



Course Catalog Number: Ttm-2
Course Track: Thermodynamic Measurements
Course Topic: Infrared
Course Career Level: Beginner

Sunday, August 25 | 8:00 AM - 12:00 PM | 1/2 – Day AM (4 Hours)

Course Title: Infrared and Radiation Thermometry Fundamentals

Instructor: Frank Liebmann, Fluke Calibration

Abstract: This course is geared to those who are new to radiation thermometry metrology, need a refresher on the subject, and to those who would like to make better measurements. This course will cover the basics of radiation temperature measurements, uncertainty budgets, radiation thermometry standards, and infrared thermometry calibration. The hands-on portion reinforces the topics covered in the lecture giving the user practical experience to include the calibration of an infrared thermometer. The tutorial is geared to those who are new to radiation thermometer metrology, those who need a refresher on the subject, and to those who would like to make better measurements.

Learning Objectives:

1. Radiation and infrared thermometry
2. Calibration
3. Uncertainty

Instructor Curriculum Vitae (CV):

Frank Liebmann graduated from the University of Utah with a BS in Electrical Engineering. He is currently the 17025 Quality Manager for the Fluke Calibration American Fork Laboratory and serves as well as a temperature metrologist. He has worked at the American Fork location since 2003. Since 2005, he has worked on establishing and maintaining radiation thermometry metrology at Fluke. This work has included the establishment of a series of blackbody sources and flat plate infrared calibrators and NVLAP accreditation for two different radiometric calibrations at Fluke in American Fork. Frank is an ASTM Fellow. He is currently serving as chairman for ASTM E20.02 Subcommittee on Radiation Thermometry. He is also serving as the Chair of Committee 132, Measurement Comparison Programs Committee.