



## Amine Treating & Sour Water Stripping Process

**Potential PDH:** 40

### Description:

- To further improve knowledge and experience with Amine Treating & Sour Water Stripping processes applications in general
- To become more familiar with specific challenges and how to effectively deal with these challenges in practice.
- The transfer and sharing of knowledge and best practices in the area of Amine processes.

### Outline:

- Introduction to Amine Treating
- Absorber Chemistry, Mass Transfer, and Operations
- Regenerator Chemistry, Mass Transfer, and Operations
- Key Process Indicators
- Troubleshooting
- Corrosion Management
- Amine Inventory Management
- Startup / Shutdown
- Fundamentals of Sour Water Stripping
- Optimizing SWS Operations
- Process Unit Optimization
- Steam Optimization
- SRU Feed Preparation

### Who Should Attend:

This program is ideal for personnel involved in refinery process engineering, unit operations, amine sales, and refinery technical service. Engineers from design and construction companies as well as those who provide products and services to the petroleum refining industry should also find the program very useful and informative. Managers who have not had previous Amine experience would also find this class to be very valuable.

### Subject Matter Expert (SME):



**Alfred E. (Al) Keller** retired from Conoco/ConocoPhillips/Phillips 66 as director of Treating and Sulfur Processing in 2017. Over a 35-year career, he was involved in implementing the first high-level oxygen enriched SRUs. He led the development of the first commercial ion exchange-based amine HSS removal (HSSX™) and regenerable particle (SSX™) and oil removal systems (HCX™) for amine solutions. He also led the development of SPOC™ technology for replacing SRU burners/thermal reactors with a catalytic reaction system. Al led the development of pre-sulfur pit sulfur degassing technology (ICOn™). He earned 32 US patents for these processes as well as processes for syngas production and HF acid recovery. He developed the training modules for ConocoPhillips/Phillips 66 for amine, sour water, SRU, TGU, and caustic treating, and developed/delivered an amine and sour water training course for Brimstone STS. Al currently provides consulting services via Becht in treating and sulfur processing for refineries.

