Personal information

Surname / First name	**Gelmetti, Ilario**
Address	Carrer Pere Martell, 13, 10°, 1^a 43001, Tarragona, Spain
Telephone	+34 675223010
Personal Email	iochesonome@gmail.com, ilario@sindominio.net
Nationality	Italian
Date of birth	March 1988

Occupational field

Materials chemist; Laboratory technician

Non-academic grants

Dates	June 2019 – August 2019
Type of grant	Google Summer of Code
Title of the project	Load-correlated distributed bandwidth analysis for LibreMesh networks
Supervisors	Marcos Gutierrez, Jésica Giudice
Name of organization	Freifunk and LibreMesh.

Education

Dates	January 2015 – July 2019
Qualification awarded	**PhD.** Final evaluation excellent *cum laude* and international mention.
Thesis Title	Advanced Characterization and Modelling of Charge Transfer in Perovskite Solar Cells.
Supervisor	Prof. Emilio José Palomares Gil
Principal subjects	Synthesis of organic and inorganic semiconductors; fabrication of perovskite solar cells (clean room, glovebox, spin coating, and thermal evaporation); characterization of materials (FTIR, PL, TEM, XRD, NMR), thin films (UV-vis, TAS, TRPL, AFM, SEM, ESEM-EDX, optical microscopy, profilometer) and complete devices (EIS, TPV, solar simulator, oscilloscope); coding for numerical modeling, data acquisition, and data analysis.
International Internship	3 months, Barnes Group, Department of Physics, Imperial College London, UK.
Name of organization	**Institute of Chemical Research of Catalonia** (ICIQ), Tarragona, Spain.

Dates	October 2007 – October 2013
Qualification awarded	**Diploma of Science Class.** Final evaluation 70/70.
Name of organization	**Scuola Normale Superiore di Pisa**, Italy.

Dates	September 2010 – October 2013
Qualification awarded	**Master Degree in Organic Chemistry.** Final evaluation 110/110 *cum laude*.
Thesis Title	Synthesis and Characterization of Chiral Polythiophenes.
Thesis Supervisor	Dr. Silvia Destri; Prof. Lorenzo Di Bari
Thesis Laboratory	Institute for Macromolecular Studies, Consiglio Nazionale delle Ricerche, Milan, Italy.
Name of organization	Department of Chemistry and Industrial Chemistry, **University of Pisa**, Italy.

Dates	September 2007 – July 2010
Qualification awarded	**Bachelor of Science in Chemistry.** Final evaluation 110/110 *cum laude*.
Thesis Title	Synthesis of Conjugated Polymers and Quantum Dots for Photovoltaics Applications.
Thesis Supervisor	Dr. Valter Castelvetro
Name of organization	Department of Chemistry and Industrial Chemistry, **University of Pisa**, Italy.

Dates	September 2002 – June 2007
Qualification awarded	**Secondary school diploma.** Final evaluation 100/100.
Name of organization	ITIS G. Ferraris, Verona, Italy.

Awards

National Chem. Olympiads	Fourth position in ranking of category C, Italian national selections, 2007.
National Physics Olympiads	Best experimental solution, Italian national selections, 2007.
National Math. Olympiads	Honourable mention, Italian national selections, 2006.

Personal skills

Mother tongue **Italian**

Self-assessment
European level[(*)]

	Understanding			Speaking			Writing	
	Listening		Reading	Spoken interaction		Spoken production		Writing
English	C1 Proficient user	C2	Proficient user	C1 Proficient user	C1	Proficient user	C1	Proficient user
Spanish	C1 Proficient user	C1	Proficient user	C1 Proficient user	C1	Proficient user	C1	Proficient user
Catalan	B2 Independent user	C1	Proficient user	C1 Proficient user	B2	Independent user	B2	Independent user

[(*)]*Common European Framework of Reference (CEF) level*

Language certificates	Certificat de nivell intermedi de català (level B2), Direcció General de Política Lingüística, September 2019
General computer skills and competences	Git version control (advanced); Debian and Arch Linux system administration (advanced); cabled and wireless networks setup and administration using OpenWrt (advanced); LaTeX markup (advanced); LibreOffice Writer, Calc and Impress (medium); GIMP and Inkscape drawing (medium); prototyping with Arduino; assembling and repairing PCs and electronic hardware in general.
Coding skills and competences	BASH scripting (medium); coding in Python (medium, e.g. development of PyPV acquisition data software), coding in R (advanced, e.g. development of data processing scripts), coding in Matlab (medium, e.g. contributions to Driftfusion), coding in Lua (medium, e.g. contributions to LibreMesh).
Driving license(s)	Driving license class B.
Volunteering	Operazione Mato Grosso (2004-2007), eigenLab Pisa and eigenNet wireless community network (2009-2013), Manitese (2013), NinuxVerona wireless community network (founder, 2014), LibreMesh.org modular firmware for community networks (developer and community manager, 2013-present), TGNU Tarragona hacklab (co-founder, 2016-2018).
Personal Interests	Renewable energy sources, open source software, computer security, wireless community networks, activism, cycling, climbing, problem solving, board games design.

Publications

Destri, S.; Barba, L.; **Gelmetti, I.**; Di Bari, L.; Porzio, W. *Macromol. Chem. Phys.* **2015**, *216 (7)*, 801–807.

Gelmetti, I.; Cabau, L.; Montcada, N. F.; Palomares, E. *ACS Appl. Mater. Interfaces* **2017**, *9 (26)*, 21599–21605.

Moia, D.; **Gelmetti, I.**; *et al. Energy Environ. Sci.* **2019**, *12 (4)*, 1296–1308.

Gelmetti, I.; Montcada, N.; *et al. Energy Environ. Sci.* **2019**, *12 (4)*, 1309–1316.

References

Dr. **Piers R. F. Barnes**

Organization	Department of Physics, Imperial College London (ICL), London, UK.
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Prof. **Emilio José Palomares Gil**

Organization	Institute of Chemical Research of Catalonia (ICIQ), Tarragona, Spain.
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