CURRICULUM VITAE ET STUDIORUM

Federica Maria Camilla Ferruti

Education and Skills

11/19-today PhD candidate in Materials Science and Nanotechnology
Università degli Studi di Milano - Bicocca — CORIMAV — Pirelli Tyre S.p.A.
Supervisors: Prof. Luca Zoia and Dr. Luca Giannini
Chemical modification of lignocellulosic materials for the reinforcement of rubber compounds, synthesis of polymeric composites and their characterization with cutting-edge instruments in Pirelli's R&D department.
Skills acquired:
•original research
•interpretation of nuclear magnetic resonance (^{1}H, ^{13}C, ^{31}P-NMR) spectra, gel-permeation chromatography (GPC) traces and FT-IR/ATR spectra
•study of mechanical properties of rubber compounds
•study of material science hot topics thanks to courses dedicated to mechanical behavior of rubber compounds, surface analytical methods and photovoltaics

7/2020 Admitted to the profession of Chemist, Section A (State examination of professional abilitation)
Università degli Studi di Milano

2017-2019 Master's Degree in Scienze Chimiche
Università degli Studi di Milano
Thesis: *Controlled synthesis of polyamidoamino acids*
Supervisors: Prof. Daniela Maggioni and Prof. Elisabetta Ranucci
Mark: 110/110 cum laude
Skills acquired:
•original research on bio-inspired polymers for biomedical applications
•interpretation of nuclear magnetic resonance (NMR) spectra and size-exclusion chromatography (SEC) traces of polymers
•use of tensiometer to investigate the surface activity of polymers
•study of mechanisms and structural investigation techniques typical of organic and polymeric chemistry thanks to courses dedicated to polymer science, stereoselectivity in synthesis, bioorganic and natural products' chemistry, homogeneous catalysis, nuclear magnetic resonance spectroscopy, and mass spectrometry
•study of chemical-physical behavior of molecules thanks to courses dedicated to photochemistry, interphases and disperse systems

2014-2017 Bachelor Degree in Chimica
Università degli Studi di Milano
Thesis: *Studio della bromurazione di derivati benzo[1,2-b:4,3-b']ditiofenici*
Supervisors: Prof. Emanuela Licandro and Dr. Silvia Cauteruccio
Mark: 110/110
Skills acquired:
•original research on the functionalization of benzothiophenic scaffolds, pertinent analysis via high performance liquid chromatography (HPLC) and gravimetric liquid chromatography, characterization via nuclear magnetic resonance spectroscopy and mass spectrometry
•specific chemical competences

Experience

12/2020 - 2/2021	Adjunct professor for the course *Chimica di coordinazione e metallorganica* held by Prof. Roberto Della Pergola

Professional Training

15/11/2018	XXIII Congresso delle Materie Plastiche TMP on *Smart City, materiali e tecnologie per muoversi ed abitare*, Parma
5/11/2018	Conference *Incontro Università, CNR e Industria* Department of Chemistry, Università degli Studi di Milano, Milano

Conference communications

Virtual Milan Polymer Days 2020, Università degli Studi di Milano, 15-17/7/2020
Controlled synthesis of linear polyamidoamino acids and preliminary investigation on their cytocompatibility and application in photodynamic therapy

Macrogiovani 2019, Università degli Studi di Napoli, 1-2/7/2019
Controlled synthesis of polyamidoamino acids

Milan Polymer Days 2019, Università degli Studi di Milano, 11-13/3/2019
Controlled synthesis of polyamidoamino acids

Language Skills

Mothertongue Italian

Others	***Listening***	***Comprehension***	***Speaking***	***Writing***
English	C1	C1	C1	C1
Servizio Linguistico dell'Ateneo di Milano (SLAM), Università degli Studi di Milano				
Spanish	C1	C1	C1	C1
DELE Diplomas de Español como Lengua Extranjera, Instituto Cervantes				

I hereby agree for processing the following personal information in accordance with the regulation

Milan, 25/03/2021

Federica Maria Camilla Ferruti