

Curriculum Vitae of Luigi Cavallo

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Biographic sketch

Luigi Cavallo earned his Ph.D. in Chemistry in 1991 at the University of Napoli (Italy) under the supervision of Paolo Corradini. He completed his education in theoretical chemistry at the University of Calgary (Canada) in the summers of 1992, 1995 and 1998 in the group directed by Tom Ziegler. He has been visiting scientist at various institutions. In the spring of 2000 at the University of Girona (Spain), in the summer 2001 at the University of Western Ontario (Canada), and finally in the spring 2002 at the -ISAS- International School for Advanced Studies of Trieste (Italy). In 1994 he joined the Department of Chemistry of the University of Naples as Assistant Professor of Macromolecular Chemistry. In 2002 he moved to the University of Salerno as Associate Professor of Industrial Chemistry. In 2011 he moved to the King Abdullah University of Science and Technology, where he serves as Professor of Chemical Sciences.

Education

July 1987 - Laurea in Chemistry, University of Naples, Summa cum Laude
March 1991 - PhD in Chemical Sciences – University of Naples

Employment history

Post-doc	University of Naples	05/1991
Assistant professor	University of Naples	11/1994
Associate professor	University of Salerno	04/2002
Associate professor	KAUST	09/2011
Professor	KAUST	07/2015

Visitor at other institutions

Jun-Sep 1992	University of Calgary
Jun-Sep 1995	University of Calgary
Jun-Sep 1998	University of Calgary
Feb-May 2000	University of Girona
Jul-Oct 2001	University of Western Ontario
May-Jul 2002	ISAS Trieste

Awards

- 1) 2002 - 12th Edition of the Prize "*Bright Future in Chemistry*", awarded by the Italian Association of Chemical Industries to young researchers.
- 2) 2015 – Ziegler-Natta Lectureship Award, by the German Chemical Society

Bibliometric data.

Prof. Cavallo matches the highest standard in research, with almost 500 papers published. More than 50 published in the Journal of the American Chemical Society, more than 20 in *Angewandte Chemie International Edition*, and more than 10 in Nature journals. He is author of 16 Highly Cited Papers in Chemistry. Prof. Cavallo has given almost 100 presentations, basically in all industrialized countries. Prof. Cavallo bibliometric data from the Web of Science, as of 30 January 2024, are summarized below:

Total publications:	573
Average citations number:	50
Total citations:	33234
h-index:	90

Areas of activity.

Understanding (and possibly solving) chemical problems using the armory of tools known as computational chemistry is the main activity of Prof. Cavallo. He is a world expert in the field of olefin polymerizations, olefin metathesis, N-heterocyclic carbenes, and photoredox transition metal catalysis. In the broadest meaning, his areas of interest range from clarifying structure/function relationships in organometallic compounds, to unraveling the mechanics of homogeneous and heterogeneous catalysts at work, to the development of molecular descriptors to reorganize catalysts space using machine learning tools. The molecular descriptors he has developed have become a standard in the characterization of organometallic complexes and have been also used to rationally design better performing catalysts. His current interests focus on contributing to improve chemical solutions to match the energy and environmental requests of a sustainable society.