

2004 ASME K-17 Committee Meeting
1 – 2:30pm
Wednesday November, 17, 2004
Hilton Hotel, Malibu Salon/4th Floor

1. Previous Minutes and Meeting

Minutes from K-17 Meeting at IMECE'03 was approved.

Ken Diller reported on the Workshop which took place last May '04 which generated a document entitled: "Transport Processes in Biomedical System: A Roadmap for Future Research Directions" that he and Geert W. Schmid-Schonbein organized with the help of the NSF and NIH to guide funding and research priorities in the coming years for our scientific group. Briefly, Ken reported that presentations on important areas of future research were given in bioheat and mass transfer, and biofluids. A manuscript resulting from this symposium has been submitted for publication and will ultimately be available via the web as well. Members wishing to view a copy of this manuscript are asked to contact Ken.

2. Future of K-17: Participation at Summer and Winter Meetings.

A. Summer Bioengineering Division (BED) Meeting

A proposal was put forth at the 2003 K-17 Meeting that, as BED moves its main meeting to the annual Summer Meeting, that we will also have the Summer Meeting as our main meeting of the year. Overwhelmingly, this was approved by our membership through email solicitation as well as a direct vote at the 2003 IMECE meeting. As a result, K-17 will have the BED Summer Meeting as its main meeting. The annual K-17 will be moved to the Summer Meeting. The next BED Summer Meeting will be held June 22-26 in Vail, Colorado.

B. IMECE participation

As of now, we are not formally planning any sessions for IMECE '05. Any session that will have K-17 sponsorship will either come from the members who would like to attend or through joint sponsorship with another HTD or BED committee. Currently, K-20 (Computation methods in HT) is interested in sponsoring a joint session.

C. HTD Summer Meeting Participation

Currently, we will continue to sponsor sessions at HTD Summer Meetings. These sessions are initiated by members interested in attending these meetings.

3. Announcements

Dr. Charles Lee of UNC-Charlotte will be the next K-17 Chairman. He is happy to note that this will be a 3 year tenure and offers himself gladly to the duties of the task.

Ken Diller has been selected to be a member of the United States National Committee on Biomechanics as a representative from ASME. This group organizes symposia in the area of hard and soft tissue mechanics, fluid mechanics, and now bioheat transfer.

K-17 Website has now been established. We will post minutes, documents, and meeting calendars to this website (<http://www.me.umn.edu/info/links/asme.html>).

4. Honors, Awards and Promotions.

It was noted that a more formal mechanism to put our members forward for deserving ASME and other awards should be discussed in future K-17 meetings. In any event, our members continue to receive significant recognition and advancements as follows: New Assistant Professors: Fredericka Brown - University of Texas Tyler, Gloria Elliot - University of North Carolina Charlotte, Bumsoo Han - University of Texas at Arlington, Obdulia Ley - Texas A+M, John Viator - University of Missouri Columbia, Zhongping Huang - Widener University; Promotion and Tenure: Liang Zhu promoted to Associate Professor with Tenure - University of Maryland Baltimore County; Funding: NIH P41 center grant in BioMEMS to Mehmet Toner - Center for Engineering in Medicine Harvard/MGH, NASA grant on bubble dynamics in arterial flow to Portonovo Ayyaswamy – University of Pennsylvania, NIH R01 on molecular adjuvants to cryoinjury to John Bischof – University of Minnesota; New Positions/Awards: K. Diller US National Committee on Biomechanics, Chair American Institute for Medical and Biological Engineering Fellows, R. Coger Director of new Biosystems Institute at UNC Charlotte. S. Rastegar NSF Program Director and Bioengineering Coordinator Engineering Research Centers Program, J. Bischof – Humboldt Fellow and George Taylor Research Award from University of Minnesota.

5. HTD 2005 Summer Meeting

The HTD Summer Meeting will be held July 22-27th at the Westin St. Francis Hotel in San Francisco. This Meeting will be co-located with InterPack. The website is available: <http://www.asmeconferences.org/ht05/>. We will be sponsoring 4 sessions:

- Transport models at molecular, cellular and tissue levels
- New ideas in cancer treatment
- Multiscale Modeling and Measurements in Biological System
- Thermal Diagnostics and Therapeutics of Tissues and Cells

Deadline for abstract submission will be January 15, 2005 despite what the website says. This was decided on at the HTD Summer Meeting Organizer meeting.

6. BED 2005 Summer Meeting

The BED 2005 Summer Meeting as stated above will be June 22-26 at Vail Colorado. The website address is: www.asme.org/divisions/bed/events/summer05.html

We will be requesting 6 sessions and 1 panel discussion:

- Molecular Mechanisms of Cryoinjury -Ram Devireddy, Chair
- Modeling of Bioheat and Mass Transfer- Alptekin Aksan
- Bioinstrumentation- Elaine Scott and Tom Diller
- Experimental Methods in Bioheat and Mass Transfer- Liang Zhu
- Transport Phenomena in Tissue Engineering- Robin Coger, Chair
- Image Guidance– Devashish Shrivastava and Xiaoming He
- Nano-bioheat and mass transfer (panel)- Charles Lee and Ram Devireddy,

Session chairs are asked to finalize the session titles and submit names of co-chairs to Charles Lee cyclee@uncc.edu. Deadline for abstract submission is January 10th, 2005.

Deadline for student poster competition is January 30th, 2005

7. International Center for Heat and Mass Transfer

The next symposium for the ICHMT is scheduled for 2007 with A. Shitzer as the organizer. There is some uncertainty with this so John Bischof has volunteered to begin discussions with Dr. Goldstein at the University of Minnesota who is a prominent member of the ICHMT.

8. Other Upcoming Meetings:

2005 International Symposium on Multiphase Flow, Heat Mass Transfer and Energy Conversion. July 3-8, 2005 Xian, China

Cryo 2005- University of Minnesota July 25-28, 2005. Website:
www.me.umn.edu/events/cryo2005/index.html

27th Annual IEEE-Engineering in Medicine and Biological Sciences, September 1-4th 2005, Shanghai, China. Lisa Xu is organizer. Website TBA.

9. Biomedical Engineering Education

Ken Diller reported on the results from a NSF grant to develop Bioengineering Education. They have developed a HyperLearning (HPL) Undergraduate Biotransport Course Material which includes lecture material, problems, solutions, and exams. This is available to members wishing to teach this course at their University. The instructor must agree to provide pertinent data on the teaching experience to Ken in order to collect data on the effectiveness of the method. The material will ultimately be available on the VaNTH website (<http://www.vanth.org/>).