

## Scott K. Thomas

Associate Professor

**Date of Initial Appointment:** September 1, 1993 (12 years of service)

### Education

Institution	Field of Study	Degree/Date
University of Dayton	Mechanical Engineering	Ph.D., 1993
Wright State University	Mechanical Engineering	M.S., 1989
Wright State University	Mechanical Engineering	B.S., 1986

### Professional Experience

Position	Institution	Dates
Associate Professor	Wright State University, Mech. & Mat. Eng.	1999-Present
Assistant Professor	Wright State University, Mech. & Mat. Eng.	1993-1999
AFRL/PRPS	NRC/AFOSR Summer Faculty Fellow	2001
AFRL/PRPG	Sabbatical Leave	2000-2001
Wright Laboratory	Summer Faculty Research Associate	1996
Monarch Marking Systems, Inc.	Research Consultant	1996
Wright Laboratory	Summer Faculty Research Associate	1995
NASA/Lewis Research Center	ASEE Summer Faculty Fellow	1994

### Principal Publications (Last 5 Years)

1. Thomas, S., and Damle, V., 2004, "Analysis of Fluid Flow in Axial Re-entrant Grooves with Applications to Heat Pipes," *AIAA Journal of Thermophysics and Heat Transfer*, accepted.
2. Thomas, S., Lykins, R., and Yerkes, K., 2001, "Fully-Developed Laminar Flow in Trapezoidal Grooves with Shear Stress at the Liquid-Vapor Interface," *International Journal of Heat and Mass Transfer*, Vol. 44, pp. 3397-3412.
3. Thomas, S., Lykins, R., and Yerkes, K., 2001, "Fully-Developed Laminar Flow in Sinusoidal Grooves," *ASME Journal of Fluids Engineering*, Vol. 123, pp. 656-661.
4. Castle, M., Thomas, S., and Yerkes, K., 2001, "The Effect of Working Fluid Inventory on the Performance of Revolving Helically-Grooved Heat Pipes," *ASME Journal of Heat Transfer*, Vol. 123, pp. 120-129.
5. Klasing, K., Thomas, S., and Yerkes, K., 1999, "Prediction of the Operating Limits of Revolving Helically-Grooved Heat Pipes," *ASME Journal of Heat Transfer*, Vol. 121, pp. 213-217.
6. Thomas, S., and Damle, V., 2004, "Analysis of Fluid Flow in Axial Re-entrant Grooves with Applications to Heat Pipes," *Proceedings of the 37<sup>th</sup> AIAA Thermophysics Conference*, AIAA2004-2177.
7. Castle, M., Thomas, S., and Yerkes, K., 2000, "The Effect of Working Fluid Inventory on the Performance of Revolving Helically-Grooved Heat Pipes," *Proceedings of the National Heat Transfer Conference*, Pittsburg, PA, Paper No. NHTC2000-12268.
8. Thomas, S., Yerkes, Y. Castle, M., Lykins, R., Lauer, J., Kuhns, J., Michalak, T., and Osborn, Z., 2004, "Scientific Research in Aircraft Mechanical/Thermal Technology," Report Number AFRL-PR-WP-TR-2004-2027.
9. Thomas, S., Lykins, R., and Yerkes, K., 2000, "Numerical Analysis of Fully-Developed Laminar Flow in Trapezoidal and Sinusoidal Grooves with Shear Stress at the Liquid-Vapor Interface," Report Number AFRL-PR-WP-TR-2000-2118.
10. Thomas, S., Castle, R., and Yerkes, K., 1999, "The Effect of Working Fluid Inventory on the Performance of Revolving Helically-Grooved Heat Pipes," Report Number AFRL-PR-WP-TR-1999-2115.

### Professional Memberships

Tau Beta Pi, American Society of Mechanical Engineers (Associate Fellow), American Institute of Aeronautics and Astronautics (Associate Fellow).

### Honors and Awards (Since Joining WSU)

Dean's Commendation for Teaching, College of Engineering and Computer Science, Wright State University, 2004; Excellence in Teaching Award, College of Engineering and Computer Science, Wright State University, 2003; SOCHE Award for Innovations in Teaching Excellence, Southwestern Ohio Council for Higher Education, 2003;

Finalist, Excellence in Teaching Award, College of Engineering and Computer Science, Wright State University, 2002; Promotion to Associate Fellow grade, AIAA, 2001; Survey Paper Citation, AIAA, 1996

### **Institutional and Professional Service (Last 5 years)**

Department Committees: Graduate Admissions, Peer Teaching Evaluation, Faculty Search, Curriculum ABET A-K Committee

College Committees: Ph.D. Program Affairs (Focus Area Chair), Teaching, Steering, Faculty Development, Math Curriculum Review, Graduate Studies

University Committees: Graduate Council Representative, Buildings and Grounds, Graduate Council Membership, Graduate Council.

Reviewer for Professional Journals: U.S. Civilian Research and Development Foundation, U.S. Department of Energy's Office of Basic Energy Sciences, International Journal of Heat and Mass Transfer, International Journal of Numerical Methods for Heat & Fluid Flow, ASME Journal of Heat Transfer, AIAA Journal of Thermophysics and Heat Transfer, IEEE Transactions on Circuits and Systems, AIAA Journal of Aircraft, Journal of Enhanced Heat Transfer Heat and Mass Transfer (Warme und Stoffubertragung), International Heat Transfer Conference, National Heat Transfer Conference Proceedings, European Joint Conference on Engineering System Design and Analysis,

Book Review: Engineering Design and Problem Solving

Other Professional Service: Technical Session Chair, "Heat Transfer Augmentation," IECEC Conference, 2005; Secretary and Treasurer, ASME Technical Committee on Direct Thermal Power Conversion and Thermal Management, International Mechanical Engineering Conference and Exposition, 2001; Tau Beta Pi Chapter Co-Advisor, 1997 to present; Technical Session Chair, "Fundamentals of Heat Pipes for Aerospace Applications," 1999 National Heat Transfer Conference.