**Jorge M. Hernandez**

1022 N. Armstrong St., Kingsville, TX 78363

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(956)-521-191

**Education**

The University of Texas at Austin Expected Graduation: May 2027

**Doctor of Science in Chemical Engineering**

Texas A&M University–Kingsville Graduation: December 2021

**Master of Science in Chemical Engineering**

Texas A&M University–Kingsville Graduation: August 2020

**Bachelor of Science in Chemical Engineering**

**Work Experience**

**Nova Molecular Technologies** Kingsville, Texas.

Senior Research Associate November 2021-July 2022

* Developed novel method of acetonitrile manufacture at laboratory scale to further develop at industrial scale.
* Developed P&ID of laboratory scale process, including pre-heating section and reactor section.
* Performed experiments to define optimal operating conditions.
* Provided biweekly update presentations to board of directors to demonstrate progress on the project.

**Department of Energy** Remote-Los Alamos, New Mexico.

Mickey Leland Chemical Engineering Intern June 2021-August 2021

* Researched novel carbon capture technologies using high efficiency gas membranes to decrease operating costs of industrial processes.
* Developed Python code to simulate a two-stage gas membrane separation process with multi-stage compression and interstage cooling.
* Conducted techno-economic analysis of process to determine carbon capture cost, decreasing costs by $30-$40 over conventional technologies.

**Inteva Products Mexico.**

Engineering Intern

Matamoros, Mexico.

June 2019–July 2019

* Conducted a research project to decrease the use of adhesive in car interiors, saving $25,000 per year by limiting waste produced by excessive use of adhesive.
* Implemented Lean methodology to improve production of car interior components, decreasing downtime by 15%.
* Conducted risk assessment of safety guidelines for various processes to decrease incidence of accidents by 25%.
* Designed database of car interior parts in Excel to catalog product specifications for over 150 components.

**Texas A&M University–Kingsville** Kingsville, Texas Pathways Academic Assistance Center-Chemistry Tutor September 2019–August 2021

* Spend 15 hours a week tutoring to assist students in learning material in different areas of Chemistry.
* Executed a problem-based learning approach to improve critical thinking and problem-solving skills of students.
* Conducted tutoring sessions for groups of students to increase class averages by 10%.

**Leadership & Organizations**

**American Institute of Chemical Engineers–Kingsville**  August 2018–May 2019

Secretary

* Notified students from the chemical engineering department for events organized by the association.
* Organized biweekly meetings to plan events and network with AIChE members.

**Skills**

* Engineering Software: ASPEN Plus, ArcGIS, Python.
* Certifications: Microsoft Suite 2007 Certification, Six Sigma–White Belt.
* Microsoft Office: Microsoft Word, Excel, PowerPoint, Outlook, SharePoint, One Note.
* Languages: Spanish (Native Speaker), English (Fluent), French (Intermediate).

**Community Service**

* Josefina Menchaca Elementary Tutor, Mexico.
* Vicente Guerrero Elementary Tutor, Mexico.