

**Course Fee: US\$650**

This short course is dedicated to the discussion of thermosiphon reboilers. Model thermosiphons in *Xist* using detailed guidelines for piping and fluid property specification. Investigate thermosiphon operational issues and learn how to screen for these using *Xist*. This course provides a checklist for future design review.

**Key Topics**

- Common types of distillation column reboiler
- Once-through vs. recirculating thermosiphon reboilers
- Vertical vs. horizontal configurations
- Modeling thermosiphons in *Xist*
- Piping and fluid property specification
- Operational issues
- Modeling turndown operation

**Suggested Participants**

Engineers who design, rate or troubleshoot thermosiphon reboilers

**Course credits:** 6 hours (PDH/CEU)

**Outline**

- I. Reboiler Equipment
  - Types of reboilers
  - Advantages and disadvantages of each
- II. Modeling Thermosiphons
  - Activating the thermosiphon logic in *Xist*
  - Piping specification
  - Guidelines for fluid properties and heat release specification
  - Overview of pressure drop calculations
- III. Operational Issues
  - Overview of wet-wall and dry-wall boiling methods
  - Typical thermosiphon reboiler operational problems
  - HTRI thermosiphon reboilers checklist
  - Modeling turndown operation