

Sandro Gambarotta

Date of birth:	July 3, 1950
Nationality:	Canadian
Position:	Professor, University of Ottawa (Canada)
Education:	1969 High School, Livorno (Italy) 1975 BSc University of Pisa (Italy) 1979 PhD under the supervision of Prof. C. Floriani, University of Pisa 1980 Postdoctoral position with Prof. H. Alper, University of Ottawa
Professional associations:	ACS Canadian Institute of Chemistry
Awards:	1995 Alcan Award
Current research interests:	Synthesis, reactivity, and characterization of early transition-metal complexes in low oxidation states and their applications in molecular activation by studying the processes related to energy conservation and environmental pollution, catalyst design for the degradation of obnoxious pollutants, and olefin polymerization by designing new catalysts and understanding the mechanism of polymerization. The long-term goal of this research, and the common thread between these different topics is to understand the factors which promote or disfavor these performances, such as the nature of the ligand, electronic configurations, and steric hindrance
Hobbies:	Cycling, carpentry, and baroque music



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The author presented on this page has recently published his **10th article** since 2000 in *Angewandte Chemie*:
"Chromium Catalysts Supported by a Nonspectator NPN Ligand: Isolation of Single-Component Chromium Polymerization Catalysts": K. Albahily, E. Koç, D. Al-Baldawi, D. Savard, S. Gambarotta, T. J. Burchell, R. Duchateau, *Angew. Chem.* **2008**, 120, 5900–5903; *Angew. Chem. Int. Ed.* **2008**, 47, 5816–5819.

The biggest challenge facing chemists is... being creative.

When I was eighteen I wanted to be... an astrophysicist.

The biggest problem that scientists face is... money, money, and money.

My biggest inspiration is... my granddaughter.

My first experiment was... an explosive reaction of sulfur with KClO_3 , which resulted in the police banging at the door (age of 16).

My biggest motivation is... certainly not money.

A good work day begins with... not opening the e-mail browser.

If I could be described as an animal it would be... a grizzly bear.

My worst habit is... trying to be funny in English.

My work is significant because... somebody wanted to cite it.

The most significant advance in chemistry of this century has been... something I wish I discovered.

The biggest problem that chemists face is... convincing the public that we are environmentally responsible.

My five top papers:

1. "Breaking the 1.80 Å Barrier of the Cr–Cr Multiple Bond Between Cr^{II} Atoms": S. Horvath, S. I. Gorelsky, S. Gambarotta, I. Korobkov, *Angew. Chem.* **2008**, 120, 10085–10088; *Angew. Chem. Int. Ed.* **2008**, 47, 9937–9940.
2. "Isolation of Single-Component Trimerization and Polymerization Chromium Catalysts: The Role of the Metal Oxidation State": A. Jabri, C. B. Mason, Y. Sim, S. Gambarotta, T. J. Burchell, R. Duchateau, *Angew. Chem.* **2008**, 120, 9863–9867; *Angew. Chem. Int. Ed.* **2008**, 47, 9717–9721.
3. "Single-Site, Single-Component Catalysts for Very High Molecular Weight Polyethylene: A Robust "Ready-To-Go" Vanadium π -Bonded Complex Without a Preformed V–C Bond": A. Jabri, I. Korobkov, S. Gambarotta, R. Duchateau, *Angew. Chem.* **2007**, 119, 6231–6234; *Angew. Chem. Int. Ed.* **2007**, 46, 6119–6122.
4. "The Question of the Cr Oxidation State in the $\{\text{Cr}(\text{SNS})\}$ Catalyst for Selective Ethylene Trimerization: An Unanticipated Re-Oxidation Pathway": C. Temple, A. Jabri, P. Crewdson, S. Gambarotta, I. Korobkov, *Angew. Chem.* **2006**, 118, 7208–7211; *Angew. Chem. Int. Ed.* **2006**, 45, 7050–7053.
5. "Role of the Metal Oxidation State in the SNS–Cr Catalyst for Ethylene Trimerization: Isolation of Di- and Trivalent Cationic Intermediates": A. Jabri, C. Temple, P. Crewdson, S. Gambarotta, I. Korobkov, R. Duchateau, *J. Am. Chem. Soc.* **2006**, 128, 9238–9247.

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