
Contact

pol.benitez@upc.edu /
polbeco@gmail.com (email)
<https://polbeni.github.io/> (webpage)
www.linkedin.com/in/pol-benitez-colominas-3b3076235 (LinkedIn)
+34620381099 (phone Number)

Programming languages and software knowledge

Python
Fortran
VASP
Phonopy
hiPhive
M3GNet

Skills

Density Functional Theory
Phonon calculations
Ab Initio Molecular Dynamics
Crystal Structure Prediction
Data Analysis
Machine Learning Methods
Numerical Simulation

Languages

English (Full Professional Proficiency)
Spanish (Native)
Catalan (Native)

Pol Benítez Colominas

PhD student at UPC
Barcelona, Catalonia, Spain

Profile

I am currently doing research in computational materials science, trying to understand structural and optoelectronic properties of novel semiconductor materials interesting for energy applications. My interests range from condensed matter physics to machine learning applications and computer science.

Experience

Universitat Politècnica de Catalunya; Barcelona, Spain:

- Predoctoral Researcher, Sep 2023 - Present
- Adjunct Professor, Feb 2023 - Apr 2024
- Postgraduate Researcher, Jan 2023 - Aug 2023

Universitat de Barcelona; Barcelona, Spain:

- Undergraduate Researcher, Nov 2021 - May 2022
- Undergraduate Researcher, Feb 2021 - May 2022

Education

Universitat Politècnica de Catalunya - PhD in Computational and Applied Physics (2023 - Present)

Universitat Politècnica de Catalunya - Master's degree in Engineering Physics (2022 - 2023)

Universitat de Barcelona - Degree in Physics, Mention in Fundamental Physics (2016 - 2022)

Research topics

Anharmonic materials for energy applications

Crystal structure prediction with ML interatomic potentials

Crystal graph neural networks for materials properties prediction

Awards and grants

Joan Oró FI 2024, predoctoral research grant (May 2024 - May 2027)

Best Predoctoral Research Awards (1st edition) of the Department of Physics of UPC, second prize (Feb 2024)
