Giuseppe ERMONDI PhD – Curriculum Vitae

ASSOCIATE PROFESSOR AT MOLECULAR BIOTECHNOLOGY AND HEALTH SCIENCES DEPT, UNIVERSITY OF TORINO, ITALY.

E-MAIL: giuseppe.ermondi@unito.it
PHONE: +39 011 6708337
WEB SITE: https://sites.google.com/site/cassmedchem/home

Giuseppe Ermondi studied at the University of Torino (Italy) where he received a B.Sc. in Chemistry in 1989 with a dissertation entitled “Studio N.M.R. di complessi paramagnetici dei lantanidi” (“N.M.R. studies of paramagnetic complexes of lanthanides”) under the supervision of Prof. Silvio Aime.

He then was awarded a Ph. D. in Chemistry in 1994 under the supervision of Prof. Silvio Aime with a thesis about the “Study of structure and dynamics of complexes of Lanthanides” (“Studio della struttura e della dinamica dei complessi dei lantanidi”).

In 1993, he became Researcher in Medicinal Chemistry at the University of Eastern Piedmont (Università del Piemonte Orientale).

In 1997, he was a postdoctoral researcher at the Institut de Chimie Thèrapeutique, Ecole de Pharmacie in Lausanne under the supervision of Prof. Testa.

From 2001, he is Associate Professor at the University of Torino.

In 2013, he joined the Department of Molecular Biotechnology and Health Science of the University of Torino.

Research topics

Giuseppe Ermondi has a strong expertise in the application of in silico strategies to deconvolute information from inter- and intramolecular interactions. He is the main developer of the Block Relevance (BR) analysis, a tool that enables mechanistic interpretation of PLS-based QSAR/QSPR models.

His primary scientific activity is the design, experimental determination and computational prediction of physicochemical properties related to ADME and biological activity of molecules using different chemometrics tools (e.g. Partial Least Squares, PLS) and tailored molecular descriptors (e.g. mainly derived from Molecular Interactions Fields, MIFs).

He was involved in research programs about the use of cyclodextrins and the design and absorption properties of platinum derivatives with anticancer properties in collaboration with the University of Eastern Piedmont (Università del Piemonte Orientale).

To improve his expertise in the field of peptide-based drug discovery in 2013 he joined the new Department of Molecular Biotechnology and Health Sciences. This supported his recent interest in the development of in silico models of permeability of cyclic peptides and macrocycles based on statistical and mechanistic model using PLS and Molecular Dynamics tools, respectively.

He is coauthor of more than 70 papers, 3 book chapters, 2 software products and serves as a reviewer for various international journals in the field of medicinal chemistry and pharmaceutical sciences.

Educational activities

Giuseppe Ermondi teaches Pharmaceutical Analysis, Medicinal Chemistry and Environmental Chemical Toxicology also with blended learning technologies.