

BIOGRAPHICAL NOTES

Born in Suzzara (Mantova) in 1966, studied chemistry at the University of Parma, where he obtained his B.Sc. (Laurea with summa cum laude) and Ph.D degrees in 1992 and 1996, respectively.

In 1999 he was nominated Assistant Professor of Organic Chemistry and he joined the *Dipartimento di Chimica Organica e Industriale* of the University of Parma.

In 2001 he was Visiting Scientist at the *Centre d'Elaboration de Matériaux et d'Etudes Structurales (CEMES)* of the CNRS of Toulouse (France).

In 2010 he was nominated Associate Professor of Organic Chemistry and in 2012 he joined the *Dipartimento di Chimica* of the University of Parma

In 2016 he joined the *Dipartimento di Scienze Chimiche, della Vita e della Sostenibilità Ambientale*, where is currently doing his research and teaching activities.

TEACHING ACTIVITY

- From 2001 to 2006 – course of *Bibliographic Research Methods* (2 ECTS) for the BSc degree in Chemistry.
- From 2001 to 2004 – course of *Environmental Organic Chemistry* (4 ECTS) for the BSc degree in Packaging Technology and Science.
- From 2005 to 2009 – course of *Organic Chemistry II* (4 ECTS) for the BSc degree in Science and Technology of Packaging, and course of *Instrumental Laboratory of Organic Chemistry* (4 ECTS) for the M.Sc. degree in Chemistry.
- From 2009 to 2010 – course of *Synthesis and Techniques in Organic Chemistry* (3 ECTS) for the M.Sc. degree in Chemistry.
- From 2009 to 2011 – course of *Supramolecular Chemistry* (6 ECTS) for the M.Sc. degree in Materials Sciences.
- From 2010 to 2014 – course of *Laboratory of Organic Chemistry II* (6 ECTS) for the BSc degree in Chemistry
- Since 2005 is teaching the course of *Physical Methods in Organic Chemistry* (6 ECTS) for the M.Sc. degree in Chemistry.
- Since 2014 is teaching the course of *Advanced Organic Chemistry* (6 ECTS) for the M.Sc. degree in Industrial Chemistry.
- Since 2016 is teaching the course of *Organic Chemistry of Materials* (3 ECTS) for the M.Sc. degree in Chemistry.

SCIENTIFIC ACTIVITY (SHORT ACCOUNT)

His present research interests include supramolecular chemistry, molecular recognition and nanosciences. At the beginning of his academic research career (1999) he worked on the synthesis and functionalization of a class of synthetic macrocyclic receptors called “calixarenes”. These compounds were designed, prepared and studied for the selective recognition of ion pairs and neutral organic species in low polar solvents. Later, he focused his research interests on the synthesis and study of the properties of a series of calix[6]arene derivatives which were

designed and employed as active components of “molecular machines” prototypes based on pseudorotaxanes and rotaxanes species. In the last years, these later achievements have been transferred to the preparation of new organic-inorganic functional hybrid materials. In particular, through the preparation of organic monolayers based on calixarene receptors which were used as active components of 2D and 3D self-assembled monolayers on gold, copper and silicon. His entire academic career has been documented by 83 scientific papers (with four book chapters) published on peer reviewed international journals (ISI).

BIBLIOMETRICS

Published papers on ISI Journals: 83

Published papers on non-ISI Journals: 2

Books and book's chapters of international relevance: 4

Sum of the Times Cited 2572 (ISI); 2491 (SCOPUS)

Sum of Times Cited without self-citations: 2094 (SCOPUS)

h-index: 28 (ISI); 28 (SCOPUS)

h-index (without self-citations): 27 (SCOPUS)

PUBLICATIONS

(1) Arduini, A.; Pochini, A.; Sicuri, A. R.; Secchi, A.; Ungaro, R. Iodo- and Alkynylcalix[4]Arenes: Versatile Precursors for Host Synthesis. *Gazzetta Chimica Italiana* **1994**, *124* (3), 129–132.

(2) Arduini, A.; Cantoni, M.; Graviani, E.; Pochini, A.; Secchi, A.; Sicuri, A. R.; Ungaro, R.; Vincenti, M. Gas-Phase Complexation of Neutral Molecules by Upper Rim Bridged Calix[4]Arenes. *Tetrahedron* **1995**, *51* (2), 599–606.

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(4) Arduini, A.; Pochini, A.; Secchi, A.; Ungaro, R. A New Macrocavitand from the Head to Tail Four-Point Capping of p-Tert-Butylcalix[8]Arene with a Calix[4]Arene. *Journal of the Chemical Society, Chemical Communications* **1995**, No. 8, 879–880.

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(6) Arduini, A.; McGregor, W. M.; Paganuzzi, D.; Pochini, A.; Secchi, A.; Ugozzoli, F.; Ungaro, R. Rigid Cone Calix[4]Arenes as π -Donor Systems: Complexation of Organic Molecules and Ammonium Ions in Organic Media. *Journal of the Chemical Society, Perkin Transactions 2* **1996**, *5* (5), 839–846. <https://doi.org/10.1039/P29960000839>.

(7) Arduini, A.; McGregor, W. M.; Pochini, A.; Secchi, A.; Ugozzoli, F.; Ungaro, R. New Upper Rim Pyridine-Bridged Calix[4]Arenes: Synthesis and Complexation Properties toward Neutral Molecules and Ammonium Ions in Organic Media. *The Journal of Organic Chemistry* **1996**, *61* (20), 6881–6887. <https://doi.org/10.1021/jo960937b>.

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- (9) Arduini, A.; Domiano, L.; Oglioni, L.; Pochini, A.; Secchi, A.; Ungaro, R. Self-Assembled Hydrogen-Bonded Molecular Cages of Calix[6]Arenetricarboxylic Acid Derivatives. *The Journal of Organic Chemistry* **1997**, *62* (22), 7866–7868. <https://doi.org/10.1021/jo9704826>.
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Axle Components. *Journal of the American Chemical Society* **2013**, *135* (26), 9924–9930.

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