

Patrizia Rubiolo

Curriculum vitae

Patrizia Rubiolo, graduated in Pharmacy at the University of Turin in 1987. In 1992 she received her PhD in "Drug Chemistry " (Biologically active organic substances of vegetable origin). As part of her PhD, he spent a period of research at the Pharmaceutical Chemistry and Microbiology Laboratory of the University of Antwerp (Prof. Vlietinck and Prof. Vanden Berghe) to study the toxicity of pyrrolizidine alkaloids.

In 1992, she received a scholarship from Robertet SA (Grasse, France) to study aromatic plants useful for fragrance industry.

From 1993 to 2000 she was assistant Professor at the Faculty of Pharmacy of the University of Turin and in 1995 she spent a period of three months in the group of Prof. Peter Weyerstahl at the "Technische Universitat" of Berlin focusing her research on new strategies for the exhaustive study of essential oils using innovative technologies to isolate and characterize minor components.

In 2000 she became Associate Professor of Pharmaceutical Biology and since 2011 she is Full Professor of Pharmaceutical Biology at the Department of Drug Science and Technology of the University of Turin. From 2012 to 2018 she was President of the Degree course in Herbal products.

Since October 2018 she is the head of the Department of Drug Science and Technology of the University of Turin.

She is also member of the Board of the Ph.D. in Pharmaceutical and Biomolecular Sciences of the University of Turin.

Research interests are focused on the characterization of secondary (Specialized) metabolites in plant organisms, the development of new and innovative technologies in the field of "sample preparation", the use of solvent-free techniques and miniaturization for the analysis of plant raw materials and their processing products (plant extracts and essential oils). The research activity is described in more than 150 publications in International journals (H-index = 35, citations: 4110) and 6 book chapters, and has been the subject of numerous conferences, oral communications and posters at national and international meetings.

The main research topics concern the study of plant matrices used for their healthy, food, pharmaceutical and cosmetic interest; in particular the research activity is addressed to:

- The characterization of plant secondary metabolites in extracts or essential oils also applying a bioguided strategy;
- The extraction, isolation and identification of biologically active secondary metabolites;
- The development of methods for quality and safety control of extracts and finished products obtained from raw plant materials (Botanicals);

- The development of innovative techniques for sample preparation and analysis, suitable for implementing the knowledge of plant raw materials and their transformation products.

The development of research topics takes place by using advanced volatile fraction sampling systems such as Static Headspace (S-HS), Dynamic Headspace (D-HS), Solid Phase Microextraction (SPME, HS-SPME), Stir bar Sorptive Extraction (SBSE), Sorptive Tape Extraction (STE), and advanced chromatographic analysis technologies such as: Gas Chromatography (GC, Fast GC, Comprehensive GC \times GC), Enantioselective GC with derivatized cyclodextrins, Liquid Chromatography (LC) coupled to mass spectrometry detectors (GC-MS, GC \times GC-MS, LC-MS)

She is member of the Permanent Scientific Committee of the ISEO (International Symposium on Essential Oils), member of the Advisory Board of Flavour & Fragrance Journal, member of the Editorial Board of Food Chemistry and of Plants (Phytochemistry Section) as well as a referee of several international scientific journals.

She is involved in various international collaborations, including: • School of Pharmacy - University of Geneva - Switzerland - Prof. J.-L. Veuthey, Prof. Jean-Luc Wolfender • Departement de Chimie - Université Nice Sophia- Antipolis - Nice, France - Prof. Nicolas Baldovini. • University of Iowa - Prof. Jared Anderson • Embrapa - Brasil - Prof. Dr. Humberto Bizzo and Roberto Viera.