

Gemma Leone, born in Siena 10th January 1975.

Graduation degree in Pharmaceutical Chemistry and Technology, at the University of Siena, Department of Chemical and Biosystem Science and Technologies with a dissertation on the "Metal-polysaccharide based hydrogel complexes and their biological characterisation" (110/110 e Lode - April 2001).

PhD Degree in Biomaterials at the University of Pisa. Title: " Chemical and morphological modification of polysaccharidic hydrogels for biomedical applications" (May, 2005).

Grant in Chemistry at the University of Siena (2005/2006)

Since 1st October 2006: Research fellow at the Pharmacy Faculty

Since 1st July 2022 : Associate Professor in Inorganic Chemistry

The research activity is focused on two main areas, listed below:

I) Synthesis, spectroscopic, rheological and thermal characterization of hydrophilic matrices added with fundamental microelements (P, N, S, Cu, Zn, Ag, Ti, Fe, Ca) in the form of ions, nanoparticles or spacer arms to be used in the treatment of pathologies of the musculoskeletal and/or ophthalmic system that induce the repair/regeneration of soft tissues and that act as inhibitors of inflammatory processes.

II) Study of the chemical structure-activity relationship of

- Gold and silicon biosensor model systems
- Complex organic-inorganic systems in solid phase and/or in solution
- Matrices of natural origin