# Yaidel Toledo González

Scientific researcher with proven experience in Computational Simulations, coding, and much more



Email

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Institution IPREM, University of Pau and the Adour Countries, France

Web Page See more at yaidel.poview.org/curriculum-vitae

## **Experience**

## Researcher, Post-doc

2023 - 2024

¶ IPREM, University of Pau and the Adour Countries, France

Performed computational simulations which provided insights into processes at the atomic scale in Ru based catalysts to storage H<sub>2</sub> and CO<sub>2</sub> into formic acid, and then release them.

#### Researcher, Ph.D.

2019 - 2022

¶ IPREM, University of Pau and the Adour Countries, France

Performed computational simulations, coding with Bash and Python, data analysis, and research, to identify the reaction mechanisms defining the catalytic properties of urea-based foldamers to achieve challenging C-C bond forming reactions.

#### Researcher, student

2018 - 2019

¶ InsTEC, Univerity of Havana, Cuba

Build from scratch a Molecular Dynamics code in FORTRAN to simulate the Matrix Isolation deposition process to trap small molecule into rare gas matrices.

## **Education**

## Ph.D. degree in Physical-Chemistry

2022

¶ IPREM, University of Pau and the Adour Countries, France

"Molecular design for catalytic activities of helical chiral oligoureas." Under the supervision of Philippe Carbonniere, and Jean-Marc Sotiropoulos.

#### **Engineer in Nuclear and Energetic Facilities**

2019

📍 InsTEC, Univerity of Havana, Cuba

**66** "Matrix isolation of  $W(CO)_6$ : understanding at the atomic scale of the materials design." *Cum Laude*. Under the supervision of Germán Rojas Lorenzo.

## Skills

⟨/> FORTRAN · Python · Elisp · C · C++ · HTML/CSS · LATEX

SciPy · Numpy · Pandas · Matplotlib

>\_ Linux · Bash · Emacs · Inkscape · GIMP · WordPress · LibreOffice · Zotero

☐ Gaussian · deMon2K · Multi-WFN · ANSYS · DFT · Molecular Dynamics · HPC

#### **Grants and awards**

Grant 1M CPU/hours · 2023 Granted by GENCI, at TGCC

Grant 900k CPU/hours · 2021 Granted by GENCI, at TGCC

First Place Award · 2019

Theoretical Physics commission price "InSTEC 2018-2019"

**Third Place Award** · 2016 ACM-ICPC InsTEC Finals

## Languages

Spanish	Native	•••••
English	C1	••••
French	B2	•••00

## Other interests

Writing  $\cdot$  Photography  $\cdot$  Web design  $\cdot$  Baseball  $\cdot$  Calisthenics  $\cdot$  Gardening