Chemical Engineer Resume - United States Houston

# John D. Smith

**Chemical Engineer Resume**

*United States Houston | Professional Chemical Engineer with 8+ Years of Experience*

## Professional Summary

Dynamic and results-driven Chemical Engineer with over eight years of experience in process optimization, safety compliance, and sustainable solutions within the energy and manufacturing sectors. Adept at leveraging technical expertise to solve complex challenges while adhering to industry standards in the United States Houston area. Proven track record in leading cross-functional teams, delivering cost-effective projects, and ensuring environmental responsibility. Committed to advancing innovation in chemical engineering practices tailored for the unique demands of Houston's industrial landscape.

## Professional Experience

### Senior Chemical Engineer

**Energy Solutions Inc., Houston, TX** | January 2018 – Present

* Lead the design and optimization of chemical processes for oil refining and petrochemical production, achieving a 15% reduction in energy consumption across three major facilities in the United States Houston region.
* Collaborated with environmental teams to ensure compliance with OSHA and EPA regulations, resulting in zero safety incidents over the past five years.
* Managed a team of 10 engineers to deliver a $25M project for renewable fuel production, completed ahead of schedule and under budget.
* Developed proprietary software tools for real-time process monitoring, enhancing operational efficiency by 20% in key facilities.

### Process Engineer

**ChemTech Innovations, Houston, TX** | June 2014 – December 2017

* Designed and implemented process improvements for polymer synthesis plants, increasing output by 12% while reducing waste by 8%.
* Conducted feasibility studies for new chemical production lines, contributing to the expansion of the company’s footprint in the United States Houston market.
* Provided technical support to field teams, resolving equipment malfunctions and optimizing maintenance schedules to minimize downtime.
* Published two industry white papers on sustainable chemical engineering practices, gaining recognition within the Chemical Engineering Society of Houston.

### Junior Chemical Engineer

**Gulf Coast Engineering Services, Houston, TX** | September 2011 – May 2014

* Assisted in the development of a wastewater treatment system for industrial clients, improving compliance with local and federal regulations.
* Supported the design of pilot-scale reactors for pharmaceutical applications, contributing to two patent filings.
* Trained junior staff on safety protocols and process simulation tools such as Aspen Plus and HYSYS.
* Participated in community outreach programs to promote STEM education in Houston schools, inspiring the next generation of engineers.

## Education

### Bachelor of Science in Chemical Engineering

**Rice University, Houston, TX** | Graduated May 2011

* GPA: 3.8/4.0; Honors: Dean’s List (2009-2011)
* Relevant coursework: Thermodynamics, Reaction Engineering, Process Control, Environmental Engineering
* Senior Project: “Design of a Carbon Capture System for Industrial Emissions” – Recognized with the American Institute of Chemical Engineers (AIChE) Award for Innovation.

## Skills

* **Technical Skills:** Process Simulation (Aspen Plus, HYSYS), CAD Software, MATLAB, LabVIEW
* **Industry Knowledge:** Oil & Gas, Petrochemicals, Renewable Energy Systems
* **Safety & Compliance:** OSHA Standards, EPA Regulations, ISO 14001
* **Project Management:** Agile Methodologies, Budgeting, Risk Assessment
* **Languages:** English (Native), Spanish (Basic)

## Certifications

* **Professional Engineer (PE) License** – Texas Board of Professional Engineers | Issued 2016
* **OSHA 30-Hour General Industry Certification** | Occupational Safety and Health Administration | Completed 2019
* **Six Sigma Green Belt** – ASQ Certified | 2020

## Professional Affiliations

* American Institute of Chemical Engineers (AIChE) – Member since 2011
* Houston Society of Chemical Engineers – Volunteer Committee Member (2018–Present)
* Environmental and Energy Study Institute (EESI) – Affiliate Member

## References

Available upon request. Contact John D. Smith at (713) 555-0198 or john.smith@email.com.

This resume is tailored for a Chemical Engineer in the United States Houston area, emphasizing expertise in process optimization, safety compliance, and sustainable practices.