

Ana Delia Parejo Vidal

linkedin.com/in/aparejo Vidal

+1 805-637-9557 · aparejo Vidal@ucsb.edu

EDUCATION

Ph. D. in Physical Chemistry University of California Santa Barbara, US 2020-current

Thesis title: " Applications of Molecular Spectroscopy"

Third year conducting research abroad at Tokyo Institute of Technology, Japan

M.S. in Chemical Sciences and Technologies, University of Granada, Spain 2019-2020

Thesis title: " Exploring the Slow Magnetic Relaxation of lanthanide-MOFs "

B.S. in Chemistry, University of Granada, Spain 2015-2019

Senior year studying abroad at University of California Santa Barbara

FELLOWSHIPS AND GRANT AWARDS

Dr. Horia Metiu and Dr. Eun Hee Cirlin Endowed Fellowship 2024

This prestigious award recognizes the outstanding achievements and strong interest in Physical Chemistry

University of California Chemical Symposium Physical Division Prize 2024

Award sponsored by Real Society of Chemistry Mechanochemistry, for the talk "Tip Enhanced Laser Desorption"

Doctoral student Travel Grants UC Santa Barbara 2023 and 2024

Awarded with three different travel grants during my PhD program to assist to conferences and symposiums

Japan Promotion of Science Postdoctoral fellowship 2023

Although it is considered one of the most prestigious fellowship to conduct postdoctoral research, during my

PhD I was exceptionally awarded to conduct independent research at Tokyo Institute of Technology, Japan

Award in "Excellence in Internationalization of Students" by the University of Granada 2020

Recognition of excellence in portraying the University of Granada through beyond expectations academic development during my year abroad in the UC Santa Barbara

"99% bonification" by the University of Granada, Spain 2020

Recognition of academic excellence resulting funding my Masters studies

"Plan Propio" Fellowship by the University of Granada 2018

I was awarded with one of the 10 fellowships offered for the 80,000 students in the University of Granada to cover the expenses of studying abroad in one of the UC during my senior year of undergraduate studies

CONFERENCES & ACADEMIC PRESENTATIONS

UC Santa Barbara Grad Slam speaker- Runner up position

TEDxUCSB 2024 speaker, presenting "What's the point of fundamental research"

University of California Chemical Symposium, 2024, participated a speaker with a winning-award talk

76th International symposium of Molecular Spectroscopy, participated as speaker

TEDxUCSB 2023 speaker, introducing my PhD research to the general public in "The bright side of life"

University of California Chemical Symposium, 2023, participated a speaker

ACS Spring, 2023, participated remotely presenting a poster

RESEARCH TOPICS

Atomic Force Microscopy

High vacuum systems

Resonance Enhanced Multiphoton Ionization

Tip Enhanced Laser Desorption

Time of Flight MS

Pump Probe Spectroscopy

Laser desorption-Jet cooling

Electrospray ionization

UV-IR Hole Burning Spectroscopy

COMPUTATIONAL SKILLS

Labview

Gaussian 16

Igor

Origin

C++

Microsoft Office

Matlab

Libre Office

OTHER SKILLS

Bilingual in Spanish and English

OUTREACH & VOLUNTEERING EXPERIENCE

Mentor in the program Climatry at UC Santa Barbara 2023

Mentor in the program RMP UC Santa Barbara 2023

Mentor in the program JUMP UC Santa Barbara 2021-2023

Mentor in the program McNair UC Santa Barbara 2020-2021

Mentor in the program SciTrek UC Santa Barbara 2019

Chemistry Student Representative University of Granada 2015-2018

Coordinator of Mensa Granada, Cordoba and Jaen 2016-2020

PROFESSIONAL EXPERIENCE

Tokyo Institute of Technology, Japan 2023
GRADUATE STUDENT RESEARCHER IN THE FUJII GROUP

I joined in the group of Professor Masaaki Fujii based on ionic gas phase spectroscopy, and I applied and developed the application of Electrospray Ionisation Source Cold Ion Mass trap-Time of Flight Mass Spectrometer coupled with IR Spectroscopy to several natural bases, dimers, and tetramers.

UC Santa Barbara 2020-Current
GRADUATE STUDENT RESEARCHER IN THE DE VRIES GROUP

Member of de Vries Group at UCSB, I research the development and detailed analysis of surface materials using Tip Enhanced Laser Desorption (TELD) to produce highly spatially resolved samples for ex-situ detection. I also study the dynamics of excited states of biomolecules in the gas phase using Resonance Enhanced Multiphoton Ionization (REMPI), pump probe experiments, and hole-burning UV-IR spectroscopy in the picosecond and nanosecond regime.

UC Santa Barbara 2020-2021
TEACHING ASSISTANT

I was a Teaching Assistant for the thermodynamics class and the series of general chemistry laboratory courses. I gave weekly sections where I solved numerical problems, I explained the experiments, the concepts covered, and graded all the assignments

University of Granada, Spain 2019-2020
GRADUATE STUDENT RESEARCHER IN THE RODRIGUEZ GROUP

Member of Antonio Rodriguez's research group based on Inorganic Chemistry. During my Master's thesis research I synthesized Metal-Organic Frameworks and characterized their structures, and electromagnetic, and luminescent properties.

N-Fuzed, Grover Beach, CA, 2019 2019
ASSOCIATED CHEMIST

I worked for a start-up company researching new features and products for the industry, producing tinctures for production batches, maintaining and organising stock, and following and improving SOPs. I am also responsible for maintaining and calibrating peristaltic pumps, scales, stir plates and MDI machines.

UC Santa Barbara 2018-2019
UNDERGRADUATE RESEARCHER IN DE VRIES GROUP

I was an active member of this research group studying spectroscopy. I was in charge of modifying and trouble shooting LabView scripts, making samples, analyzing data, and brainstorming ideas.

CD Smilo Sport Club, Granada, Spain 2012-2016
BASKETBALL COACH

I coached a novice team of girls who were eventually able to play at a high-performing, fast-paced level of basketball. I was very grateful to experience the power of leadership, teamwork, and passion for the game towards my success as a coach.

PUBLICATIONS

- Cohen, T., Svadlenak, N., Smith, C. et al. Excited-state dynamics of deuterated indigo. *Eur. Phys. J. D* **77**, 168 (2023)
- Oyarzabal, I., Rojas, S. Parejo Vidal, A. et al. Exploring the slow magnetic relaxation of a family of photoluminescent 3D lanthanide-organic frameworks based on dicarboxylate ligands. *Magnetochemistry* **7**, 3 (2021)
- Parejo Vidal, A.D., Cohen, T., Estebanez, N. et al. Tip Enhanced Laser desorption: Spatially resolved nano-scale surface sampling with ex-situ chemical analysis. In preparation
- Parejo Vidal, A.D., Cohen, T., et al. Isomer differentiation in nanoscale surfaces. In preparation
- Parejo Vidal, A.D., Okura, Y. et al. ESI- Cold ion trap- IR spectroscopy of Cytosine clusters. In preparation
- Parejo Vidal, A.D., Cohen, T. et al. Excited-state dynamics of shikonnin. In preparation