



## NATHAN B. COOLEGE Senior Consultant



### Summary of Qualifications

A professional with over 30 years of responsible leadership experience in a diverse technical environment. Demonstrates strong functional expertise in various aspects of project work and operations support, with extensive knowledge and experience of the HF Alkylation Process. Able to apply technical skills to support multiple activities by the way of client interface through all phases of a project including, commissioning and startup, troubleshooting, and turn around services, in addition to day-to-day operation.

### Career Experience

2015 to present

**HF Alkylation Consultants – Senior Consultant**

Supporting HF Alky units with the following key services:

- Leading API RP-751 Audits.
- Safety and unit operability reviews.
- Project scoping.
- Unit site specific training.
- All technical services; including SU & SD support, pre-turnaround chemical cleaning, turnaround preparation and support, process objective inspection, procedure review, troubleshooting.

Phillips 66 // 2012-2015

**Senior Process Advisor, Gasoline Desulfurization Network Lead and Principle Consultant for Alkylation & Reformer Networks**

- Responsible for vetting and selecting desulfurization processes, including those required to attain Tier 3 sulfur reduction.
- Led monthly Network meetings, unit improvement reviews, API RP-751s Audits, and championed implementation of value improving projects for the Alkylation, Reformer and SZ orb Networks.
- Led effort to evaluate new catalysts for Reformer Semi-Regen units.
- Implemented cost saving practices for catalyst regenerations, and reduced catalyst usage of the company's SZorb units capturing significant savings.

ConocoPhillips // 2002–2012

**Senior Process Specialist**

- Led the HF Alkylation Licensing activities and supporting the Company's HF and Sulfuric Alkylation Networks.

- Principle in the Reformer Network charged with championing improving procedures, optimizing catalyst regenerations and timeliness of new catalyst selection.
- Network Lead for the Company's Gasoline Desulfurization units, including SZorb.

Phillips Petroleum // 2001- 2002

**Process Specialist**

- Responsible for technical support of the Company's internal HF and Sulfuric Alkylation units, in addition to the Licensed HF Alkylation units worldwide.
- Led development activities for new projects, including defining the project premises and scope, setting project schedule, cost and value tracking, and coordinating project reviews to deliver the Technology Package to customer.
- Team member for the development and demonstration of the SZorb unit (fluid bed gasoline desulfurization unit).
- Prepared unit operating procedures, safety guidelines and training materials.

1987-2002

**Senior Licensing Specialist**

- Project management which included leading and developing project premises, defining schedule, cost and value tracking, and coordinating project reviews to ensure delivery of Technology Package to customer.
- Provided technical support for all HF alkylation units worldwide, including project work and leading successful commissioning and startup activities.
- Startup Chief for numerous grassroots units.
- Team member for the development and demonstration of the ReVAP process, in addition to being the Commissioning and Startup Leader for the first commercial ReVAP unit.