



Notes from the Chair

Allow me to begin my term as MESD Chair by first thanking the outgoing officers and welcoming the incoming volunteers. Jeff Koberstein assumes the position of Past Chair after serving as MESD's Chair for 2006. We are deeply indebted to him for his efforts, particularly with regard to implementing a reception at the MESD Poster Session and getting the new MESD website jumpstarted. Please also join me in thanking our outgoing Directors for their service to MESD: Rick Register and Stacey Bent. Our incoming officers include Don Baird (Second Vice-Chair), Eric Lin (Director) and Joel Fried (Director). Don will be doing the programming for the 2008 Fall Annual Meeting. We are honored to have their services.

There are two important topics upon which I would like to solicit your input. The first has to do with the number and quality of MESD sessions at the Fall Annual Meeting. This is an ongoing issue that comes up every few years or so, but deserves continual re-evaluation. MESD has traditionally offered a large number of sessions on a variety of topics, with relatively low rejection rates. The result of this policy is (sometimes) low session attendance and a high proportion of papers presented by graduate students. The effect of this policy on quality is difficult to measure. The alternative is to offer fewer sessions, and/or limit the number of presentations by graduate students. Again, the effect this move would have on overall session quality is open to debate. Would you rather see fewer sessions with more presentations by principal investigators and potentially higher quality? Are you willing to present your paper in a poster session if it is rejected? Or do you think the training and exposure graduate

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students receive by presenting is an important component of the meeting?

The second topic is related to meeting sessions, but at a meeting to which MESD does not traditionally provide programming. There is a unique opportunity in Spring, 2008 when the ACS and AIChE meetings are in the same location at the same time. The meetings will be held April 6-10, 2008 in New Orleans. I know there has been little interest in arranging sessions at the Spring meeting due to the traditional industrial focus. However, the ACS meeting has been a strong draw for chemical engineers, particularly those in MESD. Does it make sense to provide some targeted sessions that might be of interest to both MESD and ACS members that might also attract the traditional AIChE Spring Meeting goers? Potential topics could include corrosion, materials for energy applications and separations.

If either or both of these topics are of interest to you, please drop me an email or give me a call. I'd be delighted to hear from you. In closing, let me encourage you to keep working on MESD membership. Suggest membership to your new faculty members, undergraduate researchers, graduate students and post-docs. The division's future depends on it.

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Application Deadline Rapidly Approaches for 2007 Charles M.A. Stine Award

The deadline for this year's Charles M. A. Stine Award in Materials Engineering and Sciences is **February 15th**. The award is given to recognize outstanding contributions by members of the AIChE to the scientific, technological, educational, or service areas of Materials Engineering and Science. The \$1500 award is sponsored by E.I DuPont de Nemours and Company and is to be presented at the AIChE Plenary Session. Selection criteria include:

1. Nominations must be submitted by members of the Materials Engineering and Sciences Division; however, the only requirement for the nominee is that he/she must be an AIChE member.
2. Applications must be received no later than Feb 15th
3. The award can be given to an individual or a team
4. Is given for significant discoveries, important research, development of new products or processes, outstanding service to the materials community, education concepts, or initiation of new materials and management.

Additional information, including previous winners of this award, can be found on the AIChE website at www.aiche.org/awards. Under the "Select Award Category", click on Division Awards; the Stine Award is listed under MESD. If interested please contact Dennis W Hess:

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Fall Meeting Highlights

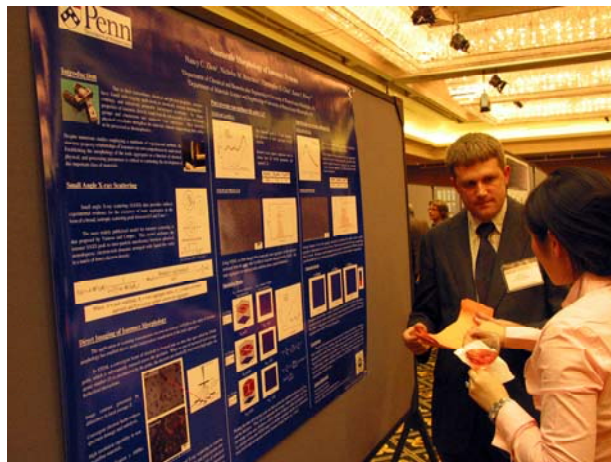
The 2006 Fall Annual Meeting was another record-setting conference for AIChE and MESD. Over 4200 people attended over 700 sessions during the conference, which ran from November 12-17, 2006 in San Francisco. The 700-plus sessions were the most ever offered at an AIChE Meeting (see Historical Programming Information), including 16 Topical Conferences. MESD offered 89 sessions – similar to the number offered in San Francisco in 2003 – including a Topical Conference on Organic Electronics.



Above: Tiby Leib (left) of du Pont Engineering presents the 2006 Charles M.A. Stine Award to Jeffrey Koberstein (right) at the 2006 AIChE Annual Meeting in San Francisco.

The Poster Session, again sponsored by Chevron Phillips Chemical Company, highlighted research by over 75 participants. Poster Session awards for best posters were presented to:

1st place Paul Podsiadlo, University of Michigan, “Novel High Strength Nanostructured Composites Prepared with Layer-by-Layer Assembly Technique” (Nicholas Kotov, Advisor)



Above: MESD member Brian Grady (left) listens to Nancy Zhou (right) describe her research.

2nd Place Sumod Kalakkunnath, University of Kentucky “Segmental Relaxation Characteristics of Rubbery Membrane Networks” (Douglass Kalika, Advisor)

3rd Place David Statler, Jr., West Virginia University (Rakesh Gupta, Advisor) “Recyclability of Flame Retardant Polycarbonate: Comparison of Non-Halogenated and Halogenated Flame Retardants.”

The Charles M.A. Stine Award – MESD’s highest award for research excellence – was awarded to (Past Chair!) Jeffrey Koberstein of Columbia University. His presentation entitled “Using Molecular Design Concepts and Light to Engineer Surface Properties” was delivered at the MESD Plenary Session on Wednesday, November 15. Plenary Session talks were also given by Stuart L. Cooper, Annelise E. Barron, Demetre J. Economou, and T. Alan Hatton.

The MESD Executive Committee Meeting was held on Tuesday, November 14 in Hotel Nikko San Francisco, CA. See the meeting minutes for more details.

Congratulations New MESD Executive Board Members!

The October election results showed that **Don Baird** was elected Second Vice Chair and **Joel Fried** and **Eric Lin** will be Directors through the 2008 year.

We apologize for the miscommunication regarding the opening of electronic balloting (see the MESD Executive Committee Meeting minutes in the next article). We are working hard to correct these issues as well as to streamline communications to avoid a recurrence. Our goal is to provide voting instructions through the MESD website.

AIChE

AIChE is looking for you! Haven’t updated your information? Know someone that’s lost touch? Encourage them to keep in touch. Update your contact information and renew your yearly membership for 2007.

www.aiche.org/MemberCenter/Renew2007.aspx

MESD EXECUTIVE COUNCIL MEETING MINUTES

*Carmel Room, Hotel Nikko, San Francisco, CA
4:00-6:15 p.m., Tuesday, November 16, 2006*

1. Welcome – Jeff Koberstein

Jeff Koberstein called the meeting to order at 4:00 PM and welcomed participants. An agenda was distributed but it was modified to accommodate those who could not attend the entire meeting.

2. 2006 Election Results – Jeff Koberstein

Only 26 people voted in the election which resulted in tie votes (a 5.2% response rate, in comparison to 12 % in 2005). Jeff found no provision for breaking ties in the bylaws. AIChE-NY did not provide an option of an extended voting time frame. Thus he chose to call on previous Stine Award winners to solicit their votes and used this to break the ties. Don Baird (Virginia Tech) was elected as 2nd Vice Chair and the new Directors elected were Joel Fried (University of Cincinnati) and Eric Lin (NIST).

Discussion ensued noting problems with the announcement elections. Rick Register noted that the email announcing the elections came out a couple weeks before the election and did not provide a link that led directly to the voting page. A more convenient notification and response method could improve the response rate.

Jeff suggested that the web page could be used more effectively to promote the elections, along with other items of MESD business; under New Business he will propose that the MESD webmaster develop this. Furthermore, assignment methods of unelected positions such as Webmaster and Newsletter Editor should be formalized.

3. 2005 Minutes Approval – Stevin Gehrke

Steve Gehrke distributed copies of minutes from the 2005



Above: MESD Chair and Stine Award recipient Jeffrey Koberstein (left) enjoys a free poster session reception beverage while chatting with Holly Martin (right) about her poster.

meeting, which had also been distributed by email to Council members a week ahead of the meeting to streamline the approval process. Jeff noted that not all of the items planned were carried out, such as the plan to offer three \$500 travel awards to graduate students (after the meeting, Brian Mitchell and Steve Gehrke agreed that it would be a good idea to distribute draft minutes by the end of the calendar year so that all members have a record of tasks agreed upon for action prior to the following year's meeting).

Corrections to the number of past Stine award winners involved in selection of the new awardee (the previous 4 awardees are involved, not 2, in addition to the committee chair vote). Some typos were also noted and corrected. With these amendments noted, the minutes were accepted following a motion, seconded, and unanimous voice vote.

4. Stine Award – Dennis Hess

Dennis noted that he continues to receive excellent nominations. However, some strong candidates who have been passed over in recent years have not been renominated; their nominators should be encouraged to resubmit nominations. Jeff Koberstein was the 2006 winner.

Dennis noted the need by the Division to formalize the entire Stine Award process. This involves solicitation of nominees, convening the selection committee and making the selection, recruiting suitable plenary speakers, soliciting the award money from du Pont, getting the checks cut for the plenary speakers and the awardee, and having an award plaque made (AIChE-NY no longer handles plaques for the divisions). This year, Dennis handled the elections and requesting of checks. Tim Anderson (Florida) solicited the money from du Pont, but this occurred only in the preceding couple weeks prior to the Annual meeting. The contact person at du Pont has changed in recent years from Jim Trainham to James B. Porter Jr. (James.B.Porter-Jr-1@USA.dupont.com); the award will be presented this year by Tiberiu (Tiby) Leib.

Steve Gehrke noted that there has been some uncertainty about who is making check requests on behalf of the division. He has not always been notified about which checks, if any, have been cut on behalf of the MESD. Usually, the check to the award winner has been cut without his involvement, but not for the plenary speakers. In 2005, for the first time the poster awards were also cut without his involvement, and due to an error in AIChE's balance sheet (poster checks were not deducted from the MESD balance), he submitted check requisitions to AIChE before he discovered the error on the balance sheet, fortunately in time to cancel the duplicate checks.

The Council agreed that in the future, all check requests should be processed through the Secretary/Treasurer. The Council also established that it will be made the duty of the Secretary/Treasurer to make the check requests of AIChE for the Stine Awardee and the invited speakers by June 1 (or as soon thereafter as AIChE allows) and send the checks to the Stine Award Chair before the Annual Meeting for distribution at the meeting.

Jeff asked Dennis for suggestions on how to formalize the duties of the Stine award chairman and the process from solicitation of nominees to running of the award session at the annual meeting.

At this point, Alon McCormick noted that the Stine award committee and other committees and supporting roles (newsletter editor, webmaster, membership, etc.) are not spelled out in the division bylaws. Nor is relevant supporting information documented outside of the bylaws as in a handbook or on the MESD website where it is readily accessible to the members. Several Council members agreed and the Council consensus was that the Executive Council should appoint the chairs of any supporting committees, with the chairs of the committees to have responsibility for soliciting additional members, if any (Some committees like the website may not need any supporting members beyond the webmaster. It was also the consensus of the Council that these supporting chairs (i.e. those not specifically mandated by AIChE in division structure) should be charged with specific periods of service, with the option to renew. The committees envisioned to fall into this category included the Stine Award committee, web page, newsletter, membership (a proposed committee not currently active), bylaws, liaison to other divisions, and student awards committee (travel awards and poster awards). Rick Register noted that the MESD directors do not have specific responsibilities enumerated in the bylaws or elsewhere; they would be logically tasked with service as chair of at least one of these committees. In 2005-06 term, Jeff had appointed an *ad hoc* committee composed of Alon McCormick, Sue Ann Bidstrup Allen (Georgia Tech) and Douglass Kalika (Kentucky). Although they had developed some ideas for revision, Rick recommended that the MESD not revise the bylaws in a piecemeal fashion. The Council agreed and the ad hoc Bylaws committee will be asked to continue with their re-evaluation of the bylaws, with a comprehensive overhaul of the bylaws to be prepared and submitted to the membership for ratification within two to three years.

Regarding the specific question of the Stine award chair, the consensus was that the term should be three years, and Dennis accepted this nomination by acclamation to serve as chair for the next three years (2006-2007, 2007-2008, 2008-2009).

5. Secretary/Treasurer Report– Stevin Gehrke

Stevin Gehrke distributed the Secretary/Treasurer's report, the membership report, and Division account activity report. He reviewed the reports passed out with the Executive Council. Membership had risen for the second year in a row following a lengthy period of membership attrition; in the past year, there were 504 dues-paying members, the highest total since 2001-02. Although no special efforts were undertaken in 2005-06 to increase membership, it was agreed that formal efforts to continue to grow the membership should be undertaken. Membership dues income plus the return on invested funds held by AIChE continues to run a surplus relative to annual Division

expenses.

Steve noted that Raj Krishnaswamy had been the internal champion at ChevronPhillips for sponsorship of the poster session awards, but as he has recently left the company, a new person within the company needs to be identified to continue this sponsorship; Don Baird volunteered to identify such a person. Steve also recommended that the MESD be sure to properly acknowledge the division's corporate sponsors (du Pont and ChevronPhillips) at the sessions and in AIChE program brochures.

Discussion moved to a discussion of the CMA Stine award publicity and financing. The Council wants to publicize the award more broadly. This includes adding a biographical sketch of Dr. Stine to the Web site along with a listing of past Stine Award winners. Steve Gehrke will look for the Stine biosketch that was included with past dinner brochures and submit this to the webmaster. We should also see if we can get du Pont's sponsorship of this award explicitly noted in the program brochure. Tim Anderson (Florida) has been the MESD's contact with du Pont regarding the Stine award for the last several years; Buddy Ratner suggested that the MESD approach du Pont with a request for multi-year support or ideally an endowment for the award, though he agreed that corporations are often reluctant to make such long term or lump sum commitments.

A new expense incurred for 2006-07 was sponsorship of a hospitality bar for the MESD poster session. Jeff Koberstein was not able to arrange direct billing for this expense through AIChE so he put the charge, approximately \$1000, on his personal credit card that he will submit for reimbursement. He also posted flyers announcing the event. He found that most participants had not been aware of the MESD or its role in planning and sponsoring the session. We need to follow up and contact the poster session participants to get them to sign up for Division membership. Eric Lin was appointed to take the lead on this as chair of the MESD membership committee.

To conclude this discussion, Rick Register moved that the Secretary/Treasurer's report be accepted. This was



Upcoming Meetings and Events

AIChE has its annual spring meeting April 22-26th in Houston, Texas.

This year's national meeting will be held November 4-9th in Salt Lake City, Utah

seconded by Don Baird and approved by voice vote of the Council.

6. 2006 Programming Report – Brian Mitchell

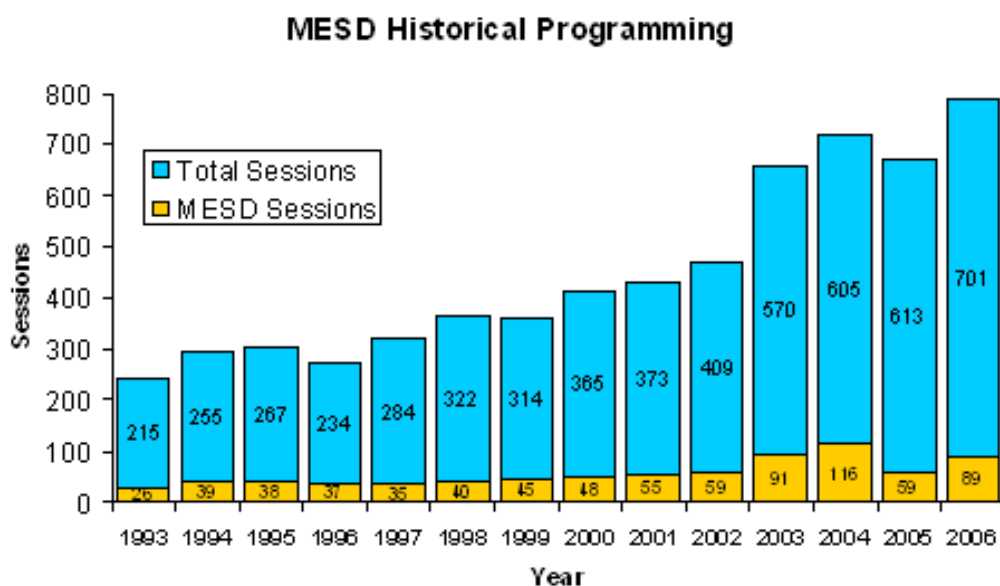
Brian Mitchell provided information on the historical trends of session sponsorship by MESD at Annual Meetings of AIChE. In 2006, the MESD sponsored 89 out of 701 total sessions. The MESD was originally allocated only 32 sessions as the primary sponsor, out of 48 requested; ultimately we wound up with 55 as the primary sponsor and an additional 34 as co-sponsor. The increase in sessions available was due to AIChE scheduling activities in other hotels besides the Hilton, which allowed an increase in the total number of sessions from 585 to 701. Thus we got nearly all of the sessions that were requested by area chairs. Brian had to argue for this programming increase, basing the argument on the number of sessions that the MESD had at the 2003 meeting, which was also held in San Francisco. It was not clear why the MESD was the division which had many of its sessions moved over to the Marriott, which was rather inconvenient. It may have been due to the fact that the ABS meeting was being held at the convention center, to which the Marriott is near, so it may have been considered advantageous to MESD members to have sessions located closer to the convention center. However, if the choice was between cutting sessions and inconvenience of location, the inconvenience was probably worth it. However, we should request of AIChE that as the MESD has taken its turn being moved out of the primary conference hotel that in the future at other multi-site meetings other divisions take turns being moved out of the primary site.

A major issue in the session allocation process is determining which division is to be designated as the primary sponsor of that session. However, these session allocation issues become a problem only in years where available session space is constrained as it is in San

Francisco. The MESD does need to try to get its poster session held at a more effective time than it is at this meeting: the Monday 6:30 PM start time meant that the poster session was in competition with the various hospitality suites, which cut attendance. Brian notes that the MESD has limited say in the scheduling of these sessions, due in part to constraints in available space and coordination with poster sessions held by other divisions.

Extended discussion ensued among the Council members about our philosophy regarding the appropriate number of sessions and the number of papers accepted into these sessions. Historically, the Division has looked to maximize the number of sessions it can offer and accept all meritorious papers submitted into these sessions, generally with 20 minutes allocated per paper. Jeff Koberstein notes that AIChE has a two-papers-per-author limit but this is not enforced. He believes that this leads to too many papers being offered in too many sessions, reducing the audience size for any given paper and cutting down on opportunities for social interactions and networking, which is an important facet of the meeting in addition to the technical programming.

Balaji Narasimhan notes that in recent years that few submitted papers are actually rejected (Paula Hammond and Rick Register recalled that rejection rates as high as 70% had been seen 10 years ago when the number of sessions available was lesser). There are a number of reasons for this. That includes the fact that session chairs don't want to cut papers and lose their sessions due to undersubscription and the fact that session chairs are often junior faculty members who are reluctant to reject papers by established figures in their field. Alon McCormick noted that when he was a topical conference chair, he was asked to increase the number of papers submitted to grow the size of the topical conference; it was recognized that people whose papers are



Above: Fall annual meeting session summary since 1993.

rejected were less likely to attend the meeting. Rick Register would like to see a different method of allocating sessions be developed by AIChE so that the number of MESD sessions can be expanded or contracted during the proposal to present stage as paper submission and rejection numbers are obtained. Extensive discussion continued on the potential to increase the quality of the sessions offered by the MESD by instituting tougher standards and reducing the acceptance rate.

7. **Newsletter – Brian Mitchell**

Brian Mitchell was not available to give a report on the newsletter.

8. **CTOC – Kristi Anseth, Council Liaison**

Kristi Anseth was not available to give the CTOC report,

9. **Student Poster Awards: Alex Chang**

Alex Chang was not available to give the student poster award report.

10. **MESD Website – Pete Ludovice**

Pete Ludovice was not available to give the MESD website report.

11. **2007 Meeting, Salt Lake City – Paula Hammond**

This will be the first meeting that AIChE has held in Salt Lake City; there have been some concerns about the attendance to be expected for this meeting. Unlike San Francisco, however, space is not an issue – we will have plenty of space for Division programming. Confex software will be used for all session planning. By December 15, 2006 Paula must submit all session information to AIChE. To meet this deadline, she needs all of the relevant

information from area chairs by approximately December 1. Calls for papers will go out on February 1, 2007 and May 15, 2007 will be the closing date for paper submission. The closing date for the programming grid is July 16, 2007. The planning currently is for 43 primary sessions, possibly as high as 47. The tentative breakdown by area are as follows: 8a, 16 sessions (plus 19 co sponsored); 8b, 17 sessions; 8d, 9 sessions; 8e, 6 sessions; and 8f, 6 sessions. This is a similar allocation to this year. Jeff Koberstein suggests, as discussed earlier, that acceptance rates be kept down, or send more of the submitted papers from oral presentation sessions to the poster session. Don Baird would like to see that no sessions have presentation slots less than 20 minutes – avoid 12 or 15 minute talks. Buddy Ratner notes that people generally want to hear presentations by the senior authors, but at AIChE meetings, junior researchers give most of the talks; thus preference might be given to papers where the senior author is the designated speaker. Thus the Executive Council would like to charge MESD session chairs with the goal of putting an increased emphasis on paper quality over quantity. Topical conferences to consider includes polymers in energy.

Jeff Koberstein thanked Brian Mitchell for his efforts on putting together a good program overall for the San Francisco conference. Paula Hammond also thanked Brian for all of his help in planning the 2007 conference.

12. **2008 Meeting – Don Baird**

Don Baird will be following Paula's lead while developing the program for the 2008 meeting. He also welcomes advice from past chairs.

Attendees of the MESD Executive Committee Meeting

E-mail	Name	Affiliation	2005-06 Office
shgehrke@ku.edu	Stevin Gehrke	U. of Kansas	MESD Sec./Treasurer
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jk1191@columbia.edu	Jeff Koberstein	Columbia Univ.	Chair
register@princeton.com	Rick Register	Princeton Univ.	Director
nbalaji@iastate.edu	Balaji Narasimhan	Iowa State Univ.	8A Chair
hmatthew@wayne.edu	Howard Matthew	Wayne State U.	8b Vice Chair
brian@tulane.edu	Brian Mitchell	Tulane Univ.	1 st Vice-Chair
dbaird@vt.edu	Don Baird	Virginia Tech	2 nd Vice Chair elect
hammond@mit.edu	Paula Hammond	MIT	2 nd Vice Chair
eric.lin@nist.gov	Eric Lin	NIST	CTOC member
dennis.hess@chbe.gatech.edu	Dennis Hess	GA Tech	Stine Award Chair
joel.fried@uc.edu	Joel Fried	U of Cincinnati	Director
RATNER@UWEB.ENGR.Washington.edu	Buddy Ratner	U of Washington	Director

13. Bylaws Committee Report– Alon McCormick

Alon McCormick has taken the lead on reviewing the MESD bylaws for eventual updating, as charged by Jeff Koberstein. He plans to get more information regarding the bylaws onto the MESD website to try to get members more involved in Division activities. Jeff agreed with Alon that the goal for the bylaws committee is to put together a complete package of changes that can be presented to the membership at some point in the next couple years, rather than to overhaul them in a piecemeal fashion. As Alon develops modified bylaws, he will plan to circulate them to members of the Executive Council as a Word document with the “Track Changes” feature activated. The Council should try to meet electronically about twice per year outside of the Annual meeting to discuss these developments. A teleconference should be scheduled to discuss the bylaws and other issues after the spring programming meeting, perhaps in April or May 2007.

14. New Business– Jeff Koberstein

Jeff Koberstein suggests that some new committees be established to advance MESD activities. This includes the membership committee described earlier. A Web committee is one area of need. It might be a committee of

one – the webmaster – but he could invite other MESD members to serve on such a committee. Some ideas for increasing the utility of the MESD website to members had been discussed earlier such as adding more information about the Stine Award and the bylaws. Adding a means of easily contacting the membership regarding MESD activities could also be built into the website, perhaps password-protected. If the content of the web site is to be increased significantly, we could consider using the AICHe webhosting services.

At this point, Jeff turned the meeting over to Brian Mitchell, the incoming MESD Chair. Brian thanked Jeff for his active leadership of the MESD in the preceding year. As the meeting was running long, Brian postponed further new business to the planned April-May 2007 teleconference.

Rick Register moved to adjourn the meeting, which was seconded by Don Baird and accepted by voice vote of the Council. Brian Mitchell adjourned the meeting at 6:10 PM.

Minutes recorded by Steve Gehrke, MESD Secretary/Treasurer

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