

Curriculum Vitae et Studiorum

PERSONAL DETAILS

Frist name: ILARIA

Family name: SILVESTRO

Academic degree: Master of science M.Sc in industrial chemistry (curriculum: Polymeric materials)

EDUCATION AND TRAINING

❖ **Period: from November 2018 until today.**

Institution: "La Sapienza" University, Rome

Faculty of Industrial Chemistry

Address: Piazzale Aldo Moro, 5, 00185 Roma RM, Italy

Main Activity: PhD Student in Chemical Science.

❖ **Period: 2015-2018**

Institution: "La Sapienza" University, Rome Faculty of Industrial Chemistry

Address: Piazzale Aldo Moro, 5, 00185 Roma RM, Italy

Obtained degree: Master of science M.Sc industrial chemistry (Curriculum Polymeric Materials), 25th January 2018.

Experimental thesis: "Use of magnetic nanoparticle systems as enzymatic immobilization supports for industrial applications". Supervisor: Dott.ssa Antonella Piozzi

Main topics/acquired abilities:

- In-depth study of basic disciplines such as organic chemistry, physical chemistry and analytical chemistry.
- In-depth study of polymeric materials and their applications.
- In-depth study of enzymatic catalysis and immobilization strategies.

Grade : 110 / 110 (cum laude)

❖ **Period: 2017**

Institution: "La Sapienza" University, Rome Faculty of industrial chemistry. Laboratory for the study of Macro-molecules.

Address: Piazzale Aldo Moro, 5, 00185 Roma RM, Italy

Activity: Pre-graduation (Masters degree) internship.

Main topics/acquired abilities:

- Research activity concerning the catalysis of enzymes bounded to magnetic supports.
- Planning and execution with a good degree of independence.
- Elaboration of the obtained data and valid interpretation of the problem at hand.

❖ **Period: 2012-2015**

Institution: "La Sapienza" University, Rome Faculty of industrial chemistry

Address: Piazzale Aldo Moro, 5, 00185 Roma RM, Italy

Obtained degree: Bachelor of science B.Sc Industrial chemistry, 11th December 2015
Experimental thesis in polymeric materials: "Preparation and characterization of chitosan and hyaluronic acid matrices" Supervisor: Dott.ssa Iolanda Francolini

Main topics/acquired abilities: Acquisition of basic theoretical and experimental knowledge on the main areas of chemistry.

Grade : 108 / 110

❖ **Period: July 2014 - November 2015**

Institution: "La Sapienza" University, Rome Faculty of industrial chemistry. Laboratory for the study of Macro-molecules.

Address: Piazzale Aldo Moro, 5, 00185 Roma RM, Italy

Activity: Pre-graduation (Bachelors degree) internship

Main topics/acquired abilities:

- Experimental activities based on the study of biocompatible polymeric materials and related characterization techniques.

❖ **Period: 17/04/2014**

Institution: "La Sapienza" University, Rome Faculty of industrial chemistry.

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Address: Piazzale Aldo Moro, 5, 00185 Roma RM, Italy

Activity: Standard course on Chemical Risk

Main topics/acquired abilities: Risk prevention related to laboratories activity.

❖ **Period: 2007-2012**

Institution: Higher education Institution "Giustino Fortunato", Rionero in Vulture (PZ), Basilicata

Activity: Scientific high school

Obtained degree: Higher education diploma, 11 July 2012

Vote: 95/100

Main topics/acquired abilities: Acquisition of extensive training which includes in addition to the study of humanities and scientific subjects the study of economic and legal subjects.

PUBBLICATIONS

Silvestro, I., Francolini, I., Di Lisio, V., Martinelli, A., Pietrelli, L., Scotto d'Abusco, A., ... & Piozzi, A. (2020). Preparation and Characterization of TPP-Chitosan Crosslinked Scaffolds for Tissue Engineering. *Materials*, 13(16), 3577.

Silvestro, I., Lopreiato, M., Scotto d'Abusco, A., Di Lisio, V., Martinelli, A., Piozzi, A., & Francolini, I. (2020). Hyaluronic Acid Reduces Bacterial Fouling and Promotes Fibroblasts' Adhesion onto Chitosan 2D-Wound Dressings. *International Journal of Molecular Sciences*, 21(6), 2070.

Pietrelli, L., Francolini, I., Piozzi, A., Sighicelli, M., **Silvestro, I.,** & Vocciante, M. (2020). Chromium (III) Removal from Wastewater by Chitosan Flakes. *Applied Sciences*, 10(6), 1925.

Francolini, I., Perugini, E., **Silvestro, I.,** Lopreiato, M., Scotto d'Abusco, A., Valentini, F., ... & Piozzi, A. (2019). Graphene oxide oxygen content affects physical and biological properties of scaffolds based on chitosan/graphene oxide conjugates. *Materials*, 12(7), 1142.

Francolini, I., **Silvestro, I.,** Di Lisio, V., Martinelli, A., & Piozzi, A. (2019). Synthesis, characterization, and bacterial fouling-resistance properties of polyethylene glycol-grafted polyurethane elastomers. *International journal of molecular sciences*, 20(4), 1001.

CONFERENCE

Poster and oral session

Ilaria Silvestro, Noemi Prudenti, Iolanda Francolini, Antonella Piozzi

"Polyethyleneglycole diglycidyl ether crosslinked chitosan membranes containing graphene oxide as promising materials for wound dressing.

International Conference of Materials, Engine and Nanotechnologies (ICMEN).

Kuala Lumpur 2-5 December 2019, Malaysia(Poster)

Ilaria Silvestro, Elena Perugini, Iolanda Francolini, Antonella Piozzi, Andrea Martinelli

"Influence of Graphene Oxide Oxygen Content on properties of Chitosan/Graphene oxide scaffolds"

Convention for young researches: "Marcrogiovani 2019" of the Italian Association of Science and Technologies of Macromolecules (AIM). Naples 1-2 July 2019, Italy. (Oral Presentation)

Ilaria Silvestro, Elena Perugini, Iolanda Francolini, Antonella Piozzi, Andrea Martinelli

"Influence of Graphene Oxide Oxygen Content on properties of Chitosan/Graphene oxide scaffolds"

Convention for young researchers "VIII Convegno Giovani chimici", La Sapienza University, Rome Faculty of industrial chemistry. 25-26 June 2019 (Poster)

M. Di Consiglio, **I. Silvestro,** L.M. Migneco, A. Martinelli, A. Piozzi, I. Francolini

"Cationic polymeric nanoparticles for the release of an antimicrobial drug"

XXIII National Congress of the Italian Association of Science and Technologies of Macromolecules (AIM). Catania 9 - 12 September 2018. (poster)

I. Silvestro, A. Apriceno, A. Girelli, I. Francolini, A. Martinelli, A. Piozzi

"Magnetic nanoparticle systems as enzymatic immobilization media for industrial applications".

XXIII National Congress of the Italian Association of Science and Technologies of Macromolecules (AIM). Catania 9 - 12 September 2018. (poster)

Azzurra Apriceno, Gloria Arduini, Iolanda Francolini, Anna Maria Girelli, Antonella Piozzi,

Ilaria Silvestro. "Preparation and characterization of coated manganese ferrite nanoparticles for laccase immobilization". 6th EuChemS Chemistry Congress, Seville 11-15 September 2016. (Poster).

Lucio D'Ilario, Iolanda Francolini, Andrea Martinelli, Antonella Piozzi, **Ilaria Silvestro.**

"Matrices based on chitosan and hyaluronic acid as medical devices for the healing of skin lesions".

(Poster). Convention for Young researches "VII Convegno giovani chimici" La Sapienza University,

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Rome Faculty of industrial chemistry. 14-15 June
2016 (Poster)

Azzurra Apriceno, Gloria Arduini, Iolanda
Francolini, Anna Maria Girelli, Antonella Piozzi,
Ilaria Silvestro. *"Synthesis and characterization of
coated magnetic nanoparticles for laccase
immobilization"*. Convention for young researches "
VII Convegno Giovani chimici", La Sapienza
University, Rome Faculty of industrial chemistry. 14-
15 June 2016 (Poster)

TECHNICAL, PERSONAL AND RELATIONAL SKILLS

Knowledge of Microsoft applications and the Office
package, especially Excel and Power Point. Good
ability to surf the Internet. Good interpersonal and
communication skills, good listening skills, respect
for others, education, self-criticism and self-
analysis. Seriousness and reliability allow me to be
productive in group work.

LANGUAGES

Italian: Mother tongue

	Writing	Speaking	Reading
English	Good	Good	Good

PERSONAL DATA I authorize the processing of my
personal data in accordance with Legislative Decree
no. 196 of 30 June 2003 "Personal Data Protection
Code".

F.to Ilaria Silvestro