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TO: ASME K-20 Committee

DATE: November 20, 2006

SUBJECT: Meeting Minutes, HTD K-20 Committee Meeting on Computational Heat Transfer, 2006 IMECE, Chicago, IL, Monday, November 6, 2006 10:00 am – 12:00 pm , Hilton Hotel-Marquette Room

PRESENT: S. Acharya, N.K. Anand, M.J. Andrews, K. Ball, D. Banerjee, J. Chai, Y. Chen, A. Crosbie, K. Dowding, A. Emery, L. Guessous, R. Hogan, D. Kaminski, J. Khan, B.Li, P. Majumdar, S. Mazumder, W. Minkowycz, J. Murthy, D. Pepper, S.P. Vanka, G. Wang, K. Woodbury, H. Zhang, and L. Zheng

EXCUSED: R. Amin, D. Carrington, R. Douglass, E. Khalil, R. Pletcher, A. Runchal, and S. Webb

Roy Hogan called the meeting to order at 10:06 a.m.

Executive Committee Report: T. Tong

- IMECE 2006: 476 abstracts, 275 draft papers, 262 papers were accepted into the program, 75 technical sessions and 6 poster sessions. Thanks to Debbie Kaminski for organizing sessions for K-20.
- Organization of future IMECE: Organizing committee will have representatives from different groups. Symposium topics have been identified and it appears that committees have to work within this frame work.
- 2007 Summer Meeting is co-organized with the JSME and co-located with Interpack. 2007 IMECE TPR: Chang Oh
- 2008 Summer Meeting will be co-located with ASME Fluids Engineering Division.
- 2008 IMECE TPR: Van Carey
- 2009 Summer Heat Transfer Conference: Young Tao
- 2010 International Heat Transfer Conference ASME organizers: Bar Cohen and Yogesh Jaluria
- Balance in Custodial Fund: \$105K. HTD Executive Committee is interested in suggestions to best use these funds to serve HTD members.
- Members are allowed to serve on only one TC except K-20
- K-21 has been promoting paper presentations by undergraduate students. One possible use of HTD custodial funds is to support this activity. If interested, contact K-21 chair, Ann Anderson (andersoa@union.edu)

Minutes from 2006 SHTC/AIAA Thermophysics Meeting – San Francisco, CA were unanimously approved.

2006 IMECE, Chicago, IL

November 5-10, 2006, Chicago Hilton and Towers

TPR: Tim Tong

KCR: Debbie Kaminski

Feedback to the Executive Committee: Hotel is very expensive. No computers and no pointers in the rooms for presentation. An unnecessary number of ASME staff members were in each room. What about the results of earlier feedback? Authors not showing up to present is a major concern.

- Sessions in honor of Suhas V. Patankar's 65 th birthday
 1. Advances in Computational Heat Transfer I (Jones, Acharya, Douglass, 5 papers)
 2. Advances in Computational Heat Transfer II (Chen, Majumdar, Muley, 4 papers, 1 no show)
 3. Advances in Computational Heat Transfer III (Dowding, Guessous, 4 papers, 2 no shows)
 4. Advances in Computational Heat Transfer IV (Kaminski, 4 papers)

- Panel on History of Computational Heat Transfer, Past, Present, and Future (Murthy, Chai, 6 panelists)
- Computational Heat Transfer in Materials Processing (Vanka, Carrington, 5 papers, poster session)
- Industrial Applications of Computational Heat Transfer I (Anand, Chen, 4 papers, 1 no show)
- Industrial Applications of Computational Heat Transfer II (Anand, Zhang, 4 papers, 1 no show)

2007 ASME-JSME Thermal Engineering and Summer Heat Transfer Conference, Vancouver, BC

July 8-12, 2007, co-locating with INterpack, The Westin Bayshore,

<http://www.heattransferconference.org/>

TPR: Ken Ball (63 sessions, 2 tutorials) Deadlines for abstract submission is December 1, 2006.

KCR: Kevin Dowding

- Advances in Computational Heat Exchanger Design (Yitung Chen co-sponsored with K-10)
- Computational Heat Transfer in Multiphase Systems (Laila Guessous and John Chai)

- Advances in Computational Heat Transfer (Robert Spall and Dave Carrington, co-sponsored with K-12)
- Computational Methods in Multi-Scale Heat Transfer (Baki Farouk)
- Computational Heat Transfer in Interfacial Phenomena (Jerry Jones and Lili Zheng)
- Tutorial on Boundary Elements and Meshless Methods (Aki Runchal, Alain Kassab, Darrell Pepper, and Eduardo Divo)
- Tutorial on Nano-scale Heat Transfer Modeling (Jayathi Murthy and Sam Graham)
- Tutorial on Design of Experiments (co-sponsored with K-12, Ashley Emery)

K-20 chairs should try getting co-chairs from other co-sponsoring K committees.

2007 IMECE, Seattle, WA

November 11-16, 2007, Sheraton Seattle, Washington State Convention Center

TPR: Chang Oh

KCR: L. Zheng

- Bio Engineering/Medical Applications (Aki Runchal)
- Advances in Computational Methods for Fluid Mechanics and Heat Transfer (Jayathi Murthy and Laila Guessous)
- Computational Advances in Simulating Energy Conversion Technologies (Sandip Muzumdar)
- Applications of Cognitive Computing (Debbie Kaminski and Keith Woodbury)
- Computational Heat Transfer in Nano Manufacturing (Pratap Vanka and Pradip Mujumdar)
- Optimization of Thermal Design (Jerry Jones)
- Global Sensitivity and Parameter Interactions in Numerical Simulations (Ashley Emery and Kevin Dowding)
- Computational Techniques for Stochastic Multi-disciplinary Problems (Ashley Emery)
- Computational Heat Transfer in Turbo-machines (co-sponsored with K-14, Yitung Chen)

K-20 chairs should try getting co-chairs from other co-sponsoring K committees.

2008 Summer Heat Transfer Conference, TBD

Date TBD, possibly Boston, co-located with Fluids Division, Advanced Energy Systems Division, and Nano Institute

TPR: S.A. Sherif

KCR: Jamil Khan


Sessions: (we need to coordinate with other K-committees)

- Advances in Computational Heat Transfer (Laila Guessous and Robert Spall)
- Review of Benchmark Problems (Darrell Pepper)
- DNS and LES of Flow and Heat Transfer (Sumanta Acharya and Pratap Vanka, with FED)
- Transport Phenomena in Fuel Cells (Pradip Majumdar and Sandip Mazumder with FED and AESD)

Idea of reviewing and compiling numerical solutions for various benchmark problems was discussed. Also, possibility of collaborating with the ASME Fluids Engineering Division on this matter was discussed. However, no conclusion was reached regarding this matter.

Meeting was adjourned at 12:03 p.m.

Respectfully submitted,


N.K. Anand