Personal information

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

Occupational field

Materials chemist, Laboratory technician, Data scientist, SysAdmin

Work experience

July 2020 – present	**Post-Doc researcher**. **Prof. J. R. Galán Mascarós group, Institute of Chemical Research of Catalonia** (ICIQ), Tarragona, Spain.
Project	Distributed chemicals and fuels production from CO_2 in photoelectrocatalytic devices. Development of anodes for ethanol oxidation.
June 2019 – Aug. 2019	Student in **Google Summer of Code** grant, **Freifunk and LibreMesh** organizations.
Project	Load-correlated distributed bandwidth analysis for LibreMesh networks.

Education

Jan. 2015 – July 2019	**Pre-Doc researcher**. **Prof. Emilio Palomares group, Institute of Chemical Research of Catalonia** (ICIQ) and Universitat Rovira i Virgili (URV), Tarragona, Spain. PhD final evaluation excellent *cum laude* and international mention.
Thesis Title	Advanced Characterization and Modelling of Charge Transfer in Perovskite Solar Cells.
Internship	3 months, Dr. Piers Barnes Group, Dept. of Physics, **Imperial College London**, UK.
Oct. 2007 – Oct. 2013	**Diploma of Science Class**. Final evaluation 70/70. **Scuola Normale Superiore di Pisa**, Italy.
Sept. 2010 – Oct. 2013	**Master Degree in Organic Chemistry**. Final evaluation 110/110 *cum laude*. Dept. of Chemistry and Industrial Chemistry, **University of Pisa**, Italy.
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.
Sept. 2007 – July 2010	**Bachelor of Science in Chemistry**. Final evaluation 110/110 *cum laude*. Dept. of Chemistry and Industrial Chemistry, **University of Pisa**, Italy.
Thesis Title	Synthesis of Conjugated Polymers and Quantum Dots for Photovoltaics Applications.
Thesis Supervisor	Dr. Valter Castelvetro
Sept. 2002 – June 2007	Secondary school diploma. Final evaluation 100/100. 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		
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	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user

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

Language certificates — Certificat de nivell suficiència de català (level C1), Universitat Rovira i Virgili, July 2020.

Computer skills — 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 — BASH scripting (medium); coding in Python (medium, e.g. PyPV data acquisition software and data processing for electrochemistry data), coding in R (advanced, e.g. data processing for photovoltaics), coding in Matlab (medium, e.g. contributions to Driftfusion), coding in Lua (medium, e.g. contributions to LibreMesh).

Driving license — 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–), TGNU Tarragona hacklab (co-founder, 2016–2018), No BoardGames (game developer, 2014–).

Hobbies and 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

Contacts — Dr. **Piers R. F. Barnes**, Dept. of Physics, Imperial College London (ICL), London, UK.
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Contacts — Prof. **Emilio Palomares**, Institute of Chemical Research of Catalonia (ICIQ), Tarragona, Spain.
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