

## Personal information

Name / Surname **Gelmetti, Ilario**  
Address Barcelona 08030, Spain  
Personal Email [ilario@sindominio.net](mailto:ilario@sindominio.net)  
Nationality Italian  
Date of birth March 1988, Verona, Italy  
Github account <https://github.com/ilario/>

## Work experience

May 2023 – October 2025	<b>R&amp;D Engineering Manager.</b> <a href="#">Vitsolc Technologies</a> , Castelldefels, Barcelona, Spain. Technology validation; electronic engineering; coding in Python; Linux server management; projects writing and justification (Eureka Eurostars, EIC Transition, CDTI Neotec, Acció Startup Capital).
July 2020 – May 2023	<b>Post-Doc researcher.</b> Prof. <b>J. R. Galán Mascarós</b> group, Institute of Chemical Research of Catalonia ( <b>ICIQ</b> ), Tarragona, Spain. Development of a spray coater, of a nitridation reactor and of large area electrodes for heterogeneous electrocatalysis for water splitting and for chemicals conversion (Horizon 2020 <i>DECade</i> <a href="https://decadeproject.eu/">https://decadeproject.eu/</a> ). Project management and justification. Design of experiments with machine learning.

## Education

Jan. 2015 – July 2019	<b>Pre-Doc researcher.</b> Prof. <b>Emilio Palomares</b> group, Institute of Chemical Research of Catalonia ( <b>ICIQ</b> ) and Department of Electrical Electronic Engineering and Automation of Universitat Rovira i Virgili (DEEEA-URV), Tarragona, Spain. PhD evaluation excellent <i>cum laude</i> and international mention. <a href="#">Advanced Characterization and Modelling of Charge Transfer in Perovskite Solar Cells.</a> Fabrication of perovskite solar cells. Advanced characterization using electrical and optical transients. Software development for automated data analysis (R) and for data acquisition (Python).
PhD Thesis Title	<a href="#">Advanced Characterization and Modelling of Charge Transfer in Perovskite Solar Cells.</a>
Project	Fabrication of perovskite solar cells. Advanced characterization using electrical and optical transients. Software development for automated data analysis (R) and for data acquisition (Python).
Internship	3 months, Prof. <b>Jenny Nelson</b> Group, Dept. of Physics, <b>Imperial College London</b> , UK. Development of numerical modeling (Matlab) for simulation of impedance spectroscopy.
Oct. 2007 – Oct. 2013	<b>Diploma of Science Class.</b> Evaluation 70/70. <b>Scuola Normale Superiore di Pisa</b> , Italy.
Sept. 2010 – Oct. 2013	<b>Master Degree in Organic Chemistry.</b> Evaluation 110/110 <i>cum laude</i> . Dept. of Chemistry and Industrial Chemistry, <b>University of Pisa</b> , Italy.
Master Thesis Title	<a href="#">Synthesis and Characterization of Chiral Polythiophenes.</a>
Laboratory	Institute for Macromolecular Studies, <b>Consiglio Nazionale delle Ricerche, Milan</b> , Italy.
Sept. 2007 – July 2010	<b>Bachelor of Science in Chemistry.</b> Evaluation 110/110 <i>cum laude</i> . Dept. of Chemistry and Industrial Chemistry, <b>University of Pisa</b> , Italy.
Bachelor Thesis Title	<a href="#">Synthesis of Conjugated Polymers and Quantum Dots for Photovoltaics Applications.</a>
Sept. 2002 – June 2007	Secondary school diploma. Evaluation 100/100. ITIS G. Ferraris, Verona, Italy.

## Volunteering

Creating Board Games	Co-founder and <b>board game developer</b> of the No Board Games collective since 2014. Created the games <i>Cast the First Stone</i> and <i>The Fully Automated Board Game</i> .
Wireless Community Networks	eigenNet (2009–2013); LibreMesh.org modular firmware for community networks ( <b>developer, maintainer and community manager</b> , 2013–); NinuxVerona (founder, 2014–2015, <a href="#">presentation video</a> ); setting up network for events <a href="#">it.hackmeeting.org</a> , June 2017; <a href="#">es.hackmeeting.org</a> , September 2019; <a href="#">WirelessBattleMesh v15</a> , 2023); GSOC project manager with Freifunk (written 3 successful projects).
Hacklabs	eigenLab Pisa (co-founder, 2009–2013); TGNU Tarragona hacklab (co-founder, 2016–2018); Hacklab Logout (2022–2025); Phonelab del Clot (2026–).
Other volunteering	Operazione Mato Grosso (2004–2007), Manitese (2013).

## Non-academic grants

June 2019 – August 2019  
Project  
Acquired experience

[Google Summer of Code](#) (Freifunk and LibreMesh).

[Load-correlated distributed bandwidth analysis for LibreMesh networks](#)

Low level cabled and wireless networking; Lua coding; BASH scripting; git.

## Awards

National Chem. Olympiads  
National Physics Olympiads  
National Math. Olympiads

Fourth position in ranking of category C, Italian national selections, 2007.

Best experimental solution, Italian national selections, 2007.

Honorable mention, Italian national selections, 2006.

## Personal skills

Mother tongue

*Self-assessment*  
European level<sup>(\*)</sup>

**English**

**Spanish**

**Catalan**

Language certificates

Computer skills

Coding skills

Driving license

## References

	Understanding				Speaking				Writing	
	Listening		Reading		Spoken interaction		Spoken production			
<b>English</b>	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user
<b>Spanish</b>	B2	Independent user	C1	Proficient user	C1	Proficient user	C1	Proficient user	B2	Independent user
<b>Catalan</b>	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user

<sup>(\*)</sup>Common European Framework of Reference (CEF) level

Catalan language C1, issued by Universitat Rovira i Virgili, July 2020.

English language C1, issued by Escuela Oficial de Idiomas de Tarragona, February 2022.

Spanish language B2-C1, issued by SIELE, November 2025.

Linux system administration (more than 20 years experience using Debian and Arch Linux, x86 and ARM with DeviceTree); cabled and wireless networks setup and administration using OpenWrt; L<sup>A</sup>T<sub>E</sub>X; LibreOffice Writer, Calc and Impress; GIMP and Inkscape drawing; prototyping with Arduino and Single Board Computers for electronics (I2C, SPI, 1-wire, interrupt communications); assembling and repairing PCs and electronic hardware in general; CAD of mechanical pieces using FreeCAD (Part and Part Design workbenches).

Git version control; BASH scripting; advanced coding in Python; coding in R; coding in Matlab; coding in Lua.

Driving license class B.

Dr. **Sergi Cuesta Arcos**, CTO at Vitsolc Technologies, Castelldefels, Spain. [sergi.cuesta@vitsolc.com](mailto:sergi.cuesta@vitsolc.com)

Prof. **José Ramón Galán-Mascarós**, Group leader at Institute of Chemical Research of Catalonia, Tarragona, Spain. [jrgalan@iciq.es](mailto:jrgalan@iciq.es) +34 977 920 200

Prof. **Piers R. F. Barnes**, Assistant professor at Dept. of Physics, Imperial College London, London, UK. [piers.barnes@imperial.ac.uk](mailto:piers.barnes@imperial.ac.uk) +44 (0)20 7594 7609

Prof. **Emilio Palomares**, Director of Institute of Chemical Research of Catalonia, Tarragona, Spain. [epalomares@iciq.es](mailto:epalomares@iciq.es) +34 977 920 245