




# Ilaria Abdel Aziz, PhD

 Calle Mayor 7, San Sebastian (ES)

 Ilaria.aaziz@gmail.com

 [www.linkedin.com/in/ilaria-abdel-aziz](https://www.linkedin.com/in/ilaria-abdel-aziz)

 +34 626350742

## Profile

---

Self-motivated researcher in physics and material science, passionate about science communication. I thrive in interdisciplinary and international teams. I learnt how to make data-driven decisions, to have my ideas and hypotheses challenged and tested, and to work constantly under mostly unknown circumstances, where the research direction is discovered one step at a time and taking risks.

## Skills

---

- **Team Working**, demonstrated working with multidisciplinary and interdisciplinary teams to pursue research objectives, located in multiple countries (Europe, Australia and the U.S.).
- **Scientific writing and peer-review processes**, demonstrated by authoring scientific publications (<https://scholar.google.com/citations?hl=en&user=719Fw3QAAAAJ>) in **different editorial houses (Wiley, Elsevier, Cell, Frontiers, Cambridge University Press)**, from **manuscript preparation to review and publication**.
- **Scientific communication**, demonstrated by presenting my results at **international conferences**.
- **Project Management**, demonstrated during the development of my research projects and during the supervision of PhD, master and high school students, managing deadlines, work streams and stakeholders by objectives and results reporting (weekly or monthly) with PowerPoint or Word.
- **Networking**, demonstrated by initiating a collaboration for the Progetto Rocca fellowship with the So Lab at MIT and by managing other internal collaborations with successful publications.
- **Prioritisation**, demonstrated by working on different projects and being able to conclude all of them with publications, together with other duties as laboratory handling.
- **Data analytics**, acquired through research experience. I performed data analysis using Matlab, Python, ImageJ, OriginLab, Excel, as well as instrument-specific softwares.
- **Programming**, demonstrated through the control of electric ad hoc instruments (Arduino).
- **Grant Writing**, demonstrated by receiving funding from private and European frameworks, as:
  - 2023 Marie Curie COFUND ADAGIO Postdoctoral fellowship (Horizon Europe)
  - 2022 Marie Curie Postdoctoral fellowship (Seal of Excellence, Horizon Europe)
  - 2018 Progetto Rocca fellowship
- **Laboratory management**, as safety procedures, orders and resources coordination and maintenance, demonstrated by managing the chemistry laboratory and the POLYMAT.
- **Experimental physics skills**, demonstrated through the successful publication of scientific results.
  - Expert on: design of experiment, electrochemistry techniques and imaging.
  - Advanced knowledge: devices fabrication, cleanroom procedures, surface characterization techniques.
  - Basic knowledge: mammalian cells and plants handling and maintenance.

## Professional Experience

---

### Basque Center for Macromolecular Design and Engineering (POLYMAT) San Sebastian – Donostia (ES)

Postdoctoral Researcher

03.2023 - now

- *I manage and develop three different projects on design, synthesis and characterization of new polymeric materials for water harvesting, as a possible solution for fighting water shortage in the upcoming years. I am responsible for planning and design of experiments, data acquisition and analysis, making **data-driven decisions** on the next steps of the project, monthly reports on projects' progress, in collaboration with international partners (Australia).*
- *I am responsible for the chemistry laboratory management, as safety procedures, orders and coordination.*

### Linköping University (LIU)

Postdoctoral Researcher

Norrköping (SE)

01.2021 – 12.2022

- *I worked on and managed two projects for the development of materials and devices for improving plant response during drought (Horizon 2020 EU framework). I was responsible for planning and design of experiment, data acquisition and analysis, making **data-driven decisions** on the further steps, managing collaborators (Italy, UK, Sweden), project updates and research expeditions at their facilities. I was responsible for manuscript preparation, submission and review processes to Wiley journals (Advanced Science, Advanced Functional Materials).*

### Italian Institute of Technology (IIT)

Research fellow

Milan (IT)

08.2020 - 12.2020

- *I worked on publishing the results of my PhD, from manuscript preparation to submission and review procedure. I transferred my knowledge to the new coming students and postdocs.*

---

**Italian Institute of Technology (IIT)** **Milan (IT)**  
PhD fellow 05.2017 – 07.2020

- *I worked on a project for developing photovoltaic patches for tissue engineering. I was responsible for **experimental procedures** and **data reporting**. I learnt how to make **data-driven decisions** for research projects. I developed experience in **data analysis** with OriginLab and Excel. I learnt how to pitch my own ideas and quickly test their feasibility.*

---

**Massachusetts Institute of Technology (MIT)** **Cambridge (U.S.A.)**  
PhD visiting student 03.2019 – 12.2019

- *I managed a project on evaluation of new optical methods for characterising material/cell interfaces. I developed expertise on phase microscopy techniques, image and data analysis.*
- *I experienced a very different research environment and university management system, from which I took good practices and implemented them in my following institutions.*

---

**Italian Institute of Technology (IIT)** **Milan (IT)**  
Master student 07.2016 – 04.2017

- *I worked on a project on the characterization of photosensitive devices for photoelectrochemical stimulation of mammalian cells. My responsibilities were: data acquisition and analysis and weekly reporting, statistical analysis and interpretation.*

## Education

---

**PhD in Physics *graduato cum laude***, Politecnico di Milano (PoliMi) joint with **Milan (IT)**  
Italian Institute of Technology (IIT) **2017 – 2020**

- *Awarded Progetto Rocca Fellowship (2018) for an exchange period at MIT (Cambridge, U.S.A.)*
- *Awarded Materials Research Society Graduate Student Gold Award, for promising and talented researchers in the material science field (2019).*

---

**MSc**, Politecnico di Milano, Engineering Physics – Nanophysics and Nanotechnology **Milan (IT)**  
**2014 – 2017**

---

**BSc**, Politecnico di Milano, Engineering Physics **Milan (IT)**  
**2010 – 2014**

## Languages and additional information

- 
- **Languages:** Italian (native speaker), English (C1), Spanish (B1), Swedish (A1/A2).
  - **Personal interests:** Hiking and nature enthusiast, outdoor climber, traveller, and photographer. Passionate about dog training.