



Course Catalog Number: Tmf-1  
Course Track: Force Measurements  
Course Topic: Uncertainty  
Course Career Level: Intermediate

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

**Course Title: Improving the Accuracy of Dynamic Force Measurements**

**Instructors:** Dr. Akobuije Chijioke and Dr. Nicholas Vlajic, National Institute of Standards and Technology (NIST)

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**Abstract:** This course will consider factors that contribute to uncertainty in measurements of dynamic forces, and methods for reducing the uncertainty, so as to achieve reliable estimates of the force. Different measurement scenarios will be considered, as well as the limitations of some available options, and ongoing developments for reducing measurement uncertainty.

**Learning Objectives:**

1. To know what constitutes a dynamic measurement.
  2. To understand fundamental challenges in dynamic force measurements.
  3. To understand solutions to mitigate challenges in dynamic force measurements.
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**Instructor Curriculum Vitae (CV):**

Dr. Ako Chijioke is a staff scientist at the National Institute of Standards and Technology, where he has been project leader for Dynamic Force Metrology since 2012. Prior to this, he worked as a research scientist at NIST and at Heinrich Heine University, Germany. He received his PhD in 2006, in the area of experimental solid-state physics.

Dr. Nick Vlajic is a staff mechanical engineer in the Mass and Force Group within the Physical Measurement Laboratory at the National Institute of Standards and Technology (NIST) in Gaithersburg, MD. His primary interests are in dynamics, vibrations, and controls within the context of S.I.-traceable dynamic force metrology.