

DAVID FRANKMAN

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EDUCATION

- Brigham Young University** *Provo, Utah* 2003 – August 2008 (Expected)
Doctoral Candidate in Mechanical Engineering, Emphasis in Heat Transfer 3.55/4.0
- Modeled the effect of a volumetrically participating sapphire light pipe on a silicon wafer for eventual implementation into rapid thermal wafer processing
 - Quantified the effect of water vapor on radiation heat transfer in forest fires
 - Parametrically studied the effect of semitransparent flames in forest fires
 - Experimentally determined the relative effects of convection and radiation in flame spread
 - Published in two journals and three conference proceedings
- Brigham Young University** *Provo, Utah* 2000 - 2003
Bachelor of Science degree in Mechanical Engineering 3.34/4.0
- Ricks College** *Rexburg, Idaho* 1998-2000
Associate degree in Mechanical Engineering 3.6/4.0
- Full academic scholarship
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EXPERIENCE

- Brigham Young University** *Teaching Assistant*
Transport Phenomenon August – December 2003
- Assisted students in learning heat and mass transport concepts such as conduction, convection, mass diffusion and radiation
- Woodward Governor Company** *Engineering Co-op*
Fort Collins, Colorado May - August 2003
- Implemented concepts of control to determine failure criteria for electrically actuated precision wellhead valve
 - Evaluated the effectiveness of temperature sensitive lubricants for use in valves operating in a wide range of conditions
- Private Contractor** *Construction*
Island Park, Idaho May – August 2002
- Learned practical construction techniques while building homes
 - Gained working knowledge of plumbing, framing and electrical wiring while following state building codes
- Goodrich Corporation** *Engineering Intern*
Pueblo, Colorado May - August 2001
- Developed gas analysis techniques for future implementation in process control
 - Began program to use 2d thermal conductivity measurement as a form of non-destructive part evaluation
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LEADERSHIP & ACTIVITIES

- Engineers without Borders Chapter at BYU** 2006-Present
- Implementation of sustainable engineering projects in third world countries
 - Tested quality of biodiesel in engines for a humanitarian project in Tonga that will convert coconuts into biodiesel
 - Traveled to Tonga to demonstrate process to local students and government cabinet officials
- Representative, Graduate Student Council** 2005-Present
- Serve as a liaison between department graduate students and the graduate student council
 - Assist in workshops and graduate student activities
- LDS Missionary in Halifax, Canada** 1996-1998
- Supervised 15-20 other missionaries

Other interests: Ice-fishing, hiking, hunting, camping, auto-mechanic, gardening, mycology, fish guru & beekeeper

P U B L I C A T I O N S

Frankman, D. J., Webb, B. W., Jones, M. R., 2006 Investigation of Lightpipe Volumetric Radiation Effects in RTP Thermometry, Journal of Heat Transfer, Vol. 128, p 132-141.

Frankman, D. J., Webb, B. W., Butler, B. W., 2008 Influence of Radiation Absorption by Environmental Water Vapor on Radiation Transfer in Wildland Fires, Combustion Science and Technology 180: 509–518

C O N F E R E N C E P R O C E E D I N G S

Frankman, D. J., Webb, B. W., Jones, M. R., 2004 Investigation of Volumetric Radiation Effects in Lightpipe Thermometry, 12th IEEE International Conference on Advanced Thermal Processing of Semiconductors, p 195-202.

Frankman, D. J., Webb, Jones, M. R., 2005, Investigation of Lightpipe Volumetric Radiation Effects in RTM Thermometer, ASME Summer Heat Transfer Conference.

Frankman, D. J., Webb, B. W., Butler, B. W., 2007 Influence of Radiation Absorption by Environmental Water Vapor on Radiation Transfer in Wildland Fires, 2nd Fire Behavior and Fuels Conference March 26-30, 2007.