Giorgia Franzino

CHEMICAL ENGINEER





Soft skills

- Teamwork
- Problem solving
- Communication
- ✓ Critical thinking
- Time management
- Interpersonal

Digital skills

- Office
- Matlab
- OriginLab
 - Aspen Plus
- Aloha Marplot

Language

- Italian (Mother tongue)
- English (B1)

Personal interests

The main interest is in the world of dance. critical sense and the ability to handle stressful situations. Participation intensive workshops led to an improvement in one's perception within a group, communication skills and the ability to work in a team.

Professional profile

Chemical engineer interested in research in the field of macro-rheology of biological fluids and with experience in the chemical-physical characterisation of nanostructured materials.

Professional experience

Research fellow

from 21/2/2024 (in progress)

Winner of competition prot. n. 0385788 (06/12/2023).

The research activity is carried out as part of the project 'Relationship between mucus structure and water magnetic relaxation: a link toward the use of LF-NMR to monitor the clinical conditions of COPD and CF patients' at the Institute for Polymers, Composites and Biomaterials (IPCB) in Portici (NA).

Research fellow

from 1/2/2023 to 31/1/2024

Winner of competition n. 28/2022/ASS.RIC. (PG/2023/0011597)

The research activity is carried out as part of the project 'Development and chemical-physical characterisation of controlled release systems using microfluidic techniques' at the DICMAPI of the University of Naples Federico II in collaboration with the Institute for Polymers, Composites and Biomaterials (IPCB) in Portici (NA).

Academic Education

University of study of Naples Federico II PhD

From 1/11/2023 (in progress)

Winner of the 39th PhD course competition in Product and Industrial Process Engineering at the University of Naples Federico II (DR/2023/3785 04/10/2023). The research activity is carried out in the field of the design of hydrogels for the removal of multiple pollutants from wastewater. The PhD is carried out in collaboration with the Institute for Polymers, Composites and Biomaterials (IPCB) in Portici (NA).

University of study of Naples Federico II Master's degree in chemical engineering

From 20/09/2020 to 19/12/2022

Final grade: 110/110 cum laude

Thesis title: 'Design of biologically active nanomaterials based on magnesium doped hydroxyapatite and melanic pigments'.

Advisors: Prof. Luciani G., Prof. Vitiello G. Co-author: Dr. Pota G.

The aim of the thesis work was to coat Magnesium doped hydroxyapatite nanoparticles with melanin produced from two different precursors (DHICA and DOPAMINE) and at different polymerisation times, in order to obtain functional which has led to both the development of a nanomaterials for regenerative medicine applications.



Other skills

B driving licence

University of study of Naples Federico II Bachelor's degree in chemical engineering

From 20/09/2017 to 29/09/2020

Final grade: 105/110

Title of the thesis: 'Particle Migrations in Microfluidics'.

Supervisor: Prof. Trofa M.

The aim of the thesis was to describe both the experimental evidence and the theoretical analysis underlying the phenomenon of particle migration in

microfluidics.

Scientific activities

Publications:

- ❖ Castellani S., Mallamaci R., De Giglio E., Caponio A., Guerra L., Fracchiolla G., Trapani G., Kristan K., Cardone R.A., Passantino G., Nicola Zizzo, <u>Franzino G.</u>, Larobina D., Trapani A., Conese M., (2024). **Slightly viscous dispersions of mucoadhesive polymers as vehicles for nasal administration of dopamine and grape seed extract-loaded solid lipid nanoparticles**. (DOI: <u>10.1016/j.ijpharm.2024.124255</u> (Paper) <u>International Journal of Pharmaceutics</u>).
- Langella, A., <u>Franzino, G.</u>, Maffettone, P. L., Larobina, D., & D'Avino, G. (28/11/2023). **Dynamics of non-spherical particles in viscoelastic fluids flowing in a microchannel** (DOI: <u>10.1039/D3SM01399E</u> (Paper) <u>Soft Matter</u>).

Oral presentation:

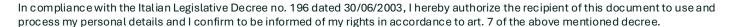
Franzino G., Tescione F., Larobina D., Effect of reducing agent on the viscoelastic properties of porcine gastric mucus, XVIII Italian Society of Rheology conference, 12-14 September 2024, Villa Rosa-Anacapri (NA).

Collaborations in presentations/posters presented at the following conferences:

- ❖ Tescione F., Franzino G., <u>Larobina D.</u>, Effect of reducing agent on the viscoelastic properties of porcine gastric mucus, **SoftComp Annual Meeting 2024**, 21-24 May 2024, Lyon, France (Oral presentation).
- ❖ Tescione F., Franzino G., Larobina D., Effect of Disulfide-Reducing Agent on Gelling Mucins, Giornate di Dipartimento, 18-20 October 2023, Sestri Levante (GE), (Poster).

Other activities

- Certificate of participation in the 'Demo Phenonom SEM Thermo Fisher Scientific' event at the Institute for Polymers, Composites and Biomaterials (IPCB) in Portici (NA) on 13-14 December 2023.
- ❖ Participation in Speed Dating at the 'Futuro Remoto' event at Città della Scienza (NA) on 23 November 2023.
- Certificate of attendance at the 'ACS agenda day' at CNR via Pietro Castellini (NA) on 12 October 2023.
- ❖ Participation in the 'Accenture Career Lab' course aimed at improving Soft Skills held by Dr Fabio Chianese at the University of Naples Federico II, on 15-16 and 19 November 2021.
- Certificate of attendance at the specific training course on Safety in the workplace for workers particularly exposed to risk, at the University of Naples Federico II, on 20 October 2021.
- Certificate of attendance at the basic training course on health and safety in the workplace delivered through Federica Web Learning, University of Naples Federico II, on 25 September 2021.













(*) ai sensi dell'art. 15, comma 1 della Legge 12/11/2011, n. 183 le certificazioni rilasciate dalla P.A. in ordine a stati, qualità personali e fatti sono valide e utilizzabili solo nei rapporti tra privati; nei rapporti con gli Organi della Pubblica Amministrazione e i gestori di pubblici servizi, i certificati sono sempre sostituiti dalle dichiarazioni sostitutive di certificazione o dall'atto di notorietà di cui agli artt. 46 e 47 del DPR 445/2000