004-2005, 2005-2006, 2006-2007, 2007-2008, 2008-2009, 2009-2010.
9. **Advanced Inorganic Chemistry** (Specialistic Degree in Advanced Chemical Methodologies) in the academic years 2003-2004, 2004-2005, 2005-2006, 2006-2007, and 2007-2008.
10. **Mechanisms of Reaction in Inorganic Chemistry** (Specialistic Degree in Advanced Chemical Methodologies) in the academic years 2003-2004, 2004-2005, 2005-2006, 2006-2007, 2007-2008.
11. **General and Inorganic Chemistry** (Degree in Biotechnology) in the academic year 2006-2007.
12. **Advanced Didactics of Chemistry** (Interuniversity School of Specialization for teaching in School, Natural Sciences Curriculum) in the academic years 1999-2000, 2000-2001, 2001-2002, 2002-2003, 2003-2004, 2004-2005, 2005-2006.
13. **Inorganic Chemistry- I** (Degree in Chemistry) in the academic years 1996-1997 and 1997-1998.
14. **General and Inorganic Chemistry** (Degree in Paper Sciences and Technologies) in the academic years 1996-1997, 1997-1998, 1998-1999, 1999-2000, and 2000-2001.
15. **General and Inorganic Chemistry** (Science of Animal Production) in the academic year 2010-2011.
16. **Inorganic and Organometallic Biochemistry** (Specialistic Degree in Advanced Chemical Methodologies) in the academic years 2009-2010 and 2010-2011.
17. *La cultura dei materiali per l'innovazione* (Materials for innovation) in the IFTS course: **TECNICHE DI DISEGNO E PROGETTAZIONE INDUSTRIALE DESIGN CON MATERIALI ECO-COMPATIBILI NUOVE TECNOLOGIE E STAMPANTI 3D.**
18. Lectures: **Pericolosità dei prodotti in cemento-amianto o fibrocemento (5h) Sicurezza sul lavoro nei settori petrolifero e chimico (5h) Gestione rifiuti e protezione ambientale (5h), La sicurezza in ambiente sanitario (5h) in Diritto e processo penale della sicurezza sul lavoro**

Actual Teachings

- a) **General and Inorganic Chemistry** (Degree in Pharmacy): 12 CFU

Teaching Staff

Teaching Staff period at the Universities of Sevilla, Paris, Strasbourg, Lisbon, Galati and Toulouse during which time Claudio pettinari did lessons of Mechanisms of Reactions In Inorganic Chemistry and performed seminars on Advanced Inorganic Chemistry. Seminars in Paris, Barcellona, Saragozza, Sevilla, Strasbourg, Galati, Univ. Delaware, Univ. South Carolina.

Tutor of degree theses

Tutor of more than 130 degree thesis since 1994 till now and tutor of ten Ph.D thesis (six in the last three years).

Supervisors of Doctoral Thesis (in bold are indicated the concluded PhD courses)

- a) Domenico Martini
- b) Corrado Di Nicola
- c) Adele Cerquetella
- d) Jean Ngoune
- e) Aurel Tabacaru (XXV course)
- f) Ivan Timokhin (XXIV course)

- g) **Alessandro Marinelli (XXIII course)**
- h) **Serena Orbisaglia (XXV course)**
- i) **Jessica Palmucci (XVI course)**
- j) **Nertil Xhaferaj (XXVII course)**
- k) **Greta Veronica Badillo Pazmay (XXVII course)**
- l) **Francesca Condello (XXVII course) EUREKA Project (Azienda INFISSI DESIGN)**
- m) **Alessandra Sabatini (XXVIII course) EUREKA Project (Azienda TEUCO)**
- n) **Giovanni Tosi (XXVIII course) EUREKA Project (Azienda COSMOB)**
- o) Nello Mosca (XXIX course)
- p) Fabio Ciuffreda (XXIX course) EUREKA Project (Azienda COSMOB)
- q) Alessia Tombesi (XXX course) EUREKA Project (Azienda DIASEN)
- r) Francesco Balducci (XXXI course)

Master Organization:

He is actually member of the scientific committee for a Master on “Paper conservation and restoration” and Director of a Master on Advanced Materials for the fashion system (Brasilia-Camerino 2015). Claudio Pettinari has coordinated for his university the introduction and development of dual MASTERS degree courses with great relevance European universities for all scientific courses and specifically he coordinated the agreement between Instituto Superior Tecnico de Lisboa and UNICAM for Chemistry and Jilin University and UNICAM for Biotechnology.

Activity carried out as Internationalization delegate:

- About new 80 MoU signed between University of Camerino and other International Universities and Research Centres
- 4 Specific protocols signed between University of Camerino and Catamarca, Belgrano, Santafè and Lisboa for double degree courses certifications
- Increase of outgoing ERASMUS students number from 35 to 120 (2006-2016)
- Increase of incoming ERASMUS students number from 23 to 60 (2006-2016)
- 12 ERASMUS TS or ERASMUS+ KA2 projects approved.
- Increase of International students number (from 230 in 2006 to ca 700 in 2016)
- More than 240 students mobilities funded through PAESI TERZI, COPINT and double Degree Mobilities Actions
- More than 120 students mobility within ERASMUS trainership grants from 2014 to 2016
- 17 International Missions as member of official delegation + 25 international mission in Europe within ERASMUS/COST and analogous actions.
- Participation to 2 international projects funded by SEBRAE-Brasil

Other Activity

- PAPERWORLD Project funded by CARIFAC for research on Nanocellulose
- UNICAMONTAGNA project developed with Castelraimondo, Camerino and Matelica municipalities
- SHOEVALLEY project developed with entrepreneurs of Chienti Shoes District.
- Agreements with AICU, COOSS, MARCHE SOLIDALI, GUS + other 20 no-profit organizations for research and higher education projects.

Camerino, 11 aprile 2017

