Open Position for 1 PhD Fellowship within the MSCA Doctoral Network project MASAUTO (MAterials for Smarter AUTOnomous sensors) on Perovskite solar cells for sustainably powering IoT electronics.

MISSION: Indoor photovoltaics (IPVs) allows to both power IoT devices and recharge their energy storage units, allowing them to operate while in the dark and obliviating the need for replaceable batteries, a convenient solution both economically and environmentally. However, high-efficiency IPV devices are required to perform both these energy-demanding tasks, and the IPV modules currently available have power conversion efficiencies around 10-15%.
The **Doctoral Candidate** will focus on the fabrication of perovskite solar cells based on wide bandgap formulations, and on the optimization of their performances for indoor, low-light, energy harvesting.

Project website: https://masauto-net.eu/
Supervisor website: https://pvsquared2.unipv.it/

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Host Institution	Università di Pavia
Supervisor	Prof. Giulia Grancini
Duration	36 months
Starting Date	1st April 2026
Doctoral Degree	PhD Fellowship in Chemistry
MC Contract	With Living Allowance and Family Allowance

Project-specific Selection Criteria

- Master's degree in materials engineering, physics, chemistry or a related discipline
- Good understanding of solid-state chemistry, semiconductor physics, and solar cell operation
- Experience with solution processable materials and deposition methods, thin-film formation, solar cell fabrication, and electrical and optical characterization methods.

Other Criteria

- Highly proficient English language skills.
- Willingness to work collaboratively in a research environment.
- Strong commitment to his/her own continuous professional development
- Willingness to travel and work across Europe.