



Barbara Benedetti

Fixed-term assistant professor

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Education and training

2019

PhD in Sciences and Technologies of Chemistry and Materials

Development and optimization of innovative analytical methods for the determination of phytoestrogens in soy-food by chromatographic techniques coupled to mass spectrometry - Cum laude
University of Genoa - Genova - IT

2013

Master degree in Analytical Chemistry

Extraction and determination of methylxanthines and flavanols in cocoa samples by HPLC-DAD and chemometrics - 110/110 cum laude
University of Rome Sapienza - Rome - IT

2011

Bachelor degree in Chemistry

Preparation and XPS characterization of crystalline silicon surfaces suitable for the adhesion of gold nanoparticles - 110/110 cum laude
University of Rome Sapienza - Rome - IT

Academic experience

2019 - 2020

Post-doctoral fellow

CREA-Food and Nutrition - Rome - IT
analysis of bioactive molecules in industrial and food waste samples by chromatographic-mass spectrometric techniques

2018 - 2019

Post-doctoral fellow

University of Rome Sapienza - Rome - IT
development of analytical methods (sample preparation and liquid chromatography-high resolution mass spectrometry) for the characterization of food biological and environmental samples

2014 - 2015

Internship

University of Barcelona - Barcelona - ES

Synthesis and characterization of molecular imprinted polymers analysis of antibiotics by high performance liquid chromatography

Work experience

2014

Analyst in quality control laboratory

Catalent Pharma Solutions - Aprilia (LT) - IT

Language skills

English

Independent

First certificate in

English (B2 level)

Spanish

Independent

Italian

Mother tongue

Research interests

My main research interests involve the analytical chemistry of organic compounds, from sample preparation to instrumental parameters optimization. My experience is mainly in chromatographic techniques (GC and HPLC) coupled to mass spectrometry (both low and high resolution instruments). During my academic career I've dealt with several types of sample, from food to environmental and biological samples. I focus my research on the optimization of sample prep strategies, as well as of the instrumental analysis conditions, in order to develop or improve analytical methods for the determination of various classes of compounds. I then complete my studies with the steps involved in the evaluation of the method performances and validation. I am also interested in chemometrics, especially experimental design, a fundamental tool to study chemical problems in a multivariate fashion.