

February 26-28, 2018

The Florida Hotel & Conference Center | Orlando, FL
1500 Sand Lake Road, Orlando, Florida 32809 | 1-800-588-4656

TE-6 | Monday & Tuesday, February 26 & 27 | 8:00 AM - 5:00 PM | 2-Day (16 Hours)

Course Title: Pressure and Vacuum Metrology

Instructors: Jacob Ricker, National Institute of Standards and Technology (NIST)

Julia Scherschligt, National Institute of Standards and Technology (NIST) Office of Weights and Measures

Track: Thermodynamics

Course Description:

This course will discuss pressure sensors and standards, including an in depth look at how they work. The material will cover the pressure range of 1×10^{-6} Pa ($\sim 1 \times 10^{-8}$ Torr) up to 280 MPa (40,000 psi). This broad pressure range is covered by several different types of gauges and we will discuss basic design principals of a calibration system for each of these different ranges. Students will receive hands on experience with the equipment needed and will learn about gas connections and fittings along with gaining experience with several gauge types and calibration equipment.

Learning Objectives:

1. Identify gauge types and basics of operation.
2. Identify limitations of gauge types and what pressure range they can be used.
3. Practical application of lecture – Be able to assemble a vacuum and pressure calibration system.