



# Federico Iori, PhD

**EU scientific projects innovation officer in HPC & advanced computing**  
**Computational physicist**

**Innovation strategies for exploitation of results from R+D+I projects**  
**Community-structuring activities for networking within the ERA**

**Application fields:** Accelerators, Programming models, FPGA, RISC-V, Embedded systems  
**Business lines:** IoT, Chips design, HPC systems, Digital EU market, STEM

## Education

2004

**Physics degree**

Università di Modena & Reggio Emilia

2008

**PhD in Physics**

Università di Modena & Reggio Emilia

## Expertise

Innovation management

Exploitation & sustainability

Knowledge brokering

Technology watch

Data analysis

HPC, Programming languages

Molecular & materials modelling

Physics / Chemistry

## Hard skills

IPR

Problem-solving

Risk analysis

Linux, Bash shell, F90,

Python, MPI/openMP

Quantum chemistry simulation codes

Open office suite

Spreadsheets

Databases

Quantum theory of materials

## Soft skills

Critical thinking

Detail-oriented and accommodating

Socially-focused

Teaches and shares

Accommodating

Careful with rules

Detail-oriented and thorough

Driven to achieve operational

efficiencies

## Professional experience

### ● November 2021- present

*Barcelona Supercomputing Center - Barcelona (ES)*

#### **EU projects innovation officer**

- Responsible for the **exploitation and sustainability management** in EU funded projects on RISC-V, FPGA, heterogeneous architectures, programming models, NLP, consortium supporting actions.
- Identification of **business opportunities** and partnership for projects follow-up.
- Consolidation of **adoption of results** and **IPR** management
- Strategic solutions to **consolidate project impact** for society, environment, industry, science.
- Facilitator and **knowledge transfer** responsible for researchers and support groups.
- Activities to foster **recruitment** for young researchers in STEM within the HiPEAC project.
- **Career development advisor** for Marie Curie fellowship proposals on pre-submission phase.

### ● March 2018 - November 2021

*Air Liquide - R&D Paris Innovation Campus (France)*

#### **Computational research engineer**

- Responsible for the Molecular Modelling exploratory program (electronics, catalysis, gas separation).
- Provide technical expertise on developing of gas production technologies.
- Fostering and managing collaborations between the industry and academia.

### ● August 2017 - March 2018

*Mutina SciTech consulting start-up*

#### **Auto-entrepreneur**

- Creation of the start up Mutina SciTech, a database platform for knowledge and instrumentation sharing.
- Market study and business model preparation for a freelance basis occupation providing materials science, consultancy, project management and delivery.
- Selected to participate to the Program for enterprise creation led by BGE (<https://www.bge.asso.fr/>).

### ● November 2014 - July 2017

*Université Paris-Saclay (France)*

#### **Researcher Marie Skłodowska Curie IF 2014 - budget € 173.076**

- Modelling opto-electronic properties of multi-ferroics oxides and semiconducting nanostructures.
- Primarily accountable for planning and managing research projects on ceramic oxides properties.
- Collated research data and produced comprehensive reports for R&D project.
- Delivered teaching to students, organised events, produced learning materials.

### ● March 2008 - August 2014

*Ecole Polytechnique (Fr), UPV (Spain), UNIMORE (Italy), ICMAB-UAB (Spain)*

#### **4 Postdoctoral researcher positions in different european laboratories**

- Oversaw, coordinated and conducted complex research into nanostructured materials.
- Tasked with managing the supply chain process workflow for technology transfer.
- Provide comprehensive teaching to the undergraduate students in line with course curriculum.
- Tasked with conducting extensive research on oxide materials to support projects.
- Joint research between theory and experiments to model and predict functional properties of materials for opto-electronic and photonic applications.
- Prize "Edison-Volta 2012" funded by Edison and «A. Volta Foundation» (Italy) (€ 10K budget) (2012).

## Networks

### Orcid ID

0000-0002-7677-3435

### ResearcherID

C-4091-2016

### LinkedIn

[linkedin.com/in/federicoioriphysicist/](https://www.linkedin.com/in/federicoioriphysicist/)

## Languages

Italian (native)

English (C1)

French (C1)

Spanish (C1)

Catalan (C1)

## Contact

### Phone

+34633244308

### Email

[federico.iori29@gmail.com](mailto:federico.iori29@gmail.com)

### Address

carrer de Villaroel,6,4-1

08011 Barcelona

## Other experience

### Expert evaluator for EU and national projects

- MSCA PF, PRACE HPC EU, Marti-Franques Cofund programme 2020, FLAG-ERA 2021.
- Reviewer for journals: Phys. Rev.B, EJP, Nature Scientific Report.

### Teaching

- Supervision: 3 master students.
- Teaching: Ecole Polytechnique (2016), Centrale-Supelec (2016) (France); University of Modena (2005).

### Science popularization

- Scientific translator: Science Day Festival (Fete de la Science) (Orsay 2015, 2016, 2019).
- Conceptualised and organised workshop 'Voyages dans le Nanomonde' at the University of Paris (2015, - 2016, 2017).
- Instrumental in conceiving and delivering educational materials for the exposition 'Blow Up: An Eye to the Nanoworld' (<http://blowup.nano.cnr.it>) (Modena, IT 2008).
- Planned, organised and delivered the ETSF Young Researchers' meeting (Modena, IT, 2008).

### Scientific production

- Scientific production through peer-reviewed papers and conferences acts:
  - 24 publications in international journals (20 articles, 4 compte rendus, 1 book chapter).
  - 33 contributions at international conferences (of which 13 orals).

### Hobbies

Mountain sport activities (climbing, skiing, trekking,), volunteer at Arrels Fundació for homeless people, reading, music, photography, popular culture traditions related activities.