

**Education Committee
ASME Heat Transfer Division**

**Minutes – IMECE 2004
Tuesday, November 16, 2004, 12:00-2:00 pm**

Attendance: Ann Anderson, Ted Bergman, Bob Boehm, Fredericka Brown, Antonio Campo, Marcelo DeLemos, Ahmad Fakheri, Amy Fleischer, Obdulua Ley, Jim McLeskey, Pam Norris, Marino Penataveras, Rob Ribando, Andrew Smith, Rob Stevens,

Regrets received from: Terry Simon, Himanshu Joshi, Frank Kulacki, Marcus Bianchi, Richard Figliola

Minutes:

- 1) Introductions
- 2) Committee Review/Mission Statement Review for new people
- 3) Review of 2004 Sessions
 - (a) Student Poster Session
 - 11 papers (a record high)
 - Exec Committee agreed to give \$4000 to reimburse students
 - Session was well publicized, students were invited to the HTD Banquet and all received certificates for presenting their work
 - Poster location was great – located just outside exhibit hall with lots of traffic.
 - The session organizers got funding from the regional ASME chapters.
 - General comments for future sessions:
 - We need to identify the posters as undergraduate student presentations.
 - Need updated handbook on how to run a student poster session (Jim and Rob?)
 - (b) Standup Paper Session (organized by Richard Figliola, Antonio Campo)
 - Had 7 submitted abstract, 3 retracted ended up with 4 papers.
 - 25-30 people attended the session.
- 4) Ahmad Fakheri (Mechanical Engineering Education Symposium Chair)
 - (a) Received 80 abstracts which resulted in 60 papers.
 - (b) 15 MEED sessions in broad areas of ME Education
 - (c) K-21 was co-listed as sponsor with MEED
 - (d) The symposium will continue – 10 sessions allotted to MEED
- 5) Planning for 2005 Poster Session:
 - (a) The standup paper session will be organized by Ted Bergman and Antonio Campo
 - (b) The student poster session will be organized by Andrew Smith and Bob Boehm
 - (c) The panel session will be organized by Bob Ribando and will be on Modeling and Simulation in Heat Transfer Education
- 6) The KCR for 2006 IMECE Meeting will be Richard Figliola
- 7) New Business: Pam Norris to end as chair June 2005, Ann Anderson to be recommended to HTD Exec and serve June 2005- June 2008. Andrew Smith nominated as Vice Chair June 2005-June 2008

Prepared by: Ann M. Anderson June 23, 2005

Student Poster Presenters:

IMECE2004-60247 (Poster)	Presentation Order: 1
Transient Testing to Determine Heat Transfer Coefficient and Wall Thickness of Turbine Blades	
<i>Authors: Dathan Froerer Boise State University, James R. Ferguson Boise State University</i>	
IMECE2004-60747 (Poster)	Presentation Order: 2
Experimental Measurement of Glass to Mold Heat Transfer for Computational Modeling of Container Production	
<i>Authors: Brenton Underwood Virginia Military Institute, Matthew Hyre Virginia Military Institute</i>	
IMECE2004-61295 (Poster)	Presentation Order: 3
Creation of Nano-scaled Surface Structure For the Enhancement of Boiling Heat Transfer	
<i>Authors: Sho (Lisa) Ngai Department of Mechanical Engineering, Michigan State University, John Lloyd Michigan State University, Leontiev A. I. Institute of High Temperatures of RAS, Malysenko S. P. Institute of High Temperatures of RAS</i>	
IMECE2004-61683 (Poster)	Presentation Order: 4
Too Hot to Handle? An Investigation into Safe Touch Temperatures	
<i>Authors: Katie Arthur Union College, Ann Anderson</i>	
IMECE2004-61893 (Poster)	Presentation Order: 5
A Study on the Thermal Management of the Electronic Parts and Systems	
<i>Authors: Jyh-tong Teng Chung Yuan Christian University, Shih-Cheng Tseng Dept. ME, Chung Yuan Christian University, Jiunn-Shyang Chen Dept. ME, Chung Yuan Christian University, Tien-Juinn Fung Dept. ME, Chung Yuan Christian University</i>	
IMECE2004-62480 (Poster)	Presentation Order: 6
Heat Pipe Optimization Team: The Heat Pipe Assisted Heat Sink Project	
<i>Authors: Damena Agonafer Carnegie Mellon University, Juan Ibarra UTA, Kendrick McGee UTA, Frank Platt UTA, Kendall Harris UTA, Dereje Agonafer University of Texas at Arlington</i>	
IMECE2004-62481 (Poster)	Presentation Order: 7
Investigation of Thermal Properties in Thin Films with the Transient ThermoReflectance Technique	
<i>Authors: Patrick Hopkins University of Virginia, Pamela M. Norris University of Virginia</i>	
IMECE2004-60934 (Poster)	Presentation Order: 8
Expansion of a Modified Transient Liquid Crystal Method for Thin Plates of Different Materials	
<i>Authors: Kenneth Van Treuren Baylor University, Allison Reed Baylor University</i>	
IMECE2004-60166 (Poster)	Presentation Order: 9
Analytical and Experimental Study of Potential Heat Recovery From Household Refrigerators	
<i>Authors: Jessica Todd University of Colorado</i>	
IMECE2004-60001 (Poster)	Presentation Order: 10
Determination of the Directional Dependent In-Plane Thermal Conductivity of K63B12 Pitch-Fiber/Epoxy Composite	
<i>Authors: Jessica N. McClay United State Naval Academy, Peter Joyce United States Naval Academy, Andrew N. Smith United States Naval Academy</i>	
IMECE2004-61319 (Poster)	Presentation Order: 11
Design a Product That Can Stimulate a Developing Nation's Economy: Grain Mill	

Authors: Kevin Meyer Iowa State University, Leia Guccione Iowa State University, Abby Wakefield Iowa State University, Shawn Faurote Iowa State University, Thomas Shedek Iowa State University, Curtis Carroll Iowa State University, Daniel Jones Iowa State University, Robert Hansen Iowa State University, Andrew Otterson Iowa State University, Patrick Maas Iowa State University, Kristopher Lineberry Iowa State University, Daniel Bina Iowa State University

Standup Paper Session:

Mechanical Engineering Education *(Division/Track)*

Track Manager(s): Ahmad Fakheri Bradley University

Track Co-Manager(s): Ann Anderson

Innovative Approaches to Teaching Fundamental Topics *(Topic)*

MEED-7 Innovative approaches in Thermal/Fluid Education. I *(Session)*

Session Organizer(s): Richard Figliola Clemson University

Session Co-Chair(s): Antonio Campo The University of Vermont

Session Description:

Fresh ideas with new approaches or frank discussions to the challenges of undergraduate and graduate heat transfer education. Suggested topics are not limited to: integrating TFS courses or experiences in teaching such courses, changing TFS curriculum to meet reduced credit hour mandates, integrating heat transfer for multidisciplinary relevance, integrating research and teaching, uses of software and experiments, assessment tools.

Papers

IMECE2004-59277 <i>(Technical Publication)</i>	Presentation Order: 1
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On the Teaching of Condensation Heat Transfer

Authors: Ozer Arnas United States Military Academy at West Point, Daisie Boettner United States Military Academy, Michael Benson United States Military Academy, Bret Van Poppel United States Military Academy

IMECE2004-60418 <i>(Technical Publication)</i>	Presentation Order: 5
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A Modular Wing-Tail Airplane Configuration for the Educational Wind Tunnel Laboratory

Authors: Terry Beck Kansas State University

IMECE2004-59515 <i>(Technical Publication)</i>	Presentation Order: 6
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Spreadsheets Solutions of the Boundary Layer Equations

Authors: Ahmad Fakheri Bradley University

IMECE2004-62482 <i>(Technical Publication)</i>	Presentation Order: 7
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Students Design Competition, Best Heat Sinks for Electronics Cooling

Authors: Sadegh, M. Sadeghipour Carnegie Mellon University, Mehdi Asheghi Carnegie Mellon University