American Society of Mechanical Engineers -Aerospace Division Adaptive Structures and Material Systems Branch

Meeting at SPIE 2013 Sand Diego, CA Tuesday, March 12, 2013 from 7:00-10:00pm in Windsor/Harmon

Meeting Minutes

0.0 Attendance and acknowledgment of visitors (Zoubeida Ounaies)
The ASMS Branch meeting was called to order by Zoubeida Ounaies @ 19:10 (7:10pm PST)
Introductions conducted after 1.0 agenda item

1.0 Review and acceptance of SMASIS 2012 meeting minutes (Zoubeida Ounaies)

Minutes were sent via email. Several copies were passed around room and projected by William

Oates during the meeting. Ken Cunefare asked that the spelling of his name be corrected in item 16.0 in the minutes.

Ken Cunfare moved to accept the minutes; Henry Sodano seconded the motion. Minutes were approved.

- 2.0 Membership Report (Oliver Myers)
 - 2.1 Circulation of roster for updating done
 - 2.2 Breakdown of memberships per categories

Membership roster was circulated for attendance, signatures, and updates.

ASMS Members – 101

ASMS Friends – 14

Breakdown of ASMS membership:

Academic - 71

Industrial - 12

Government -18

- 3.0 Treasury Report (William Oates)
 - 3.1 Balance Status and update: William (Billy) Oates gave the treasury report. See attachment for his detailed report.
 - 3.2 ASMS Branch Account: ASME Aerodivision and Coordination with Branch
 - SMASIS revenue As per memo, ASMS branch will receive 80% of SMASIS revenues while ASME Aero division will receive 20%. Income has not yet been deposited. Also, it was brought up that the aerospace division has custodial account to underwrite SMASIS; more discussion on balance and revenue from SMASIS conferences will be tabled until a more in-depth discussion takes place between executive committee of ASMS branch and executive committee of Aero division.
 - o Diann Brei spoke on behalf of Mary Frecker to share that the process to endow the adaptive structures prize has started at the division level.
 - 3.3 Acknowledgement of Donors
 - o Thanks to Norm Wereley, Zoubeida Ounaies and Nakhiah Goulbourne for donating their fee waivers towards the dinner.

Action item: Executive committee to meet with Diann/Norm to discuss SMASIS revenue in light of the existing approved memo, either by SMASIS 2013 or SPIE 2014 at the latest.

- 4.0 ASMS Branch Bylaws (Zoubeida Ounaies)
 - 4.1 Approved Changes
 - o As of SPIE 2012, the ASMS Branch needs to conduct an election of delegates from branch to

- aero division. Nomination CV's are requested by September with the voting by March. Delegates start assignments on July 1 for a 3-year term.
- For the ASMS branch executive committee, the only elected position is that of treasurer, and election will take place in fall 2013. Nominations are solicited prior to that and treasurer will serve a 1-year term. Treasurer ascends to co-chair & chair. Chair appoints secretary.
- 4.2 Proposed Changes
- o A contingency procedure was proposed at SMASIS 2012 regarding the special case where a treasurer is not able to ascend to co-chair.
- o A motion was made and accepted as SMASIS 2012 to submit a nomination for the co-chair position and a vote took place at that same meeting.
- O A second motion was recorded to change the bylaws to accommodate this same special case for the long term. The proposed change is:

"If the treasurer is unable to ascend to the co-chair position, nominations for co-chair will be solicited from members prior to the meeting. CVs of nominees will be circulated and elections will take place at the Fall Branch meeting. This contingency procedure only applies in the case of treasurer not ascending to co-chair" – (as discussed at SMASIS 2012)

- Changes to bylaws are required if treasurer cannot/chooses not to ascend. Nomination(s) are proposed to be taken for co-chair prior to meetings. This would include circulating CVs and conducting fall elections. Same procedure needs to be followed for the treasurer position.
- o Zoubeida Ounaies opened the floor to questions on this issue
 - Ken Cunefare asked if there was a contingency plan for treasurer ascending to co-chair and for co-chair ascending to chair if either treasurer or co-chair declined. Zoubeida Ounaies responded that the current proposal is meant to address that; the next lower position ascends to the next higher position: if co-chair declines to move to chair, then treasurer ascends to chair, and elections for new treasurer take place. If treasurer declines to move to co-chair, then nominations for co-chair are requested and elections will take place.
 - Chris Lynch asked Diann Brei if there is a defined line of succession at the Aero division level; Diann Brei responded that what the Branch is proposing is an appropriate way to handle the line of succession. She also mentioned that, at the Aero division level, treasurer nomination is required before Fall meeting, CVs sent out early and voting takes place at the next meeting. Elected officer should serve a partial term or 1.5 term (recommended).
 - It was clarified that ascension information is listed in branch bylaws to fill the next vacant position and that the current proposal is simply a contingency plan meant to address special circumstances where treasurer or co-chair chose not to ascend.
 - Ken Cunefare asked where are bylaws available to member Zoubeida Ounaies mentioned access on website.
 - Chris Lynch recommends tabling the wording of the bylaws modifications via emails
 - Ken Cunefare moved to table, seconded by Chris Lynch. Motion passed.

Action item: Decision was made to revisit the proposal and communicate with an ad-hoc committee to finalize wording, then report back to the branch at the next meeting.

5.0 Update on Aerospace Division by Aerospace Division Executive Committee Chair (Diann Brei)5.1 Update

Diann Brei presented slides (see attached). There are 32 divisions at ASME, and presently ASME is conducting a strategic plan; Diann mentioned she is serving on it, and some of the focus is on annual plan, division plan and budget reports. The aero division is the 3^{rd} largest division in ASME with \sim 6000 members, and the focus of the aero division executive committee is on building a stronger division. She mentioned that there are plans of organizing a second conference and impact of that on the division's budget. Related to that, Zoubeida asked about small budget requests and Diann said that anything up to \$1000 or less is possible.

- 5.2 Nomination and voting on new ASMS representative to Aero Division Zoubeida mentioned that there was one nomination offered a few days before for the representative to the Aero Division: Nancy Johnson. Chris Lynch nominated Nancy. Nancy was asked to step outside. Diann Brei spoke in favor of nominee saying that having an industry perspective is valuable. Andrei Zagrai proposed a motion to accept nomination and start the vote. Kara Peters seconded the motion. Branch unanimously voted Nancy as representative to the division.
- 5.3 Report from Communication Office (Sergio Lucato)
 Sergio reported that the ASME public website is under revision/planning. Features such as making it possible for us (Branch, TCs, students) to make updates and modifications. A version of the site will be available for testing in the summer 2013 on the ASME server. Sergio also mentioned that the ASME sharepoint server (Microsoft) could be a good way of archiving ASMS Branch minutes, documents for use by the branch's officers. Zoubeida stated it was a possibility, although currently googledocs was being used and it is practical and seems sufficient. This issue will be revisited at a later date once ASME completes rolling out its new website etc.
- 6.0 Status of Branch's Technical Committees (Mohammad Elahinia/Zoubeida Ounaies)
 - 6.1 Active Materials and/or Multifunctional Materials (Chair: Travis Turner and co-Chair: Hani Naguib)
 - 6.2 Adaptive Systems Dynamics and Controls (Chair: Mohammad Daqaq and co-Chair: Eugenio Dragoni)
 - 6.3 Structural Health Monitoring (Chair: Oliver Myers and co-Chair: Andrew Swartz)
 - 6.4 Active Material Technology and Integrated Systems (Chair: Eric Ruggiero and co-Chair: Ganesh Krishnamoorthy)
 - 6.5 Bio-inspired Structures and Systems (Chair: Michael Philen and co-Chairs: Vishnubaba Sundaresan and Andy Sarles)
 - 6.6 Energy Harvesting (Chair: Alper Erturk)

The 6 TCs met at lunch time the same day. Zoubeida Ounaies and Mohammad Elahinia were present at the emeting and represented the ASMS Branch. The TCs focused on issues related to recruitement, they discussed bylaws, and relationship to ASMS Branch. Below are brief statements on each TC:

- Hani Naguib, co-chair of Multifunctional materials He mentioned that his TC focused on bylaws, discussed many ideas and concepts, and agreed that the TC should primarily focus on technical content.
- Mohammad Daqaq, chair of Adaptive systems –He reported that their discussion also focused on bylaws, recruiting, and issues around organizing symposium 3 at SMASIS.
- Oliver Myers, chair of Structural health monitoring—He mentioned that his TC's bylaws were done and submitted for comments; his TC discussed issue of invited speakers for SMASIS, and is interested in encouraging student membership.
- Eric Ruggiero, chair of Active Materials
- Michael Philen and Vishnu Sundaresan, chair and co-chair of Bio-inspired structures their meeting focused on bylaws, recruitmen. They are also interested in joint sessions with other TCs.
- -Alph Erturk, chair of Energy harvesting The TC has 28 members; they discussed bylaws, and introducing a best energy harvesting paper award for bio-inspired; they are also interested in identifying invited speakers from industry.

Zoubeida brought up the new structure of the branch with the 6 TCs under it, and mentioned that there should be a discussion on TC representation at the Branch level, particularly that the TCs do not have an independent budget. ZO proposes an ad-hoc committee to discuss TC to branch relationships.

Action item: An ad-hoc committee composed of the ASMS branch officers and a representative from each TC will meet to discuss TC representation at the branch level. The committee will form, meet and report back to branch members possibly by SMASIS 213 and no later than SPIE 2014.

- 7.0 Update on SPIE Best Student Paper competition (Karla Mossi and Constantin Ciocanel) Constantin (Cornel) reported that there were 26 papers in the competition, of which 8 are international submissions. The competition took place successfully and results will be announced on 3/13/2013 morning. Cornel thanked the judges within the branch for their service in the competition.
- Report on SMASIS conference (Nancy Johnson)
 2013/2014 Conference General Chair: Nancy Johnson; Conference Technical Chairs:
 Andrei Zagrai and Ralph Smith
 2015/2016 -TBD

Nancy Johnson presented the conference summary: there were 320 submitted technical papers. The conference is going well programmatically. Next year, the conference will take place in Snowbird, UT. Abstracts are due 3/22/2013. Andrei Zagrai and Ralph Smith will serve as technical chairs. As in previous years, there will be a banquet. Lunch is provided and additional activities are planned, including student activities. Nancy stressed that volunteers are needed to help with planning and logistics.

9.0 Report on SPIE Smart Structures/NDE conference (Norman Wereley)

2013 - Symposium Chairs: Norbert Meyendorf and Norman Wereley; Symposium Co-

Chairs: Victor Giurgiutiu and Chris Lynch

2014 – Symposium Chairs: Victor Giurgiutiu and Chris Lynch; Symposium Co-Chairs: Jay Kudva and Theodoros E. Matikas

9.1 Report on 2013 SPIE (Norman Wereley)

Norm Wereley presented a brief overview: there were 800 registrants; Chris Lynch will be symposium chair for the Smart side in 2014. SPIE 2014 will take place on March 9-13th, 2014 in San Diego, CA.

- 9.2 Report on Specific Conferences
 - 9.2.1 Active and Passive Smart Structures and Integrated Systems VII (Henry Sodano)
 - 9.2.2 Behavior and Mechanics of Multifunctional Materials and Composites VII (Nakhiah Goulbourne)
 - 9.2.3 Industrial and Commercial Applications of Smart Structures Technologies VII (Kevin Farinholt)
 - 9.2.4 Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems (Jerome Lynch)
- 10.0 Report on AIAA/ASME/AHS Adaptive Structures Conference (David F. Voracek)

2013 -General Chair: David F. Voracek; Technical Program Chair: Ratneshwar (Ratan) Jha (April 8-11th in Boston, MA)

2014- General Chair: Ratneshwar (Ratan) Jha

January 13-17th in National Harbor, Maryland. Conference will be combined with Aerospace Science Meeting (SciTech 2014).

11.0 Report on International Conference on Adaptive Structures & Technology (ICAST) 2013 – Chair Nakhiah Goulbourne, Co-Chair: Dan Inman (Aruba)

Nakhiah gave an update on ICAST 2013: conference will be held October 6-9th in Aruba. The conference rates will be valid for 3 days before & after the conference. Updated emails to be sent later.

2014 –Netherlands

- 12.0 Report from Honorific Subcommittee (Mohammad Elahinia)
 - 12.1 ASME Adaptive Structures and Material Systems Prize (Norman Wereley) The award goes to

Allison Flatau (9 nominations total) – Norm had previously requested a 200-word nomination short bio, which was used to make the selection. The award consists of a \$1000 honorarium & plaque, and a lecture is delivered by the award winner. Norm proposed to more the recognition of the award to SMASIS and have the winner deliver a plenary lecture. Chris Lynch motioned to modify bylaws to include changes in where the award is recognized and lecture is held; the motion was seconded by Nancy Johnson. Marcelo commented that Norm should make sure there is consistency in selection and recognition of the award, and to include that in the write-up. The branch unanimously voted yes for moving the award recognition and related lecture.

Action item: Necessary modifications to how ASME Adaptive Structures and Material Systems Prize is recognized and related issues such as endowed the prize will be pursued and completed by SPIE 2014.

12.2 ASMS Best Paper Awards (Mohammad Elahinia)

Mohammad thanked Liao & Nakiah for their work on the awards subcommittee and reminded everyone that the deadline for nominations for best paper awards is December 31st. Nakhiah thanked the judges for their service.

12.2.1 Structures and Structural Dynamics (Report by Mohammad on behalf of Wei Hsin Liao)

Best paper was: A two-dimensional analytical model and experimental validation of garter stitch knitted shape memory alloy actuator architecture, Smart Materials and Structures, vol. 21 no. 8 (July 2012) by Julianna Abel, Jonathan Luntz and Diann Brei

12.2.2 Materials and Material Systems (Report by Nakhiah Goulbourne)

Best paper was: Strain sensing using photocurrent generated by photoactive P3HT-based nanocomposites, Smart Materials and Structures, vol. 21 no. 6 (May 2012), by Donghyeon Ryu and Kenneth J Loh

12.3 Gary Anderson Award (Mohammad Elahinia)

12.3.1 Recognition of this year's winner: Dr. Mauricio Porfiri, Polytechnic Institute of New York University- There were 10 nominations total. This award recognizes great contributions from junior researcher/scholar (up to 7 years past PhD). The award consists of a \$1000 check and a ASME Certificate. The committee is made up of past winners of awards and members of the ASMS branch executive committee.

12.3.2 Mohammad requested new nominations. The deadline is December 2013.

12.4 ASME Fellow Nominations (Don Leo)

Don reminded everyone that the ASME Fellow is the highest distinction of ASME (and is open to academic, industry, and government). There are currently two nominees, 1 pending and 1 that Don will present. He read the accompanying certificate for the new ASME Fellow: Marcelo Dapino. Branch members congratulated Marcelo with applause. Marcelo received a certificate, pin, name badge, and membership card. Chris Lynch asked about possibly nominating qualified members of the branch for SPIE Fellow; Chris said he will pursue discussion with Yoseph Bar Cohen.

13.0 AIAA Business (Norm Wereley) - none

14.0 AIAA/ASME joint newsletter (Diann Brei - Sergio) – newsletter was sent out by Mohammad Elahnia. Discussion is to make it a twice-a-year publication, where each TC must donate a 1 page article to newsletter; could be a student spotlight focus.

15.0 Report from Website and Social Media Subcommittee (Zoubeida Ounaies reported on behalf of Kam/LeAnn)

The motivation behind having website and social media is to communicate with our members and engage students. Also, it is expected that in the future, the 6 TCs may make good use of these various communication outlets.

- 15.1 Web site report and updates (Kam Leang) Kam is collaborating with Sergio to maintain the website, www.asms-tc.org; TCs should connect with Kam to update website in a way to highlight their presence and structure but it was decided to wait until ASME.org re-organizes (more on that later). The ASMS branch secretary will work with Kam to maintain a flow of information for the website. It was also noted that the ASMS information does appear on the current ASME website. Additional information is in the attachment.
- 15.2 LinkedIn group and Twitter (Barbar Akle) Barbar showed a screen shot of LinkedIn ASMS Branch; he will invite the branch via the ASMS secretary (to connect students & members); there will also be a discussion forum, job listings, conference and workshop information, and it might prove to be a fairly easy way to give visibility to the TCs.
- 15.3 Facebook page (LeAnn Faidley) The ASMS facebook page (<u>www.facebook.com/asmsbranch</u>) is liked by 6 people so far. LeAnn sent some slides that were shown and they are included in attachment.
- 16.0 Nomination of new Branch members
 - 16.1 Ralph Smith (nominating member: Zoubeida Ounaies)
 - 16.2 Adam Wickenheiser (nominating member: Nancy Johnson)
 - visitors & Ralph Smith & Adam Wickenheiser were excused @ 21:02,

Ken Cunefare moved to accept both nominations, Chris Lynch seconded the motion. Members voted unanimously to approve all nominees.

17.0 Adjourn – Ken Cunefare moved to adjourn, Victor Giurgiutiu seconded. Meeting was adjourned at 21:05.