



Course Catalog Number: Tfm-1
Course Track: Flow Measurements
Course Topic: Flow
Course Career Level: Beginner

Saturday, August 24 | 8:00 AM - 5:00 PM | 1-Day (8 Hours)

Course Title: Gas & Liquid Flow Measurement Fundamentals

Instructor: Richard Fertell, Proteus Industries, Inc.

Abstract: Overview of gas and liquid flow rate with associated measurement uncertainty concepts (no math) and viscosity with hands-on units and experiments with flow technologies and viscometers.

Learning Objectives:

1. Concepts and difference of volumetric and mass flow rate, and difference of Newtonian and non-Newtonian fluids.
2. Purpose and application of different viscosity measuring methods.
3. Concepts of cavitation and sources of cavitation, turbulence and laminar flow and use of related Reynold's Numbers 6-10, technologies, influences, Calibration Methods...

Instructor Curriculum Vitae (CV): Richard Fertell has presented papers on Liquid Flow Rate at ISFFM, NCSLI, IMEKO, FLOMEKO and CFM as well as been published in magazines: Flow Control, Cal Lab, IEEE Explorer. Conducted workshop tutorials on Flow at the Measurement Science Conference and published many technical videos on YouTube and Vimeo. Like many in the Measurement Field, Richard worked in electronics and calibration while in the military. His career progression is from electronics technician to engineer to manager, professor and scientist.
