Alessandro CASNATI
Full Professor of Organic Chemistry
Dip.to di Scienze Chimiche, della Vita e della Sostenibilità Ambientale (SCVSA), Università di Parma, Italy

1987 Degrees at Parma University cum Laude
1990 On leave in Prof. D.N. Reinhoudt laboratories at Twente University (NL)
1992 PhD in Chemical Science: tutor Prof. R. Ungaro
1992 Post-doc at Parma University, EU Project "Treatment and Disposal of Radioactive Waste"
1994 University researcher
1998 Associate Professor in Organic Chemistry
2015- Full Professor of Organic Chemistry, Department of Chemistry, University of Parma
2015- Head of the School of Chemistry
2017- Vice-director of the Department of Chemistry, Life Sciences and Environmental Sustainability

---

RESEARCH ACTIVITY

- Novel synthesis and regio- and stereoselective functionalisations of calixarene macrocycles and study of their structural properties
- Calixarene receptors for alkali, alkaline-earth and lanthanide ion as sensor elements and in supramolecular devices
- Receptors for organic and inorganic anions
- Supramolecular catalysts for hydrolysis and solvolysis reactions on carboxylic and phosphoric esters
- Polyglycosylated multivalent ligands as inhibitors of plant, bacterial and human galectins and for site-specific drug-delivery
- Surfactants having macrocyclic structure for cell transfection and gene-therapy
- Ligands for the selective extraction of radionuclides (caesium, strontium and actinides) and their recovery from highly acidic and radioactive waste
- New generation additives for fuels and lubricant oil for the petrol-chemical industry

---

PRIZES AND AWARDS

- 1997: Giacomo Ciamician Medal of the Organic Chemistry Division of the Italian Chemical Society to young talented early stage researchers

- 2012: Research award for Organic Chemistry in its structure determination and molecular interaction aspects, from Organic Chemistry Division of the Italian Chemical Society

---

RECENT SELECTED LECTURES at INTERNATIONAL CONFERENCE

- Glycocalixarenes As Multivalent Ligands; South-West Regional Meeting of the American Chemical Society, Fort Worth, 29 September – 03 October 2004
- Peptido- e Glycalixarenes in Molecular Recognition and Self-Assembly; VII Congresso Nazionale di Chimica Supramolecolare, Firenze 4-7 September 2005.
- Biomolecular recognition by multivalent calixarenes; 9th International Conference on Calixarenes, CALIX2007, College Park (USA), 6-9 August 2007
- Multivalent Glycocalixarenes For Lectin Inhibition; III International Symposium on Macrocyclic and Supramolecular Chemistry 2008, Las Vegas (USA), 13-18 July 2008
- Multivalent guanidinium-calixarenes as gene delivery systems; 10th International Conference on Calixarenes, 13-16 July, 2009, Seoul Korea.
- Self-assembling of calixarene cavities in the solid state and in solution; XIX International Conference on the Chemistry of Organic Solid State, Sestri Levante (Ge), 14-19 June 2009.

- Multivalent Aminocalixarenes: Molecular Recognition, Self-Assembly, Catalysis and Gene Delivery; Calix2011, 12th International Conference on Calixarenes, Tarragona 26-29 June, 2011
- Multivalent Calixarenes in Bioorganic Chemistry; 1st Italian-Israeli Conference On FRONTIERS IN ORGANIC CHEMISTRY; Tel-Aviv (Israele) 12-15 December 2011
- Multivalent Calixarenes in Lectin and DNA Binding; Supramolecular Chemistry@PoliMI: Where Nano meets Biology; Milano 28-29 June 2012
- Multivalent Calixarenes Ligands For Lectins and Nucleic Acids; XXXIV Convegno della Divisione di Chimica Organica SCI 2012, Pavia 10-14 September 2012
- Supramolecular Properties of Multivalent Calixarene Ligands with Biological Molecules, 12th International Conference on Calixarenes, St. John's (NL, Canada), 14-17 July 2013
- Calixarenes for Multivalent Targeting and Drug Delivery, Calix2015 - 13th International Conference on Calixarenes, Giardini Naxos (Italy), 5-9 July 2015

SCIENTIFIC/ORGANISING ACTIVITY in European NETWORKS

- Italian representative of the Ministry of Instruction, University and Research (MIUR) in the Management Committee of the COST CM1102 programme “MultiGlycoNano”
- Italian representative of the Ministry of Instruction, University and Research (MIUR) in the Management Committee of the COST CM1005 “Supramolecular Chemistry in Water”

NATIONAL/INTERNATIONAL CONFERENCES

- Member of the International Advisory Board of the International Conference on Calixarenes
- Member of the Scientific Committee of the National Conference of Supramolecular Chemistry

---

PUBLICATION and PATENT FIGURES

Authors of more than 200 publications among which 180 original papers and 9 reviews on international journals, 5 patents, 18 chapters on books.
His H-index is 56.