PhD course “Hierarchically organized polymeric materials: synthesis by living/controlled polymerization and applications”

**CURRICUL VITAE**

***Rinaldo Poli***

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# Short CV

**Education**

* Laurea degree (magna cum laude), Chemistry, University of Pisa, Italy, April 1981.
* Ph.D. degree (magna cum laude), Chemistry, Scuola Normale Superiore, Pisa, Italy, September 1985.

**Professional Experience**

* Exchange Ph.D. student, Imperial College of Science and Technology, London, 1983–1984.
* Research Associate, Texas A&M University, College Station, 1985–1987.
* University of Maryland, College Park: Assistant Professor (1987–1992), Associate Professor (1992–1995), Professor (1995–1996), Associate Chair and Director of Graduate Studies (1995–1996).
* Université de Bourgogne, Dijon: Professor (PR2 1996–1999, PR1 1999–2005), Department Chairman (2001–2005).
* Ecole Nationale Supérieure des Ingénieurs en Arts Chimiques et Technologiques (ENSIACET): Professor (PR1 2005–2007, PRCE1 2007–2011, PRCE2, 2011-2024). Emeritus Professor since 2024.
* Adjunct Professor: University of Maryland (2008–2014).
* Visiting Professor: TU München (1993–1994), Tokyo Metropolitan University (1995), Inorganic Chemistry Laboratory Oxford (1998), Los Alamos National Laboratory (2001, 2002, 2006), Celal Bayar Üniversitesi, Turkey (2003), Uni-Heidelberg (2008), Leibniz Institut für Katalyse, Rostock (2009), Université du Quebec à Montréal (2010), Universiti Kebangsaan Malaysia, Bangi, Malaysia (2010), Osaka University (2012), UFMG, Belo Horizonte, Brazil (2016). Huazhong University of Science and Technology, Wuhan, China, (2018).
* Honorary Professor of the School of Chemistry, Chemical Engineering and Life Sciences of the Wuhan University of Technology, 2024-2027.

# Honors and Awards

* Giuseppe Stampacchia Award (Rome, 1983)
* Camille and Henry Dreyfus Foundation Distinguished New Faculty (1987–92)
* Presidential Young Investigator (1990–95)
* Exxon Education Foundation Award (1991)
* Alfred P. Sloan Research Fellow (1992–94)
* Medaglia Nasini (1992)
* Alexander von Humbolt Fellow (Forschungsstipendium, 1993)
* Senior member of the “Institut Universitaire de France” (2007)
* Alexander von Humbolt Fellow (Wiedereinladung, 2008)
* Senior Award of the “Interdivisional Group of Organometallic Chemistry” of the Italian Chemical Society (2010)
* Senior Award of the “Division of Coordination Chemistry” of the French Chemical Society (2010)
* Franco-Brazilian chair, French Embassy in Brazil (2016)
* ChemPubSoc Fellow (promotion of 2016/17)
* Elected member of the European Academy of Sciences (2018)
* Paolo Chini Memorial Lecture, delivered by the Italian Chemical Society (2019)
* Jaffé prize of the " French Institute Foundation" (2020)
* "Berthelot" Medal of the French Academy of Sciences (2020)
* “Membre Distingué” (Fellow) of the French Chemical Society (2020)
* Grand Prix “Achille Le Bel” of the French Chemical Society (2023)

# Bibliometric data

>450 publications in peer-reviewed international journals, 18 contributions to books and monographs, 2 books (ca. 14000 citations, H = 55), >120 invited talks at international conferences, symposia and schools, >240 invited extramural seminars in academic and industrial research institutions worldwide.

# Selection of the 10 most relevant publications and/or patents

1. E. Le Grognec, J. Claverie, R. Poli: “Radical Polymerization of Styrene controlled by Half-Sandwich Mo(III)/Mo(IV) Couples: all Basic Mechanisms are Possible”, *J. Am. Chem. Soc.*, **2001,** *123,* 9513-9524. [DOI: 10.1021/ja010998d](http://dx.doi.org/10.1021/ja010998d).
2. M. B. Gillies, K. Matyjaszewski, P.-O. Norrby, T. Pintauer, R. Poli, P. Richard: “A DFT Study of R-X Bond Dissociation Enthalpies of Relevance to the Initiation Process of Atom Transfer Radical Polymerization”, *Macromolecules*, **2003**, *36*, 8551-8559. [DOI: 10.1021/ma0351672](http://dx.doi.org/10.1021/ma0351672).
3. R. Poli: “Relationship between one-electron transition metal reactivity and radical polymerization processes”, *Angew. Chem., Int. Ed. Engl.*, **2006**, *45*, 5058–5070. [DOI: 10.1002/anie.200503785](http://dx.doi.org/10.1002/anie.200503785).
4. S. Maria, H. Kaneyoshi, K. Matyjaszewski, R. Poli: “Effect of Electron Donors on the Radical Polymerization of Vinyl Acetate Mediated by Co(acac)2: degenerative transfer versus reversible homolytic cleavage of an organocobalt(III) complex”, *Chem. Eur. J.*, **2007**, *13*, 2480-2492. [DOI: 10.1002/chem.200601457](http://dx.doi.org/10.1002/chem.200601457).
5. A. Debuigne, Y. Champouret, R. Jérôme, R. Poli, C. Detrembleur: “Mechanistic Insights into Cobalt Mediated Radical Polymerization (CMRP) of Vinyl Acetate via Cobalt(III) Adducts as Initiators”, *Chem. Eur. J.* **2008**, *14*, 4046–4059. [DOI: 10.1002/chem.200701867](http://dx.doi.org/10.1002/chem.200701867).
6. A. Debuigne, R. Poli, C. Jérôme,R. Jérôme, C. Detrembleur: “Overview of Cobalt-Mediated Radical Polymerization: Roots, State of the Art and Future Prospects”, *Prog. Polym. Sci.*, **2009**, *34*, 211-239. [DOI: 10.1016/j.progpolymsci.2008.11.003](http://dx.doi.org/10.1016/j.progpolymsci.2008.11.003).
7. R. Poli: “Radical coordination chemistry and its relevance to metal-mediated radical polymerization”*, Eur. J. Inorg. Chem.*, **2011**, 1513-1530**.** [DOI: 10.1002/ejic.201001364](http://dx.doi.org/10.1002/ejic.201001364).
8. R. Poli, L. E. N. Allan, M. P. Shaver: “Iron-Mediated Reversible Deactivation Radical Polymerisation”, *Prog. Polym. Sci.* **2014**, *39*, 1827–1845. [DOI: 10.1016/j.progpolymsci.2014.06.003](http://dx.doi.org/10.1016/j.progpolymsci.2014.06.003).
9. R. Poli: “New phenomena in organometallic-mediated radical polymerization (OMRP) and perspectives for control of less active monomers”, *Chem. Eur. J.* **2015**, *21*, 6988-7001. [DOI: 10.1002/chem.201500015](http://dx.doi.org/10.1002/chem.201500015).
10. T. G. Ribelli, M. Fantin, J.-C. Daran, K. F. Augustine, R. Poli, K. Matyjaszewski: “Synthesis and Characterization of the Most Active Copper ATRP Catalyst Based on Tris[(4-dimethylaminopyridyl)methyl]amine”, *J. Am. Chem. Soc.* **2018**, *140*, 1525–1534. [DOI: 10.1021/jacs.7b12180](http://dx.doi.org/10.1021/jacs.7b12180).