

# CURRICULUM VITAE

## PERSONAL DETAILS

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**Name:** Chiara  
**Surname:** Bufalini  
**Nationality:** Italian  
**Date of birth:** 23<sup>rd</sup> November 1997  
**Gender:** Female  
**e-mail:** chiara.bufalini@edu.unige.it

## EDUCATION AND TRAINING

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*November 2021 – In progress* Ph.D Student in Civil, Chemical and Environmental Engineering, Curriculum: Chemical, Materials and Process Engineering, XXXVII cycle, Department of Civil, Chemical and Environmental Engineering of the University of Genoa, Italy.  
Major field of study: delivery system, encapsulation techniques, emulsion, microorganisms stabilizations.

*June 2023* Participation to the International Workshop “Catalysis for carbon neutrality and energy transition”, Genoa, Italy, 13<sup>th</sup> June 2023.

*March 2023* Participation to the Workshop “Approccio alla valutazione dinamica del Rischio nel contesto industriale ed in aree portuali: Innovazione e Ricerca”, Genoa, Italy, 10<sup>th</sup> March 2023.

*January 2023* Participation to the Workshop “MeOH come vettore energetico”, Genoa, Italy, 18<sup>th</sup> January 2023.

*September 2022* Ph.D National School of IPTA 2022 on the topic “Ingegneria di prodotto per la transizione alimentare”, Como, Italy, 8<sup>th</sup> -10<sup>th</sup> September 2022.

*July 2022* Ph.D. National School of GRICU 2022 (Group of Chemical Engineering of the University) on the topic “Fondamenti dei Processi di Elettrochimica e loro Applicazione”, Ischia, Italy, 6-9 July, 2022.

*July 2022* Participation to the Congress “La Chirurgia Vascolare tra innovazione e tradizione”, Genoa, Italy, 1st July 2022.

*November 2021* Government exam and licensed as a professional industrial engineer (Genoa, Italy).

*September 2019 – October 2021* Master's degree in Chemical and Process Engineering.  
Experimental thesis in "Study and characterization of microbial strains in liquid formulation". Company internship at C.C.S. Aosta s.r.l. and internship at the Food Engineering Lab of DICCA of the University of Genoa.  
Grade: 110/110 cum laude.

*September 2016 – September 2019* Bachelor's Degree in Chemical and Process Engineering.  
Experimental thesis in "Production of zein nanoparticles for the stabilization of *Hibiscus sabdariffa* extracts". Internship within Food Engineering Lab of DICCA of the University of Genoa.  
Grade: 110/110 cum laude

## ACADEMIC EXPERIENCE

- From 2022 – In progress* Member of the working group for the development of innovative products in the field of symbiotic agriculture for the research activity carried out from BEST s.r.l. (Genoa, Italy).
- September 2022 – September 2023* Subject expert for the course of “Operazioni unitarie e loro dimensionamento”, held by Prof. Roberta Campardelli, for the Bachelor’s degree in Chemical and Processes Engineering. Department of Civil, Chemical and Environmental Engineering, Polytechnic School, University of Genova, Italy.
- October 2022 – December 2022* Voluntary activity of teaching support for the course of “Operazioni unitarie e loro dimensionamento”, held by Prof. Roberta Campardelli, for the Bachelor’s degree in Chemical and Processes Engineering. Department of Civil, Chemical and Environmental Engineering, Polytechnic School, University of Genova, Italy.
- June 22* Research periods at the University of Salerno, with the research group of Supercritical Fluid Plants of Prof. Ernesto Reverchon. The research focused on the production of polymeric particles with the supercritical emulsion extraction plant. Department of Industrial Engineering, University of Salerno, Italy.

## PUBLICATIONS

- Pier Francesco Ferrari, Paolo Trucillo, Giulia De Negri Atanasio, Chiara Bufalini, Roberta Campardelli, Patrizia Perego, Domenico Palombo, Ernesto Reverchon, “Operating Parameters Optimization for the Production of Liposomes Loaded with Antibodies Using a Supercritical Fluid-Assisted Process”. *Processes* (2023), 11(3). Doi: <https://doi.org/10.3390/pr11030663>.

## POSTERS AND ORAL PRESENTATIONS IN NATIONAL AND INTERNATIONAL CONGRESSES

- Chiara Bufalini, Ida Palazzo, Alessandro Alberto Casazza, Pier Francesco Ferrari, Roberta Campardelli, Giuseppe Firpo, Patrizia Perego, Ernesto Reverchon. The potential of supercritical emulsion extraction for the encapsulation of *Arthrospira platensis* polyphenolic extract. Presented as oral presentation at 19<sup>th</sup> European Meeting on Supercritical Fluids (EMSF2023), Budapest, Hungary, 21-24 May 2023.
- Chiara Bufalini, Roberta Campardelli, Pier Francesco Ferrari, Domenico Palombo, Patrizia Perego. Stabilization and characterization of microbial strains in liquid formulation. Presented as poster at the Conference GRICU 2022 “Centralità dell’Ingegneria Chimica in un mondo che cambia”, Ischia, Italy, 3-6 July 2022.

## THESIS SUPERVISION AS CO-ADVISOR

- Francesco Saja. “Stabilizzazione e caratterizzazione di ceppi microbici in formulazione liquida”, 2022, Bachelor’s Degree in Chemical and Processes Engineering, Department of Civil, Chemical and Environmental, University of Genova.

## PROJECTS

- Collaboration for research contract with TICASS for a H2020 Project on “Bio-based plastic packaging”. The activity was carried out at the Department of Civil, Chemical and Environmental Engineering of the University of Genova. Technical-scientific manager: prof. Patrizia Perego.

## SKILLS & COMPETENCES

- Fluent in English with B2 level in conversation, listening, reading and writing.
- Excellent organizational skills and ability to organize and respect the deadlines.

- Excellent team working skills.
- Ability in the use of laboratory equipment and chemicals.
- Excellent ability to use the Office package.
- Intermediate knowledge of software: Matlab, Simulink, Comsol, Aspen Plus.
- Programming skills in C language: basic level.
- Basic ability to use UniSim, SimaPro, Ansys Fluent, CAD 2D Microstation.

### ***FURTHER INFORMATION***

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- European driving license, class B.
- I gave presentation and guides to the laboratories of DICCA, Genoa, for the orientation program offered to high school students.
- Achievement of a lifeguard license with related summer work experience in 2014.

*In compliance with the law D.LGS. no. 196 dated 30/06/2003, I hereby authorize you to use and process my personal details contained in this document.*