

## Energy Management and Smart Manufacturing Workshop

When: May 23, 2024 (Thursday)

Where: ORNL Manufacturing Demonstration Facility (MDF)

2350 Cherahala Blvd Knoxville, TN 37932

The East Tennessee Initiative for Smart Energy Management (ETISE) is hosting training and interactive discussion sessions on how to use smart manufacturing to better manage energy and reduce carbon emissions.

The goal of ETISE is to create a regional model for technical assistance and workforce training to effectively integrate smart manufacturing in energy management systems into energy-related business practices. The Department of Energy funds ETISE through its Industrial Efficiency & Decarbonization Office (IEDO). Most information about ETISE can be found at <a href="ETISE.utk.edu">ETISE.utk.edu</a>. The event is also supported by Oak Ridge National Lab and University of Tennessee Center for Industrial Services (CIS).



https://etise.utk.edu/etise-industrial-workshop-training-registration/







## Agenda (May 23, 2024)



| 07:45 a.m 08:30 a.m. | Breakfast and Networking  |                                     |
|----------------------|---|-------------------------------------|
| 08:30 a.m 08:40 a.m. | Opening Remarks Welcome and Overview for the Day  | Dr. Mingzhou Jin                    |
| 08:40 a.m 09:45 a.m. | Training Session #1: Energy Management Dr. Lynn Reed Review of Energy Management; Charts & Graphs on Use; Explain Why of Energy Management; Review of DOE Estimates of Energy Projects with Return on Investment; Carbon Emissions Reduction  |                                     |
| 09:45 a.m 10:00 a.m. | Break   |                                     |
| 10:00 a.m 11:00 a.m. | Training Session #2: Smart Manufacturing for Energy Efficiency and Carbon Emissions Reduction Dr. Lynn Reed Introduction to Smart Manufacturing; Levels of Smart Manufacturing Maturity; Dimensions of Smart Manufacturing; Smart Manufacturing for Energy Consumption Reduction and Carbon Emissions Reduction |                                     |
| 11:00 a.m 12:00 p.m. | Training Session #3: ISO 50001 and 50001 Ready Pete Shack Introduction to ISO50001-2018; DOE 50001 Ready, Process Model; Overview of Standard Sections; Similarity / Differences to ISO14001, DOE Resources for Smart Energy Management and Decarbonization   |                                     |
| 12:00 p.m 01:00 p.m. | Lunch & Showcases   |                                     |
| 01:00 p.m 01:55 p.m. | Interactive Session #1: Aspiration Dr. Mingzhou Jin Interactive Session #1: Status and Aspirations of Smart Manufacturing for Energy Efficiency and Decarbonization   |                                     |
| 01:55 p.m 02:50 p.m. | Interactive Session #2: Barriers Bill Hicks Barriers to Adoption of Smart Manufacturing to Improve Energy Efficiency and Reduce Carbon Emissions  |                                     |
| 02:50 p.m 03:00 p.m. | Break   |                                     |
| 03:00 p.m 03:55 p.m. | Interactive Session #3: Needs Dr. Mingzhou Jin Needed Assistance of SMEs to Reduce Energy Consumption and Carbon Emissions through Smart Manufacturing  |                                     |
| 03:55 p.m 04:00 p.m. | Closeout and Wrap-up of Sessions  |                                     |
| 04:00 p.m 05:00 p.m. | Tour of ORNL Manufacturing Demonstratio<br>Additive and Battery Manufacturing   | n Facilities including  David Vance |
|                      |   |                                     |



05:00 p.m.



Adjourn

