



Alessandra Olarini

Date of birth: 05/06/1989

☎ (+39) 3337062639

✉ a.olarini@gmail.com

in [linkedin.com/in/alessandraolarini](https://www.linkedin.com/in/alessandraolarini)

📍 via Monte Viglio 10, 67051 Avezzano (Italy)

ABOUT ME

Analytical Chemist, currently settled in Lille (France) for a PhD course in Chemometrics, with a strong drive and innate curiosity towards maths applied in chemistry theoretical chemistry, computational chemistry research.

WORK EXPERIENCE

PhD student in Models and Methods for Material and Environmental Sciences

Department of Chemical and Geological Sciences, University of Modena and Reggio Emilia

Laboratoire de Spectroscopie pour les Interactions, la Réactivité et l'Environnement, University of Lille

[01/11/2021 – Current]

City: Modena, Lille Country: Italy, France

Development of new approaches for hyperspectral imaging and multimodal spectroscopy data analysis, using machine learning, image processing and chemometrics.

Researcher (Master - Graduate internship)

Department of Food Science, University of Copenhagen and COPSAC [08/10/2020 – 11/06/2021]

City: Copenhagen Country: Denmark

Investigation of metabolites transfer from mother to child using statistical and chemometric approaches (preprocessing, exploratory, multivariate regression, multiway analysis), detectable from mother's blood and newborn's dried blood spot samples using UPLC-MS.

Highway station manager

Strada dei Parchi S.p.A [01/11/2015 – 30/09/2019]

City: Rome Country: Italy

Monitoring of the environmental parameters, monitoring of hazardous materials in transit, remote monitoring of highway technologies and intervention, technical assistance to highway users.

Researcher (Graduate Internship)

Department of Chemistry, University of Turin [01/10/2014 – 01/10/2015]

City: Turin Country: Italy

Sampling of environmental matrices (air, water, soil) and qualitative and quantitative determination of trace and ultra-trace of pollutants using HPLC-MS, ICP-MS, GC-MS, HPLC-UV, HPLC-FD.

Researcher (Bachelor- Graduate internship)

Department of Chemistry, University of Rome La Sapienza [01/09/2013 – 31/07/2014]

City: Rome Country: Italy

Molecular dynamic simulations of ionic liquids, investigation of structural and dynamic proprieties of molecules using computational techniques.

EDUCATION AND TRAINING

Master Degree - Analytical Chemistry

University of Rome "La Sapienza" [01/10/2018 – 11/06/2021]

Address: Piazzale Aldo Moro 5, 00185 Rome (Italy)

International School of Chemometrics - Advanced Course

University of Copenhagen [02/11/2020 – 20/11/2020]

Address: Rolighedsvej 30, 1958 Copenhagen (Denmark)

Specialization course of 6 ECTS on Multivariate Error, Multiblock Analysis, Sparse Modelling, Non-Linear Modelling, Multiway data Analysis, Hyperspectral Image Analysis.

International School of Chemometrics - Basic and Intermediate Course

University of Basque Country [08/10/2020 – 30/10/2020]

Address: Barrio Sarriena, 48940 Leioa (Spain)

Specialization course of 8 ECTS on MATLAB, Basic Chemometric (Exploratory, Preprocessing, Multivariate regression, Design of Experiments), Intermediate Chemometric (Variable Selection, Multivariate Classification, Multivariate Curve Resolution).

Bachelor Degree - Chemistry

University of Rome "La Sapienza" [01/10/2009 – 17/07/2014]

Address: Piazzale Aldo Moro 5, 00185 Rome (Italy)

DIGITAL SKILLS

Windows and Linux environments / Microsoft Office Packages / Latex Software / UNIX Shell script

PRACTICAL SKILLS

Chemometrics / High-Performance Liquid Chromatography / Matlab / R / PLS Toolbox, Eigenvector / Molecular Networks (GNPS) / Gas Chromatography / Mass Spectrometry

THEORETICAL SKILLS

Quantum Mechanics / Nuclear magnetic resonance spectroscopy / Liquid Chromatography / Infrared spectroscopy / Raman spectroscopy

LANGUAGE SKILLS

Mother language: Other language:

Italian

English

LISTENING B2 READING B2 WRITING B2 SPOKEN INTERACTION B2

OTHER SKILLS

Excellent organizational skills / Efficient communicator / Fast and proactive learner

PUBLICATIONS

Vertical Transfer of Metabolites Detectable from Newborn's Dried Blood Spot Samples Using UPLC-MS: A Chemometric Study.

Olarini, A., Ernst, M., Gürdeniz, G., Kim, M., Brustad, N., Bønnelykke, K., Cohen, A., Hougaard, D., Lasky-Su, J., Bisgaard, H. Chawes, B. and Rasmussen, M. A.

Metabolites **2022**, 12(2), 94; <https://doi.org/10.3390/metabo12020094>

CONFERENCES

Road to CAC2022 [20-21/07/2021]

Oral presentation Olarini A., Rasmussen M.A., Marini F. "Vertical Transfer of Metabolites Detectable from Newborn's Dried Blood Spot Samples Using UPLC-MS: A Chemometric Study"

HOBBIES AND INTERESTS

Running / Alpinism / Volunteering / Reading