Education Committee
ASME Heat Transfer Division

Meeting Minutes - 1999 IMECE

Thursday, November 18, 1999, 3:00 - 5:00 pm

Attendance, *Members*: Marcus Bianchi, Bob Boehm, Tony Campo, David DeWitt, Allen Duncan, Himanshu Joshi, Ali Khounsary, Frank Kreith, Pam Norris, Terry Simon, Gamal Refai-Amed, *Visitors:* Ed Anderson, Richard Culham, Bob Ribando, Andrew Smith.

Old Business

97-IMECE, Panel Session. "Software Utilization and Relevance in the Undergraduate Curriculum;" Allen Duncan and Bob Boehm, Organizers; Allen Duncan agreed to write a brief summary of the panelists' remarks to serve as a record for out meeting minutes.

99-NHTC, Student Poster Session. Allen Duncan and Nihad Hussain, Organizers; No abstracts received; In future years, sessions will be entitled "Student Research and Design in Heat Transfer" and organized annually for the IMECE meetings.

99-IMECE Paper Standup Session, Thermal Sciences and Energy Systems Education. Cosponsored with K-6, Energy Systems. Allen Duncan and Marcus Bianchi, Organizers: 14 abstracts received, 10 accepted, and 9 planned for presentation including one of two student poster session presentations submitted.

Industrial Problems for the Classroom. Subcommittee comprised of Dave DeWitt, Himashu Joshi, and Gamal Refai-Amed, Astec-ASP/Canada, reported on their plan to write letters seeking applied problem statements from HTD industrial members. Previous problems prepared by HJ and GR-A were distributed. Present mode of distribution is through an ASME link to a server maintained by Allen Duncan.

Future Meeting Sessions

Standup Paper Sessions

00-IMECE	Pam Norris and Peter Noymer
01-IMECE	Richard Figliola and Pam Norris
02-IMECE	Allen Duncan and Andrew Smith

Considerable discussion was given to identifying new themes; topics are listed below.

- Organizing a Highlight Session, " beyond traditional boundaries"
- Microscale heat transfer – does it fit into heat transfer?, thermal aspects of MEMS; miniaturization
- What do we expect students to understand when they come into heat transfer?
- Heat transfer is endangered; how to deal with change?
- Combining thermodynamics, fluid mechanics and heat transfer; shrinking thermal science credits
- Long-distance learning – what's peculiar to teaching heat transfer?

Topics identified at the NHTC 99 meeting should also be considered:

- Heat transfer in electronics design - Ann Anderson will explore co-sponsorship with K-16
- Curriculum course and laboratory integration, integrating research and teaching - Pam Norris will identify NSF award winners for the CCLI program to target paper contributions as well as awardees student posters.

Organizers have responsibility to write the Call for Papers as they see fit to accommodate these topics.

Student Poster Sessions
Student poster sessions, entitled "Student Research and Design in Heat Transfer," will be organized annually for IMECE meetings (not NHTC meetings). Organizers are reminded that $2000 is available from the Division treasurer to defray student travel expenses and to provide a banquet dinner ticket. Organizers for forthcoming meetings are

00-IMECE Terry Simon and Nihad Hussain
01-IMECE Ed Anderson and Ali Khounsary
02-IMECE -- seeking volunteers --

Terry Simon indicated that they will contact ASME chapter advisors, heads and other key faculty in order to establish a continuing relationship to stimulate student involvement. In addition to the traditional abstract-poster-archival paper mode (usual review process), consideration will be given to a new mode: abstract-only plus poster (no review, no publication). The main purpose of the latter mode is to increase student participation by reducing the effort and submission lead time.

New Business
Permanent Status for the Committee. The chair will present a report on the committee and petition for permanent status at the HTD K-5 Planning Committee meeting on November 19th. Discussion was given to the importance of this petition and why it should be supported including these topics: service to ASME membership (educators); with higher teaching loads, faculty need help; demands on unique coupling between industry and academe; evidence of ASME's willingness to connect with industry and universities; committee has broad perspective for thermal sciences and for interdisciplinary issues in thermal management (systems, materials, etc.); confronting the "dumbing-down" tide by feeding back industry's requirements; only committee where education issues can be debated. Our petition will also require waiving the "only one K-committee membership" rule.

Committee Organization. To give structure to our present activities, the chair asked Pam Norris and Terry Simon to serve as sub-committee chairs for the Stand-up and Student Poster Sessions, respectively. They are asked to serve as resource persons to the organizers of the next-year sessions. Himanshu Joshi agreed to serve as chair of the subcommittee on Industrial-Application Problems for the Classroom.

Committee Vice Chairperson. Following the 1995 proposal for the formation of the ad hoc committee, it was agreed that a Vice Chair should be elected "to assist the Chair in all aspects of the committee's activities, keep minutes of the meetings, and substitute for the Chair when necessary." It was further agreed that the leadership of the committee should alternate between academe and industry, and that the Vice Chair would move into the Chair position.

Short Courses. Discussion was given to whether the committee should undertake work to organize short courses. Since considerable time and effort would be required to secure ASME approval, it was agreed that the chair would organize background material on the process, pass it to the membership and then poll the membership on their interest to discuss this topic at the 00-IMECE meeting.
Student Poster Session:

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