

**Minutes of the
HTD K-20 Committee Meeting on Computational Heat Transfer**

**2005 Summer Heat Transfer
San Francisco, CA
July 18, 2005
(updated to include August 15 web meeting)**

Therese Polito called the meeting to order at 9:00 am.

Attending:

N.K. Anand	Rod Douglas	Roy Hogan
Therese Polito	Stephen Webb	

Approval of Previous Minutes

The minutes of the K-20 committee meeting held at the 2005 IMECE were reviewed, corrected, and approved.

Announcements

- A scheduling error in the Conference Program has the K-20 listed for Tuesday, July 19. Consequently, the attendance at this meeting is limited. Therese will schedule a Webcast meeting in early August to conduct K-20 business that should have been covered here.
- Therese Polito reminded us that the 13th International Heat Transfer Conference will be August 13-18, 2006 in Sydney, Australia. Additional information is available on the conference web site at www.ihtc-13.com.
- Therese Polito invited all to the HTD open forum to discuss HTD options in the Continuity & Change process that is ongoing.

Executive Committee Report

Rod Douglas reported the following items from the Heat Transfer Division Executive Committee.

- IMECE – Rod is the K-20 program rep.
 - HTD sessions are Wednesday-Friday, November 9-11 in Orlando;
 - First K-20 session is Thursday, 2 pm; pretty much continuous through Friday afternoon.
 - Three 6-paper poster sessions on Thursday afternoon
 - K-20 has a total of 51 abstracts in the mix right now
 - Started with 320 abstracts, has turned into 263 papers
 - ~70 sessions – includes tutorial and panels (panels/tutorials are the first events for each K committee session sequence)
- 2006 ASME/AIAA Conference, June 5-8 in San Francisco
 - AIAA is organizing/running. ASME conference approval expected this month
- 2006 IHTC; August 13-18, 2006; Sydney, Australia

- Abstracts due July 31; presently only about 30 abstracts from the US; would like about 120 or so.
- 2007 ASME/JSME Summer HTC will be in San Diego. May also co-locate with Solar.
- The nomination process for positions in the HTD went is about to begin. Executive Committee will be soliciting nominations for open positions and will be sending out a list of open positions to the membership. K-20 chair is up for replacement next year. Executive committee is seeking nominations
- HTD Open Forum today to discuss
 - K-2 Long Range Planning Committee is taking a look at structure and operation of HTD as part of ASME Continuity and Change Initiative
 - How would we design the division if we started with a clean sheet?
 - HTD Executive Committee is seeking a mission statement from K-20. We will contact Darrell Pepper to see if he still has one in package used in creation of K-20.
 - HTD options in Continuity and Change process
- ASME is going on with Continuity and Change process.
 - One perspective is that ASME is downloading work and costs from NY to the divisions.
 - Several HTD options in the Continuity & Change Initiative are being considered. One would be to continue as a Division under the Knowledge & Communities Sector, much as we do now. Another option would be to join with other BEG Divisions to form an "Engineering Sciences Institute." Not much hope of an Institute until we resolve funding issues and options.
 - Several changes to funding processes are being considered by ASME. One option, which is being considered is to split profits from Journal; 1/3 to the Divisions and 2/3 to ASME. Other options for sharing member dues will probably be considered as part of the restructuring.
 - Stay tuned to <http://www.asme.org/change> for periodic updates and information. Provide comments and feedback to ASME and copy the HTD Executive Committee.
- JHT is now being published monthly. Importance factor now on par with the IJHMT. HTD is looking at creating an "applications focused" journal. Presently asking the Editorial Board to look at the review process to do so.
- Executive Committee has asked the K-2 Committee to review operation and organization of the HTD to be more responsive and effective in serving our membership.
- 2005-2006 Executive Committee -- Michael K. Jensen, Chair; Rodney W. Douglass, Vice Chair; Chang H. Oh, Treasurer; Timothy W. Tong, Member; and R.D. Skocypec, Past Chair.
- Executive committee is seeking nominations for several positions including an EC member, Fellow, awards, etc. There will send out a list of open positions to get nominations from K-20 committee members.

Review of Sessions in 2005 SHTC/InterPak, San Francisco July 17-22, 2005

TPR: Christina Amon

KCR: Lili Zheng

Sessions:

- ◆ "Micro/nano/chip-level" cooling heat transfer --- (Emery)

- ◆ Computational Methods for Thermo-electric and Acoustic Problems (Farouk, Kamiski)
- ◆ Computational Heat Transfer in Material Processing (w/K-15, Zheng, Li)
- ◆ Inverse and Conjugate Problems and Optimization Heat Transfer (Jones, Woodbury, Dowding)
- ◆ Verification, Validation and Computational Heat Transfer in Nuclear Applications (Dowding, Hogan, Webb)
- ◆ Advances and Applications of LES/DNS for Heat Transfer Problems (Vanka, Kalib, Khan)
- ◆ Application of Computational Heat Transfer (Kahn, Spall)
- ◆ Computational Heat Transfer Applications in Porous Media (Khan, Amin)
- ◆ Tutorial on Numerical Micro/Nano Scale Heat Transfer (Murthy, w/K-16 Pilon)
- ◆ Computational Heat Transfer for Interfacial Phenomena (Hui Zhang)
- ◆ General Computational Heat Transfer (Pepper, Chen)

Review of Sessions in 2005 IMECE, Orlando, FL

November 5-11, 2005, Walt Disney World Dolphin

TPR: Rod Douglas

KCR: Malcolm Andrews

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

- Advances in Computational Heat Transfer (Anand, Li, Hogan, Jones)
- Multiphase Heat-Mass Transfer and Melting/Solidification in Materials Processing (w/K-15 and FED Multi-phase, Andrews, Hui Zhang)
- Multigrid Methods and Adaptive Refinement Techniques in Heat Transfer (Vanka, Choudhury)
- Computational Heat Transfer in Industrial Applications (Clarksean, Rhodes)
- Using Math Packages in Numerical Heat Transfer (Pepper, Chen)
- Stochastic Radiation (Pepper, Kaminski)
- Modeling Thermo-mechanical Systems (Chen, Majumdar)
- Verification and Validation Panel (w/FED and PTC 61)

Review of Sessions in 2006 AIAA/ASME Thermophysics Conference, San Francisco, CA

9th AIAA/ASME Joint Thermophysics and Heat Transfer Conference, June 5-8, 2006, Hyatt Regency San Francisco at Embarcadero Center

TPR: ???

KCR: Dave Carrington

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

- Advances in Meshless Methods (Pepper, Runchal)
- Computational Heat Transfer and Thermophysics – Tutorial (Runchal, Pepper) - 2 sequential sessions
- Multigrid Methods and Adaptive Refinement Techniques (????, ????)

- Application of Computational Heat Transfer and Thermophysics (???, Anand)
- CAE, Virtual Reality in Numerical Heat Transfer (Runchal, ????)
- Thermal modeling of HVAC – Invited talk ??
-

Review of Sessions in 2006 IMECE, Chicago

November 5-10, 2006, Chicago Hilton and Towers

TPR: ??

KCR: ??

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

- ??
- ??
- ??
- ??
- ??
-

Other Topics

Meeting Adjournment

The meeting adjourned at 11:00 a.m.

Respectfully submitted,

Roy Hogan