

**Course Fee: US\$450**

This workshop is devoted to the shell-and-tube exchanger geometries handled only by *Xist*. The day focuses on the extensive options available in *Xist* and how you can use these methods effectively to solve several example problems. You will leave the class knowing how to take full advantage of the features this robust tool offers.

**Key Topics**

- Overview of *Xist* capabilities and applications
- Geometry input for shell-and-tube heat exchangers
- Process specifications for rating, simulation, and design
- Guidelines for specifying fluid properties
- Introduction to vibration analysis

**Suggested Participants**

Designers of shell-and-tube heat exchangers and process engineers who evaluate their performance

**Outline**I. *Xist* Geometry

- Geometry input options
- Tube layout

## II. Performance and Process Data

- HTRI measures of performance
- Options to review performance data
- Process specification rules
- Troubleshooting process data input

## III. Fluid Properties

- HTRI methods to specify fluid properties
- Guidelines to specify fluid properties
- Improve accuracy
- Troubleshoot case with unexpected results

## IV. Vibration Analysis

- Fundamentals of vibration analysis
- Vortex shedding
- Fluidelastic instability

## V. Methods

- HTRI methods to calculate performance
- HTRI Delta Factor