

# Joyce H. Shen

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## **PROFESSIONAL HISTORY:**

*Risk Management Professionals, Inc.  
Irvine, California; Project  
Engineer; 2021-Present*

## **EDUCATION:**

*Bachelor of Science, Chemical  
Engineering, University of  
California, San Diego*

## **PROFESSIONAL AFFILIATIONS:**

*American Institute of Chemical  
Engineers (AIChE)*

Ms. Joyce Shen graduated from the University of California, San Diego (UCSD) with a Bachelor of Science degree in Chemical



Engineering. During her education, Ms. Shen participated in a progressive engineering team and served as a project manager under AIChE Projects at UCSD. Currently, Ms. Shen provides technical support as a Project Engineer for Risk Management Professionals.

Since joining, Ms. Shen has been involved in multiple aspects of United States Environmental Protection Agency (US EPA) Risk Management Plan (RMP), Occupational Safety and Health Administration (OSHA) Process Safety Management (PSM) Program, and California Accidental Release Prevention (CalARP) Program development, including the following.

- Process Hazard Analyses (PHAs) and Hazard Reviews (HRs), including Hazard Operability (HAZOP) and Layer Protection Analysis (LOPA) Studies
- Risk Management Plans (RMP) / Process Safety Management (PSM) Programs
- California Accidental Release Prevention (CalARP) Program

While Ms. Shen has experience in diverse product lines, all completed projects have used high-end qualitative and/or quantitative risk analysis techniques for decision-making. She has been involved in a variety of engineering projects across several industries, including petroleum (production, storage, refining) and wastewater treatment and distribution systems

## **PROJECT EXPERIENCE**

### **Process Hazard Analyses (PHA)**

Ms. Shen has been the technical scribe for PHAs using HAZOP and LOPA for refineries. The following is representative of the projects that Ms. Shen has provided technical scribing support for in the conceptual design stage, detailed design stage, and operating cycle.

- *Relief System, El Paso, TX* – Provided scribe support for a five-day PHA including HAZOP and LOPA for the North and South Relief Unit, including preparation and final documentation.

## **CalARP/RMP/PSM Program Developments and Updates**

Ms. Shen has developed several CalARP, RMP, and PSM Programs for a number of industries and processes.

- *Polonio Pass Water Treatment Plant, Shandon, CA* – Provided CAPP/RMP/PSM Program Level 3 development support, including Hazard Assessment / Offsite Consequence Analysis.

## **CLIENT LIST**

The following is a partial list of clients that Ms. Shen has provided technical support:

### **Oil and Gas**

- Marathon Petroleum Company

### **Municipalities and Water Treatment**

- Central Coast Water Authority

