

Personal Information

Place and date of birth	Sarzana (SP), 28/10/1989
Nationality	Italian
Address	Via Petriccioli, 58 19032, Lerici (SP)
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Education

Nov 2013 – ongoing

PhD, University of Pisa / ICCOM-CNR (Pisa)

I am currently dealing with the development of analytical strategies for the characterization and quantification of metalloproteins in biological samples (saliva, urine and blood).

I am also developing a method for the photochemical vapor generation of organo-compounds of mercury, selenium and arsenic and their determination with atomic fluorescence spectrometry.

Oct 2011 – Jul 2013

MSc Degree in Chemistry, University of Pisa

Score: summa cum laude

Thesis title: “*Low-cost proteomics: study of proteins with probe labeling mercurial coupled to atomic fluorescence spectrometry with chemical vapor generation (CVG-AFS)*”. In my thesis work I developed a method for the characterization and determination of thiolic proteins labelled with p-hydroxymercurybenzoate, based on the on line oxidative decomposition of pHMB-labeled proteins with a novel on-line UV/microwave (MW) photochemical reactor, followed by cold vapour generation atomic fluorescence spectrometry (CVG-AFS) detection.

Supervisors: Dr. Emilia Bramanti and Prof. Stefania Giannarelli.

Sep 2008 – Sep 2011

BSc Degree in Chemistry, University of Pisa

Score: summa cum laude

Thesis title: “*Studi di attività dell’aldoso reduttasi purificata da cristallino di bovino*”

The purpose of this study was to isolate and purify the enzyme aldose reductase from bovine crystalline. Subsequently were determined the kinetic parameters of the enzyme in the presence respectively of D, L-glyceraldehyde, D-glucose and 4-hydroxy-2,3-nonenal.

Supervisors: Prof. Umberto Mura.

Technical Skills and competence

Separation techniques	HPLC-DAD, HPLC-ICP-MS, GC-MS, size exclusion HPLC, ion exchange HPLC, reversed phase HPLC, preparative chromatography, gel electrophoresis
Spectroscopic techniques	UV-Vis, Fluorescence, Atomic spectroscopy
Experimental Design strategies	Full factorial, Central composite and Doehlert designs
Software	Office package, ChemDraw, SCAN, ChromQuest, MassHunter, OpenLab
Bibliographic tools	SciFinder, Web of Knowledge, Scopus

Language skills

Italian	Mother tongue
English	Good
Chinese	Basic

Social skills, interests and activities

- Team spirit, ability to collaborate and adapt to situations acquired through sports (practice of different sports such as swimming, volleyball, dance), as well as during training (group work)
- Other work experiences: babysitter, private lessons, waitress
- Sports: volleyball, swimming
- Biology

Scientific works

Publications	<p>“Impact of protein concentration on the determination of thiolic groups of ovalbumin: a size exclusion chromatography-chemical vapor generation-atomic fluorescence spectrometry study via mercury labeling” Authors: Campanella, B., Onor, M., D’Ulivo, A., Giannarelli, S., Bramanti, E. (2014) Analytical Chemistry 86 (4) PP. 2251 - 2256 doi: 10.1021/ac4041795</p> <p>“Microwave photochemical reactor for the online oxidative decomposition of p-hydroxymercurybenzoate (pHMB)-tagged proteins and their determination by cold vapor generation-atomic fluorescence detection” Authors: Campanella, B., Rivera, J.G., Ferrari, C., Biagi, S., Onor, M., D’Ulivo, A., Bramanti, E. (2013) Analytical Chemistry 85 (24) PP. 12152 - 12157 doi: 10.1021/ac403389z</p> <p>“Determination of thiomersal by flow injection coupled with microwave-assisted photochemical online oxidative decomposition of organic mercury</p>
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and cold vapor atomic fluorescence spectroscopy”

Authors: Campanella, B., Onor, M., Mascherpa, M.C., D'Ulivo, A., Ferrari, C., Bramanti, E.

(2013) Analytica Chimica Acta 804 PP. 66 - 69

doi: 10.1016/j.aca.2013.10.018

Poster

Title: **“Low-cost proteomics: study of proteins with probe labeling mercurial coupled to atomic fluorescence spectrometry with chemical vapor generation (CVG-AFS)”**.

Authors: Campanella, B., Rivera, J.G., Ferrari, C., Biagi, S., Onor, M., D'Ulivo, A., Bramanti, E.

XXXVIII Colloquium Spectroscopicum Internationale” (Tromsø, Norvegia), Jun 2013

[Poster session 1, P19]

Oral
Communication

Title: **"Proteomics low-cost: study of proteins with probe labelling mercurial coupled to atomic fluorescence spectrometry with chemical vapor generation (CVG-AFS)"**.

Authors: J Campanella, B., Rivera, J.G., Ferrari, C., Biagi, S., Onor, M., D'Ulivo, A., Bramanti, E.

XXIV Congresso della Divisione di Chimica Analitica della Società Chimica Italiana, Sestri Levante, Sep 2013

[Book of abstract pg. 65]

Referees

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