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ABOUT ME

I am a dedicated, efficient, motivated and very proactive person, looking for opportunities for professional growth. I have high logical and analytical capacity. I share a great taste for organic chemistry. I am passionate about what I do, I love learning new things and relating them to my career, as well as creating my own projects. I like research and innovation. I work very hard to succeed in all my life projects.

EDUCATION

Bachelor of Chemistry, Faculty of Chemistry, National Autonomous University of Mexico (UNAM). (2017-2022)

Teacher in Organic Chemistry I, Faculty of Chemistry, National Autonomous University of Mexico (UNAM). (2022)

SKILLS

Management of equipment in the industry: HPLC, UV-vis Detector, UV-vis Spectrophotometer, Fourier transform infrared equipment, nuclear magnetic resonance equipment and mass spectrometer (interpretation of spectra).

Molecular simulation in ChemDraw®, Avogadro®, Gaussian® and Gromacs®.

Web pages and applications development. Code languages: HTML5, CSS, SCSS, JavaScript, Node JS, JSON, Python.

LANGUAGES

Spanish (native)
English B2 (TOEFL IBT)

ADRIÁN PITALÚA CALLEJA

23 years old. Chemist

PROFESSIONAL EXPERIENCE

Research Stay and Teacher Support
2019

Faculty of Chemistry, UNAM. Department of Inorganic and Nuclear Chemistry and Analytical Chemistry. Subjects taught: General Chemistry, Analytical Chemistry I, Organic Chemistry II. Research related to ferrocenyl compounds and their derivatives. Immediate boss: PhD. Elena Ivanovna Klimova and PhD. Jessica Jazmín Sánchez García.

PAPIME Colaborator
2020-2021

"Sargassum: Contribution to Analytical Chemistry from Teaching and Formative Research". Faculty of Chemistry, UNAM. (2021). Immediate boss: PhD. Minerva Monroy Barreto.

Research Assistant
2021

Research Area: Dyeing of cotton fibers through supramolecular polymers. Department of Analytical Chemistry Marie Curie Annex Building, Rabanales University Campus, University of Córdoba (UCO), Spain. Immediate boss: PhD. Soledad Rubio Bravo.

DGECI-UNAM Research Stay
Summer 2021

"Extraction of natural dyes from waste from the agri-food and forestry industry using supramolecular polymers" Collaboration DGECI, UNAM-Department of Analytical Chemistry Marie Curie Annex Building, Rabanales University Campus, University of Córdoba (UCO), Spain. Academic responsible for Research: PhD. Soledad Rubio Bravo.

Professional Practice Work
2021

"Determination of polyphenols in Sargasso" Department of Analytical Chemistry, Faculty of Chemistry, UNAM. Head of Research: PhD. Minerva Monroy Barreto.

Social Service
2022

"Teaching and Research in Organic Chemistry" Department of Organic Chemistry, Graduate Building, Faculty of Chemistry, UNAM. Responsible tutor: PhD. Hector García Ortega.

Academic Improvement Program
2022

Subprogram 121. *"Teacher Training"* Department of Academic Improvement-Department of Organic Chemistry, Faculty of Chemistry, UNAM. Responsible tutors: PhD. Hector García Ortega (Theory) and PhD. Óscar González Antonio (Laboratory).

PERSONAL DEVELOPMENT

Project presentation *"Development of titanium photochemical cells"*. Postgraduate Unit, UNAM.

"Mathematics for Chemical Problems through Python". Institute of Engineering, UNAM.

"Electrowhat? Introduction to Analytical Electrochemistry". Institute of Chemistry, UNAM.

"Validation of analytical methods". Industrias Garay e Instrumentación S.A de C.V.

Training in validation of analytical methods *"Letters of Traceability of Analytical Methods"*. Industrias Garay e Instrumentación S.A de C.V.

"Programming for Everybody (Getting Started with Python)" by University of Michigan.

"HPLC Chromatography: Fundamentals" by PAPIME Project PE210829. Institute of Chemistry, UNAM.

"Introduction to HTML5" by University of Michigan.

"Introduction to Web Development: HTML and CSS" by Google Academics.

25th University Fair of Science, Technology and Innovation
2018

Theoretical-Practical Advanced Course
2020

Training Course
2020

Seminar
2021

Seminar
2021

Theoretical-Practical Certification
2021

Certification
2021

Professional course
2021

Certification
2021

LEADERSHIP

INVESTIGATION ASSISTANT

I directed and developed the project "Fiber dyeing of cotton fibers through supramolecular polymers" as Project Manager in the methodological development of alternative chemical processes to conventional ones, focused on finding more practical, ecological and cheaper processes compared to synthetic dyes in the industry textile. The project obtained satisfactory results to generate a patent in the Spanish Patent Office. Developed in 2021 at the Institute of Fine Chemistry and Nanochemistry, Department of Analytical Chemistry, Rabanales University Campus, University of Córdoba (UCO), Spain. Immediate manager: PhD. Soledad Rubio Bravo.

STARTUP

Simultaneous course in Web Development. I formed a team to undertake a project focused on a monetizable web and mobile page-application in Analytical Chemistry, being part of the team with the appointment of General Director of Front-End Development. My developer background is as follows:

Certified Module of "Web Development" approved. Full Stack Developer Career. CoderHouse©, Buenos Aires, Argentina. 2021.

Certified module of "JavaScript" approved. Full Stack Developer Career. CoderHouse©, Buenos Aires, Argentina. 2022.

TEACHER

I worked in the Academy of Professors of the Faculty of Chemistry with the appointment of Assistant Professor, being part of Subprogram 121 "Teacher Training" in the Department of Academic Improvement in the Department of Organic Chemistry, Faculty of Chemistry, UNAM:

Organic Chemistry I (2022). The students establish the relationship of Organic Chemistry with other sciences and acquired the ability and skill for laboratory work. The synthesis and reactions of alkanes, alkenes, alkynes and dienes are studied.

ENVIRONMENTAL CARE

In collaboration with a team, I presented a Startup based on water reduction, winning the Climathon 2021 Edition with the project "Filterpot: Purification system by reduction of organic compounds and UV light emission". Collaboration Climathon CDMX, Government of Mexico City and Climate-KIC.