



Dr. Paul Witherell

Guest Speaker

Sustainable Manufacturing Practices

Friday October 13th, 2017, 132 Fluor Daniel 1:30-2:30 pm

Abstract

Sustainable manufacturing practices have demonstrated the ability to reduce a manufacturer's environmental impacts and manufacturing costs. The National Institute of Standards and Technology (NIST) has taken an active role in promoting sustainable manufacturing through both research and standards development. This presentation highlights the efforts of ASTM E60.13, ASTM's subcommittee on Sustainable Manufacturing. Specifically, the contents of three standards led by NIST researchers will be reviewed: E2986-15 Standard Guide for Evaluation of Environmental Aspects of Sustainability of Manufacturing Processes; E3012-16 Standard Guide for Characterizing Environmental Aspects of Manufacturing Processes; and E3096-17 Standard Guide for Definition, Selection, and Organization of Key Performance Indicators for Environmental Aspects of Manufacturing Processes. The presentation will conclude with discussion on the upcoming 2018 RAMP Challenge: Reusable Abstractions of Manufacturing Processes, a NIST-sponsored competition using implementations of the aforementioned standards.

Biosketch

Dr. Paul Witherell is a Mechanical Engineer in the Systems Integration Division of the Engineering Laboratory at the National Institute of Standards and Technology (NIST). At NIST, Paul manages a project on Systems Integration for Additive Manufacturing and serves as the Associate Program Manager of the Measurement Science for Additive Manufacturing program in the Engineering Laboratory. Paul previously served as technical contact for E2986-15, Standard Guide for Evaluation of Environmental Aspects of Sustainability of Manufacturing Processes.