

CURRICULUM VITAE

YUWEN ZHANG

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Mechanical and Aerospace Engineering
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Citizenship: *United States*
Married, 2 children

PROFESSIONAL INTERESTS

Phase change heat transfer
Transport phenomena in powder and/or gas based Solid Freeform Fabrication (SFF)
Heat pipe science and technology
Microscale heat transfer

EDUCATION

Ph.D., Mechanical Engineering, University of Connecticut, Storrs, CT, 1998.
D.Eng., Energy and Power Engineering, Xi'an Jiaotong University, Xi'an, China, 1991
MS Energy and Power Engineering, Xi'an Jiaotong University, Xi'an, China, 1988
BS, Energy and Power Engineering, Xi'an Jiaotong University, Xi'an, China, 1985

PROFESSIONAL EXPERIENCES

Associate Professor (9/03 – present)
Department of Mechanical and Aerospace Engineering, University of Missouri-Columbia,
Columbia, MO 65211
Assistant Professor (1/01 – 08/03)
Dept. of Mechanical Engineering, New Mexico State University, Las Cruces, NM 88003
Senior Engineer (5/00 – 12/00)
Thermoflow, Inc., 29 Hudson Rd., Sudbury, MA 01776
Research Scientist (1/99 – 4/00)
Department of Mechanical Engineering, University of Connecticut, Storrs, CT 06269

HONORS AND AWARDS

Computational Research Award, Department of Mechanical Engineering, NMSU (2003)
U.S. Office of Naval Research (ONR) Young Investigator Award (2002)

PROFESSIONAL ACTIVITIES AND SERVICES

REVIEWERS

National Science Foundation (NSF), NASA, McGraw-Hill Higher Education (Book Review), Chemical Engineering Communications, Industrial & Engineering Chemistry Research, International Journal of Heat Mass Transfer, International Journal of Thermal Sciences, Journal of Enhanced Heat Transfer, Journal of Heat Transfer, Journal of Thermophysics and Heat Transfer, Materials Science and Engineering

ASME NATIONAL CONFERENCE ACTIVITIES

K-12 Committee on Aerospace Heat Transfer Representative, 2004 ASME Summer Heat

Transfer Conference, Charlotte, NC, July 25-29, 2004
Session Co-Chair, "Transport Phenomena in Manufacturing and Materials Processing,"
International Mechanical Engineering Congress, Washington, DC, November 16-21, 2003
Session Co-Chair, "Transport Phenomena in Manufacturing and Materials Processing,"
2003 ASME Summer Heat Transfer Conference, Las Vegas, NV, July 20-23, 2003
Session Co-Chair, "Transport Phenomena During Crystal Growth," 2003 ASME Summer
Heat Transfer Conference, Las Vegas, NV, July 20-23, 2003

PUBLICATIONS

BOOK

A. Faghri and **Y. Zhang**, *Fundamentals of Multiphase Heat Transfer*, to be published in 2003

JOURNAL ARTICLES

1. **Y. Zhang** and A. Faghri, "Oscillatory Flow in Pulsating Heat Pipes with Arbitrary Number of Turns," *AIAA J. Thermophysics and Heat Transfer*, Vol. 17, No.3, pp. 340-347, 2003
2. **Y. Zhang**, "Quasi-Steady State Natural Convection in Laser Chemical Vapor Deposition with a Moving Laser Beam," *ASME J. Heat Transfer*, Vol. 125, No. 3, pp. 429-437, 2003.
3. **Y. Zhang**, "Coupled Forced Convective Heat and Mass Transfer in a Circular Tube with External Convective Heating," *Progress of Computational Fluid Dynamics Journal*, Vol. 2, pp. 90-96, 2002.
4. M.B. Shafii, A. Faghri and **Y. Zhang**, "Analysis of Heat Transfer in Unlooped and Looped Pulsating Heat Pipes," *Int. J. Numerical Methods in Heat and Fluid Flow*, Vol. 12, No. 5, pp. 585-609, 2002.
5. **Y. Zhang**, A. Faghri and M.B. Shafii, "Analysis of a Liquid-Vapor Pulsating Flow in a U-Shaped Miniature Tube," *Int. J. Heat Mass Transfer*, Vol. 45, No. 12, pp. 2501-2508, 2002.
6. **Y. Zhang** and A. Faghri, "Heat Transfer in a Pulsating Heat Pipe with Open End," *Int. J. Heat Mass Transfer*, Vol. 45, No. 4, pp. 755-764, 2002.
7. M.B. Shafii, A. Faghri and **Y. Zhang**, "Thermal Modeling of Unlooped and Looped Pulsating Heat Pipes," *ASME J. Heat Transfer*, Vol. 123, No. 6, pp. 1159-1172, 2001.
8. **Y. Zhang** and A. Faghri, "Numerical Simulation of Condensation on a Capillary Grooved Structure," *Numerical Heat Transfer*, Part A, Vol. 39, No. 3, pp. 227-243, 2001.
9. **Y. Zhang**, A. Faghri, M. B. Shafii, "Capillary Blocking in Forced Convective Condensation in Horizontal Miniature Channels," *ASME J. Heat Transfer*, Vol. 123, No.3, pp. 501-511, 2001.
10. **Y. Zhang**, A. Faghri, C.W. Buckley, and T.L. Bergman, "Three-Dimensional Sintering of Two Components Metal Powders with Stationary and Moving Laser Beams," *ASME J. Heat Transfer*, Vol. 122, No.1, pp. 150-158, 2000.

(42 Journal publications and 25 Conference papers)