

## **Biosketch**

**Dr. Karen A. Thole** is a Distinguished Professor and head of the Department of Mechanical Engineering at The Pennsylvania State University. Dr. Thole's expertise is heat transfer and cooling of gas turbine airfoils through detailed experimental and computational studies. She directs the Steady Thermal Aero Research (START) Lab, which focuses on turbine heat transfer, additive manufacturing, and instrumentation development. Dr. Thole has published over 270 archival journal and conference papers and has supervised over 75 dissertations and theses. She has served on two National Academy of Engineering study committees related to low carbon aviation and advancing gas turbines. Dr. Thole received the 2015 ASME George Westinghouse Gold Medal for her work in gas turbine research, the 2016 Edwin F. Church Medal in Engineering Education, and in 2017 she received the ABET Claire L. Felbinger Diversity Award. In 2019, she was recognized by AIAA's Air Breathing Propulsion award. She holds two degrees in Mechanical Engineering from the University of Illinois, and a PhD from the University of Texas at Austin.