

# CURRICULUM VITAE ELISABETTA PETRI

## PERSONAL DATA



📍 Via F. Lami, 15, 47121, Forlì (FC)  
Via Torleone, Bologna (BO)

☎ +39 3497212893

✉ elisabetta.petri2@unibo.it  
elisabetta.petri@hotmail.com

Woman | Date of birth: 02/05/1995 | Italian

## PROFESSIONAL EXPERIENCE

February 2021 - to date **Research Contract** for European project H2020 - MAGNIFY: “From nano to macro: a groundbreaking actuation technology for robotic systems” at the Laboratory of Electrochemistry of Materials for Energetics at the Department of Chemistry “Giacomo Ciamician” – University of Bologna  
Digita qui il testo

**Supervisor:** Prof.ssa Catia Arbizzani

**Research activity:** Study and development of nano-structured materials with nanofibrous morphology capable of reacting to an electrical stimulus.

March - December 2020 **Graduate research** at the Polymer Science and Biomaterials research group of the Department of Chemistry “Giacomo Ciamician” - University of Bologna

**Thesis:** “Preparation and optimization of silk fibroin electrospun scaffold for the regeneration of musculoskeletal tissue”

**Supervisor:** Prof.ssa Maria Letizia Focarete

**Co-Supervisors:** Prof.ssa Barbara Roda, Dott.ssa Anna Liguori, Dott. Francesco Grassi

**Research activity:** Develop and optimization of nanostructured electrospun scaffolds based on silk fibroin and loaded with a biomolecule able to release hydrogen sulfide. The aim of the project was obtaining a device able to both support and induce the regeneration of damaged musculoskeletal tissues and actuate an anti-inflammatory action. The H<sub>2</sub>S-releasing tests were optimized and carried out in collaboration with the analytical group, while the biological tests were developed in collaboration with the RAMSES Laboratory.

The chemical-physical characterization was achieved by using: Thermogravimetric Analysis (TGA), Differential Scanning Calorimetry (DSC), Scanning Electron Microscopy (SEM), Infrared Spectroscopy with Fourier Transformation (FT-IR/ATR).

September - March 2018 **Trainee at the Photochemistry group of the Department of Chemistry "Giacomo Ciamician" – University of Bologna**

**Thesis:** "Functionalization of hyaluronic acid with rhodamine B and characterization."

**Supervisor:** Prof.ssa Nelsi Zaccheroni

**Co-supervisor:** Dott. Damiano Genovese

**Research activity:** Functionalization of hyaluronic acid with a fluorophore, rhodamine B, in order to study the changes of the protein when placed in different environmental conditions (pH, temperature, solvents). The aim of the project was developed a system for *in vivo* uses for the recognition of pathological protein aggregates on the cell surface, based on the different morphology assumed by hyaluronic acid.

Characterization techniques used: Spectrophotometry, spectrofluorimetry, Z potential, Dinamic Light Scattering (DLS), Time Correlated Single Photon Counting (TCSPC), Circular dichroism spectroscopy.

June - July 2012 **Training internship at the Istituto zooprofilattico sperimentale of Lombardia and Emilia-Romagna (IZLER) of Forlì**

**Activity:** Laboratory diagnosis of infectious diseases of domestic and wild animals, microbiological analyzes on food of animal origin and not. In particular, sowing and trapping on cultural media, preparation of serological tests using the ELISA technique, preparation of all phases of the PCR reaction.

## EDUCATION

November 2020 – to date **Percorso formativo – 24 CFU (9241)**  
*Alma Mater Studiorum – University of Bologna*

October 2018 – Dicem  
2020 **LMSc in Photochemistry and Molecular Materials (LM-54)**  
*Department of Chemistry "Giacomo Ciamician" - Polymer Science and Biomaterials research group – Analytical group – RAMSES Laboratory of Rizzoli Orthopedic Institute*  
*University of Bologna*  
**Final mark:** 110/110 cum laude

September 2014 - March  
2018 **BSc in Chemistry and Material Chemistry (L-27)**  
*Department of Chemistry "Giacomo Ciamician" – University of Bologna*  
**Final mark:** 108/110

September 2009 – July 2014 **High school: Scientific High school Degree**  
*Liceo scientifico statale Fulceri Paulucci di Calboli of Forlì*  
**Final mark:** 81/100

## PERSONAL SKILLS

MOTHER TONGUE Italian

OTHER LANGUAGES English

Reading	Writing	Listening	Speaking
B2	B2	B2	B2

January 2019 - February 2020 Participation at Alma English courses and achievement of **IELTS certification**

May - July 2018 Participation at the General English courses at Barnet Southgate College of London

Luglio 2011 Participation at the exchange program in Southampton, England

**SOFTWARE SKILLS** Microsoft Office tools and Latex, Linux (basic), ChemBioDraw, Origin and SigmaPlot, EClab (electrochemistry), TA Universal Analysis and Trios, ImageJ, Gaussian (basic).

**PROFESSIONAL SKILLS** Analytical procedures, data elaborations and library research, team working, problem solving, collaboration with other research group, compilation of report.

Macromolecular chemistry: electrospinning technique, Differential Scanning Calorimetry (DSC), Thermo-gravimetric analysis (TGA), Scanning Electron Microscopy (SEM), Infrared Spectroscopy with Fourier Transformation (FT-IR/ATR). Photochemistry: UV-Vis Spectroscopy, Time Correlated Single Photon Counting (TCSPC), fluorescence anisotropy, circular dichroism spectroscopy, Z potential, Dynamic Light Scattering (DLS). Electrochemistry: Cyclic Voltammetry (CV), Electrochemical Impedance Spectroscopy (EIS), galvanostatic techniques.

## OTHER

DRIVING LICENCE B, AM

Pursuant to Article 76 of Presidential Decree 28 December 2000, n. 445 and aware that anyone who makes false statements, issues false documents or uses them in the cases referred to in this text is punishable according to the Penal Code and special laws and incur, furthermore, in loss of benefits in accordance to Article 75 of the above mentioned Presidential Decree 445/2000, I declare under my own responsibility that that what is indicated this CV corresponds to the truth.

In compliance with the European Regulation (EU) 2016/679 and of the Italian Legislative Decree 196/2003, I hereby authorize to use my personal details and I confirm to be informed of my rights in accordance to art. 7 of the above mentioned decree.

Bologna, 22/03/2021

Signature

Elvira Petri