



## Europass Curriculum Vitae

<b>Desired employment</b>	<b>Chemist researcher</b>
<b>Occupational field</b>	Coordinate personal continuing collaboration (Collaborazione coordinata continuativa personale CO.CO.CO.) at Department of Chemical and Pharmaceutical Sciences of University of Ferrara
<b>Related work experience</b>	
<b>Dates</b>	September 2019
Occupation or position held	Three-months Coordinate personal continuing collaboration (Collaborazione coordinata continuativa personale CO.CO.CO.)
Main activities	Optimisation of synthetic stages in industrial scale production of functionalized hyaluronic acid-based ophthalmic product.
Name and address of employer	University of Ferrara Department of Chemical and Pharmaceutical Sciences
Type of business or sector	Organic Chemistry
<b>Dates</b>	May 2014
Occupation or position held	Nine-months Internship in the organic chemistry laboratory
Main activities	Enantioselective synthesis and characterization of the antitumor agent (-)-Nutlin-3 through an organocatalytic process.
Name and address of employer	University of Ferrara Department of Chemical and Pharmaceutical Sciences
Type of business or sector	Organic Chemistry
<b>Education and training</b>	
<b>Dates</b>	May 2019
Title of qualification awarded	PhD in Chemistry: Early Stage Researcher of Marie Skłodowska-Curie ITN-European Joint Doctorate program in Drug Discovery and Development; MOGLYNET Project

Main activities	Computationally aided rational design, synthesis and biological evaluation of PFKFB3 ligands for atherosclerosis plaque stabilization. Docking and molecular dynamic simulation of biological systems; Organic synthesis and characterization
Name and type of organization providing education and training	-University of Aberdeen (Main Institution) The Institute of Medical Sciences (IMS building); -University of Milan (Host University) Department of Pharmaceutical Sciences
Type of business or sector	Organic Chemistry, Medicinal Chemistry
Principal subject/occupational skills covered	Study around the identification of small molecules as novel candidate inhibitors of the kinase domain of the PFKFB3 target enzyme. The rational design was carried out with the aid of computational methods. A first- and a second-generation of hit compounds from two in silico strategies were synthesized and biologically evaluated in vitro through kinase assay, providing further insights in PFKFB3-ligand interaction and new structure activity relationship information.  Two-months <b>Industrial Secondment</b> At Bayer HealthCare, Milano Segrate (MI): Training in Quality Control, Quality Assurance, generating PQR (Product Quality Reports), managing CAPA (Corrective actions, preventing actions) investigations, OPV (On-going Process Verification), Validation processes.
<b>Dates</b>	April 2015
Title of qualification awarded	Master Degree in Organic Chemistry. Class LM-54 Final degree mark:110/110 cum laude
Principal subjects/occupational skills covered	Knowledge of the most recent protocols for the synthesis, from lab-scale to industrial-scale, of relevant classes of organic compounds including biologically active derivatives, agrochemicals and new materials. Metal-mediated Carbon-Carbon Carbon-Heteroatom bond formation reactions. Innovative synthetic strategies including asymmetric synthesis and greener synthetic methodology. Execution of a catalytic enantioselective transformation, consisting in a multi-step preparation of a catalytic chiral organo-compound and its use for the synthesis of enantioenriched products.
Name and type of organisation providing education and training	University of Pisa, Chemistry & Industrial Chemistry Department
Level in national or international classification	2 <sup>nd</sup> level degree in Chemistry- Master's Degree
<b>Dates</b>	March 2012
Title of qualification awarded	Degree in Chemistry. Class L-27
Principal subjects/occupational skills covered	Along with the compulsory courses in mathematics and physics, emphasis was given to core chemistry theory and practice, including modules on organic, inorganic, analytical, and physical chemistry integrating with several practise classes.
Name and type of organisation providing education and training	University of Ferrara – Faculty of Mathematical, Physical and Natural Science

Level in national or international classification | 1<sup>st</sup> level degree –Bachelor's Degree

### Pre-university studies

Secondary school diploma: Scientific Certificate  
 School-leaving examination taken in (year): 2008  
 Italian secondary school diploma  
 Liceo Ludovico Ariosto, Ferrara

### Personal skills and competences

Mother tongue  
 Other language

**Italian**  
**English**

Reading	Writing	Listening	Speaking
B2*	B2*	B2*	B2*

(\*) Common European Framework of Reference for Languages

Social skills and competences

Communicative and leadership skills acquired as a volunteer educator with the cultural peace organization CISV (Children's International Summer Villages) working as a group leader with partners and delegation from all over the world composed of children from 12 to 15 years old.

Organisational skills and competences

Organisational skills acquired during the Master experience in the University of Ferrara working closing with others students and laboratory technicians; writing operational plans and time-tables to manage work in the lab.

Technical skills and competences

Manage the key aspects affecting the design of synthetic procedure of multifunctional organic compound through the retrosynthetic analysis.  
 Abilities working with air sensible chemicals using inert atmosphere handling techniques.  
 Research in databases for the chemical literature such as SciFinder, Reaxys.  
 Mass spectrometry in particular Electro Spray Ionization (ESI) instruments.  
 HPLC and Chiral HPLC, resolution of racemic or enantioenriched mixture.  
 Mono and bi-dimensional NMR techniques (Cosy, HMBC, HSQC, HMQC) for the fully characterization of organic structures.

Computer skills and competences

Word Processing: Good  
 Electronic spreadsheet: Good  
 Internet skills: Excellent  
 Bash shell scripting: Basic knowledge  
 Software : MOE Molecular Operating Environment, Amber (MD simulation package); VMD, Chimera: Basic knowledge

Driving licence

Type B