

Center for Environmental & Applied Fluid Mechanics

**“Advancing Experimental
Fluid Dynamics and
Aerodynamics through
Instrumentation
Development”**

Prof. Tamy Guimarães
Pennsylvania State University
Dept. of Mechanical Engineering



In order to tackle the challenges in increasing efficiency and safety of machines, improvements on the experimental setups and measurement techniques used for flow analysis during research and development are extremely important, as well as enhancing simulation and computation capabilities that precede the testing phases. Highly customized instrumentation, such as pressure probes, rakes, and test articles with integrated sensors are amongst some of the technologies that have improved measurement techniques in the past few years. With the development of new materials and additive manufacturing techniques, these will play an even bigger role in the future of experimental research. In this talk, we will explore two recent efforts in instrumentation and experimental development commonly applicable to gas turbine research that have been made at the Guimarães Instrumentation, Sensing and Aerodynamic Measurement (GIMAS) Lab.

Spring 2024 CEAFM Seminar Series

February 2, 2024 ✦ 3:00 PM ✦ Gilman Hall 132

<https://wse.zoom.us/j/93762992307>