

Future of K-17 Discussion.

8/19/03

John Bischof - Request for Thoughts:

Dear K-17,

Below please find a recent message from Tom Andriacchi with regard to future BED meetings. This is relevant to our discussion of whether K-17 will move with BED to an annual summer meeting format, remain at IMECE as our main meeting, or perhaps find some other combination of meetings (i.e. summer HTD (NHT) and BED meetings).

Please send me your feedback and I will try and draft a response to Tom. If we have specific issues that we would like to raise with BED before agreeing to a move this would be a good time to raise them (i.e. before moving). I have appended the most recent BED summer meeting K-17 minutes and the NHT K-17 minutes below Tom's message for your perusal. You should have received these earlier this summer as well.

Broadly speaking there are those in K-17 who are enthusiastic about moving with BED, and those who are a bit more cautious and perhaps concerned about losing our connection to HTD and other traditional divisions of ASME.

I look forward to your input.

JB

Tom Andriacchi Questions to Consider for BED move to primary Summer Meeting

Questions to consider:

1. How will this change influence programming for the Annual Meeting?
2. How can the Technical Committees improve the overall quality of the papers presented at the Annual meeting? (Note: The survey from the last meeting indicated attendees would prefer fewer higher quality papers presented)
3. Should the Technical Committees expand programming for educational workshops?
4. Should the Technical Committees expand Industrial Interaction with the Annual Meeting?
5. Should we change the organization and/or operation of the Technical Committees?
If yes to above please make suggestions.
6. What is the best time for the technical committees to meet?
7. Other comments?

FEEDBACK FROM MEMBERS:

8/19/03

Wen-Jei Yang

Dear all:

It might be a good idea to join BED meetings but please keep in mind that Heat and Mass Transfer will be a minority and will be treated like a step child.

Wen-Jei

8/20/03

Sohi Rastegar

Biomechanics folks in BED seem to have managed to be doing excellently within Bioengineering community as well as having very good ties with Solid Mechanics folks at ASME. In fact, they now have their own well-defined identity as biomechanicists.

Is it possible to model that for bioheat and biomass transport?

-Sohi

8/20/03

Sohi Rastegar

More (philosophical) thoughts on this subject:

How can we build momentum towards this goal? If we use two parameters of "Quality" Q and "Size" S analogous to velocity and mass, we can do a take off on Newton's 2nd law (as you know Newton was careful not to write $F=ma$ but rather $F = d(mv)/dt$)

Force of growth = Rate of change of momentum (SQ) = $S \cdot dQ/dt + Q \cdot dS/dt$

We will have to do two things simultaneously to be most effective:

(1) We will have to (continue to) increase the quality of our work individually and collectively (which I think we are doing pretty well).

(2) We will have to increase our size (i.e. membership)

Where (or how) are we most likely to attract more members interested and enthused about the field while continuing to better the quality of our work? I believe this is probably the most relevant question for our group to address in the next few months.

Best regards,
Sohi

P.S. As you know Newton was careful not to write $F=ma$ but rather $F = d(mv)/dt$

7/03/03

Eduardo Moros

For what is worth.

It has become more and more difficult to me to make it to the IMECE meeting since it overlaps with other meetings of interest. Coupled with the fact that IMECE is relatively expensive, the sessions are spread out over the week and that attendance is not that great, I have had to make difficult decision not to go in recent years, including 2003. Moreover, Bioheat can be construed as a subdiscipline of Bioengineering. Therefore, I see the move to the BED summer meeting favorably, even it is every two years.

Eduardo.

8/20/03

Charles Lee

I am a little concerned in that, as new technology is being developed that may ultimately have Bioengineering applications, we may not get to see it first hand. It may not be possible to stay with IMECE if BED decides to leave, but I just want us to be aware of the downside as our meetings become more specialized. What is the solution? I don't know, but we may need to give this serious consideration at the K-17 meeting in November.

8/20/03

Ken Diller

I think one of the reasons that bioheat transfer has been at somewhat of a disadvantaged position within the BED and within the biomechanical engineering community in general is that we have never had representation on the US National Committee on Biomechanics. This group wields considerable influence on the organization and direction of bme at the national level. Some years back when I was more in the center of BED activities I had many talks with USNCB powers that be about this situation and was under the impression that it was to be addressed. Nothing has ever happened. Sohi, perhaps you are in position to pursue this issue now, if you are so inclined. I think it could boost our level of influence and impact, for example at the summer BED meeting.

Ken

8/21/03

Bob Eberhart

John:

Ken's suggestion makes a lot of sense. There is much that K-17 has to offer the BED, and vice versa. That will continue as thermal modeling assumes a more central role in clinical process design, therapy assessment, etc.

Bob

Robert C. Eberhart, Ph.D.
Professor of Engineering in Surgery
Southwestern Medical School

8/26/03 Neil Wright

Dear John,

IMECE has been positive for us because it has allowed us to attend to both halves of our ASME interest, although often posing challenges to the committee chair to obtain and schedule sessions from HTD and BED. With the traditional emphasis on IMECE, neither the Summer Heat Transfer or the Summer Bioengineering Meetings have had large K-17 exposure in the recent past. The K-17 sessions at this year's Summer Heat Transfer Meeting were the best yet for the summer meeting and it seemed that there was more interest from outside of K-17 than usual. The committee meetings at both the summer Bioengineering and Heat Transfer meetings were pretty well attended, each with about half the number at a typical IMECE committee meeting. It would be nice to maintain a presence at each of the summer meetings, given that K-17 is a collaborative effort between HTD and BED. This may stretch our small community pretty far, however. The

Summer Heat Transfer meeting would probably allow greater flexibility in scheduling sessions than the Summer Bioengineering would, although the addition of AIChE and the Fluids Division to the 2004 Summer Heat Transfer meeting has reduced some of this flexibility, albeit with other benefits. How this meeting will evolve in the coming years is yet to be seen. The Summer Bioengineering Meeting is evolving rapidly as well. It sounds as if it will become very large and it may be more difficult for K-17 to have influence on its direction. Be that as it may, if we must choose one summer meeting for the committee meeting, should we base it on more of K-17's papers being published in JBE than in JHT and that more of our members have had leading roles in BED than in HTD recently? Which meeting best benefits the objectives of K-17? Raj Manglik was interested in groups putting together joint sessions at the 2004 summer Heat Transfer meeting, which fits well with Vasan's idea, and may allow us to support both meetings if such a trend were to continue.

Best wishes,
Neil

9/3/03 Sohi

(From a message to Ken Diller and John Bischof)

Lou (Soslowsky) is current ASME representative to USNCB. He agreed that when his term ends we would have a representative from K-17 on it and in the future try to rotate the representation within BED.

Regards,
Sohi

10/27/03

Robin Coger

John and K17:

I've been reading all of the correspondences regarding whether or not we should replace our IMECE attendance with an annual Bioengineering summer meeting, and thought I'd share a few comments.

It is definitely a big decision. I am definitely an advocate of K17 taking a stronger role in the bioeng summer meeting -- but because of our obvious heat transfer interests (and the fact that our group also benefits from interacting with other non-bioeng colleagues) I'd like

to suggest the following:

I propose that K-17 actively participates in the bioengineering summer meeting once it becomes an annual event. However it might be best for our group if our level of activity changes on odd versus even years. For instance, in 2004 we might participate at the summer meeting on a 50% level, but in 2005 we might participate closer to the 100% level. During the November of the reduced-activity year, K-17 would also organize key sessions at IMECE as part of the heat transfer umbrella.

One thing that seems clear to me, is that K-17 is currently given very little consideration at the summer meetings since that meeting is dominated by biomechanics. It is therefore critical that if K-17 votes to follow BED's plan, that our committee also commits to becoming ACTIVE participants at the summer meeting.

-Robin Coger

10/27/03

John Bischof

Dear Robin,

This might work. However, we must remember that it has been difficult to fluctuate the number of sessions from year to year at the IMECE. This has been one of the arguments not to leave.

It may be possible to exert a larger influence at the summer bioengineering meeting if we come on a regular basis and in force. We had several good sessions this last summer.

Nevertheless, I think your point about how to maintain a connection with HTD is certainly key.

JB

Dick Smith - NSF

On your question to the committee about moving in with BED for the summer, I hope that the participation in Heat Transfer Division activities won't disappear altogether. If you have your main meeting with BED in the summer, it will be hard to sustain an active program at the summer heat transfer conference. (And if you leave the summer heat transfer conference, it will be also hard for the TTTP program to maintain its connections, especially after I am gone.) Before you have a vote, I hope that you will have people attend the two panel sessions that are planned for Wednesday, one at 11:15 and another at 3:45. That way you will have the perspective on what the rest of the HTD is thinking.