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# Energy Efficiency Engineering



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## ABSTRACT:

This seminar will discuss the role of energy efficiency engineering in achieving a prosperous, sustainable and equitable future. It will present a 'systems plus principles' approach to industrial energy efficiency that is effective, reproducible and teachable. It will then present an 'energy informatic' approach to building energy efficiency which transforms data into actionable information to identify and quantify energy efficiency opportunities. Both approaches will be illustrated with case study examples.

## BIOGRAPHY:

Dr. Kissock is a Professor and Chair of the Mechanical and Aerospace Engineering and Director of the Renewable and Clean Energy program at the University of Dayton. He is a Visiting Professor at Dalian Institute of Technology. He is also Director of the University of Dayton Industrial Assessment Center and of the Ohio Lean Buildings program. He is a Registered Professional Engineer in the State of Ohio. Dr. Kissock has been a research engineer at the Center for Air Pollution Impact and Trend Analysis at Washington University, the International Institute for Applied Systems Analysis in Vienna, Austria, Energy Systems Laboratory at Texas A&M University and the Center for Energy and Environmental Studies at Princeton University. Dr. Kissock teaches graduate and undergraduate courses in thermal sciences, energy efficiency and renewable energy. Dr. Kissock was the Mechanical and Aerospace Engineering Professor of the Year in 2009, and has twice been honored with the Distinguished Educator Award by Who's Who Among America's Teachers. Dr. Kissock and his students have published over 100 technical papers on energy systems in books, journals and conference proceedings. His research has been supported with over \$7 million in contracts and grants. His scholarship and research center have been recognized with the 2003 and 2015 U.S. Department of Energy Center of Excellence Awards, the 2006 Ohio Governor's Award for Excellence in Energy, the 2009 University of Dayton Alumni Award for Scholarship, the 2011 American Council for an Energy Efficient Economy Champion of Energy Efficiency award, and the 2012, 2014 and 2017 U.S. Department of Energy Excellence in Applied Energy Engineering Research Award. Dr. Kissock served as Associate Editor of the ASME Journal of Solar Energy Engineering. He chaired the ASME Technical Committee on Conservation and Solar Buildings, the ACEEE 2007 Summer Study on Energy Efficiency in Industry, and numerous conference sessions. Dr. Kissock has conducted over 500 energy assessments and over 100 seminars and invited lectures on energy efficiency and renewable energy both in the U.S and internationally. He is a U.S. Department of Energy certified Energy Expert in compressed air and process heating systems.