

CURRICULUM VITAE OF JOHN KELLY KISSOCK

Department of Mechanical and Aerospace Engineering
University of Dayton
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Current Position:

Professor of Mechanical Engineering: 8/15/2007-Present
Director, University of Dayton Industrial Assessment Center: 10/1997 - Present
Director, University of Dayton Building Energy Center: 1/2006 - Present
University of Dayton, Dayton, OH
Primary research areas: building, industrial and renewable energy systems

Academic Degrees

Ph.D. Mechanical Engineering
Texas A&M University, College Station, TX, 1993

M.S. Engineering and Policy
Washington University, St. Louis, MO, 1989

B.S. Mechanical Engineering
University of Colorado, Boulder, CO, 1982

Licenses, Registrations and Certifications

Registered Professional Engineer, State of Ohio, Registration Number, E-61277, 1997-2006
Qualified Specialist: AIRMaster+, U.S. Department of Energy, 7/2004.
Qualified Specialist: Process Heating Assessment and Survey Tool, U.S. Department of Energy, 11/2004.

Selected Recent Awards

Ohio Governor's Award for Energy Excellence to the University of Dayton Industrial Assessment Center, 2006
U.S. Department of Energy National Center of Excellence Award, 2003, for top IAC in nation.

Selected Recent University Level Teaching

Responsible charge for the following university level courses:

Numbers in parenthesis are student evaluations on 4-point scale (JKK/Dept. Avg.) for (Course; Instructor)
MEE-473, Renewable Energy Systems, University of Dayton, Fall, 2007, 18 students. (3.4/3.1; 3.3/3.2)
MEE-573, Renewable Energy Systems, University of Dayton, Fall, 2007, 12 students. (3.6/3.3; 3.7/3.2)
MEE-569, Energy Efficient Buildings, University of Dayton, Spring, 2007, 15 students. (2.2/3.0; 2.8/3.0)
MEE-420, Energy Efficient Buildings, University of Dayton, Spring, 2007, 14 students. (3.4/3.0; 3.7/3.0)
MEE-499, Energy Efficient Manufacturing, University of Dayton, Fall, 2006, 11 students. (3.1/2.9; 3.3/3.0)
MEE-590, Energy Efficient Manufacturing, University of Dayton, Fall, 2006, 9 students. (3.6/2.9; 3.4/3.0)
MEE-571, Design of Thermal Systems, University of Dayton, Spring, 2006, 18 students (3.6/3.0; 3.6/3.0)
MEE-471, Design of Thermal Systems, University of Dayton, Spring, 2006, 5 students (3.8/3.0; 3.8/3.0)

Selected Recent Publications

Carpenter, K. and Kissock, K., 2007, "Energy Efficient Process Heating: Managing Air Flow", *Society of Automotive Engineers 2006 Transactions, Journal of Engines*, March.

Carpenter, K. and Kissock, K., 2007, "Energy Efficient Process Heating: Insulation and Thermal Mass", *Society of Automotive Engineers 2006 Transactions, Journal of Engines*, March.

Kissock, J.K. and Eger, C., 2006, "Measuring Industrial Energy Savings", *Journal of Applied Energy*, Submitted 12/2006.

Kissock, J.K. and Limas, S., 2006. "Diurnal Load Reduction Through Phase-Change Building Components", *ASHRAE Transactions*, Vol. 112, Part 1, pp. 509-517.

Kissock, J.K., Haberl J. and Claridge, D.E., 2003. "Inverse Modeling Toolkit (1050RP): Numerical Algorithms", *ASHRAE Transactions*, Vol. 109, Part 2, pp. 425-434.

Haberl, J., Sreshthaputra, A., Claridge, D.E. and Kissock, J.K., 2003. "Inverse Modeling Toolkit (1050RP): Application and Testing", *ASHRAE Transactions*, Vol. 109, Part 2, pp. 435-448.

Kocoloski, M., McCarty, R., Eger, C., Hallinan, K., and Kissock, K., 2007, "Industrial Solid-State Energy Harvesting: Mechanisms, and Examples", *ACEEE Summer Study on Energy in Industry*, White Plains, NY, July 24-27.

Syed, R., Kleinhenz, P., and Kissock, K., 2007, "Net Energy Costs of Skylights", *ACEEE Summer Study on Energy in Industry*, White Plains, NY, July 24-27.

Carpenter, K. and Kissock, K., 2007, "Common Excess Air Trends in Industrial Boilers with Single-Point Positioning Control and Strategies to Optimize Efficiency", *ACEEE Summer Study on Energy in Industry*, White Plains, NY, July 24-27.

Eger, B. and Kissock, K., 2007, "Understanding Industrial Energy Use through Sliding Regression Analysis", *ACEEE Summer Study on Energy in Industry*, White Plains, NY, July 24-27.

Trombley, D., and Kissock, K., 2007, "Economics of Energy Efficiency in a Carbon Constrained World", *ACEEE Summer Study on Energy in Industry*, White Plains, NY, July 24-27.

Gilbert, R. and Kissock, K., 2007, "The Effect Of Thermal Mass On Thermal Transmission Loads", *ASME International Solar Energy Conference*, Long Beach, CA, June 27-30.

Mirza, K. and Kissock, K., 2007, "An Analytical Solution for Determining Dynamic Thermal Loads through Walls", *ASME International Solar Energy Conference*, Long Beach, CA, June 27-30.

Raffio, G., Isambert, O., Mertz, G., Schreier, C. and Kissock, K., 2007, "Targeting Residential Energy Assistance Programs", *ASME International Solar Energy Conference*, Long Beach, CA, June 27-30.

Mertz, G., Raffio, G. and Kissock, K., 2007, "Cost Optimization of the University of Dayton Net-Zero Energy House", *ASME International Solar Energy Conference*, Long Beach, CA, June 27-30.

Kissock, K., 2007, "Inside-Out Approach to Energy-Efficient Process Cooling", *Society of Automotive Engineers World Congress and Exposition*, Detroit, MI, April 16-19.

Selected Recent Contracts and Grants

"University of Dayton Industrial Assessment Center", Sponsor: U.S. Department of Energy, 9/1/06 - 8/31/11, \$900,000 (\$180,000 per year), Description: train graduate and undergraduate students and perform industrial assessments per year to help industry reduce energy and waste and improve productivity, Principal Investigator: J.K. Kissock, UD-Contract 3530000002.

"Intermediate Temperature Fuel Cells", Kumar, B. and Kissock, K., Sponsor: Ohio Board of Regents Research Challenge Grant, 5/2003 – 3/2004, \$27,300, UD-Contract 2565480005 .

Selected Recent Professional Service

Associate Editor, ASME Journal of Solar Energy Engineering, Conservation and Solar Buildings, 2004 – 2007
Conference co-chair, 2007 ACEEE Summer Study on Energy Efficiency in Industry, White Plains, New York, July 24-27.

Chair, Conservation and Solar Buildings Technical Subcommittee, Solar Energy Division 2001-2003