

**American Society of Mechanical Engineers - Aerospace Division
Adaptive Structures and Material Systems Technical Committee**

Meeting at
SMASIS 2011
Scottsdale, AZ

Monday September 19th from 7:30-10:00pm in Sky Ballroom

Minutes

Attendees:

Members- Alan Browne, Alison Flatau, Alper Erturk, Andrei Zagrai, Brett McMickell, Charles Seeley, Chris Niegrecki, Chris Lynch, Constantin Ciocanel, Diann Brei, Dimitris Lagoudas, Don Leo, Edward White, Eric Ruggiero, Geoffrey McKnight, Gyuhae Park, Mohammad Elahinia, Henry Sodano, Hiroshi Asanuma, Jae-Hung Han, Jayasimha Atulasimha, Jiangyu Li, Jonathan Luntz, Jordan Massad, Kam Leang, Kazuhiko Adachi, Kwang Kim, LeAnn Faidley, Lisa Mauck Weiland, Marcelo Dapino, Mary Frecker, Michael Philen, Nakhiah Goulbourne, Nancy Johnson, Norman Wereley, Paul Alexander, Roger Ohayon, Stefan Seelecke, Vishnu Baba Sundaresan, William Oates, Zoubeida Ounaies,

Friends- Virginia DeGiorgi, James Joo

Visitors- Amin Karimi, Onur Bilgen, Jinsong Leng, Hani Naguib, Matthieu Gresil, Mohammed Daqaq, Travis Turner, Whitney Reynold, Uwe Marschner, Darren Hartl, Steven Anton, Andy Sarles, Mehran Tehrani, Derek Doyle, Eugenio Dragoni, Oliver Myers, Amirhossein Ghasemi, Gang Wang, Ioannis Georgiou, Haixiong Tang, Yirong Lin, Alexander Czechowicz, Bjoern Kiefer, Andreas Wenzel, Sontipee Aimmanee

- 0.0 Attendance and acknowledgment of visitors (Marcelo Dapino)
- 1.0 Review and acceptance of minutes of TC meeting at SPIE 2011 (Mohammad Elahinia): accepted unanimously.
- 2.0 Membership Report
 - 2.1 Circulation of roster for updating (Mohammad Elahinia): roster updated
- 3.0 Treasury Report
 - 3.1 Status and update (Lisa Weiland) the report was given as a PowerPoint presentation and is **attached**. Chris Lynch mentioned that the division has \$187,000 in the custodial account and will likely add about \$20,000 from SMASIS 2011. The division has approved to add \$19,000 to fund the Spirit of St. Louis Award. Discussion will be held to evaluate proposals on the use of the money from TC. Diann mentioned to minimize paperwork with ASME, this year the conference has covered the student awards. In the future the division will cover the awards in 3-year increments. The projection is that the proceedings of SMASIS should be enough to cover TC expenses. The sponsors for SMASIS 2011 were acknowledged: Boeing, CSA, GM, Next Gen, SAGE, and SMS.
- 4.0 Update on Aerospace Division by Aerospace Division Executive Committee (Chris Lynch): The executive committee met today. There are new bylaws that were adopted and voted on. The bylaws are **attached**. There will be two branches in the Aerospace Division: Adaptive Structures and Material Systems (ASMS) and Aerospace Systems. Our current TC will essentially morph into the ASMS branch. There is a need to form smaller TCs by members of the current TC. This will help raise the profile of the new ASMS branch. The proposed structure will not affect the current large meetings and operation of the branch but rather will make it possible to have activities at more

concentrated level. This will make the two branches more balanced. The ASMS branch is responsible for about 80% of the activities of the division. Formation of these TCs will highlight the level of activities by the smart materials and adaptive structures community. This is however the decision of the existing TC to pursue this path. Dimitris asked if it is possible to become a division. Chris mentioned while it is possible, it is not the best move at this point. It is preferred to accumulate more funding so the new division can fund the conferences and achieve stability financially as well as programmatically. Another reason not to rush to division status yet is that, by leaving the Aerospace division, the branch will lose the visibility and membership size of the aerospace division. Currently the adaptive structure members have a majority in the executive committee and therefore the funds accumulated remain in the control of the current TC/new ASMS branch. Zoubeida mentioned that in the past this issue was discussed and TC decided not to pursue becoming a division. The floor was opened for discussion. Chris asked if there was any serious objection to the idea. He mentioned his idea was for the organizers of each symposium to form a TC. Lisa asked what are some areas of activity of a TC. Chris mentioned it is up to each group to decide on their level of activities. They can have sessions at various conferences, and propose awards. Members were assured that the TC's function would not change. Marcelo mentioned that Alison has agreed to serve on the committee that will find a mechanism to select members from the TC for appointment in the executive committee of the division. Contact her if you are interested to serve.

- 5.0 Update on SPIE Best Student Paper competition (Karla Mossi and Constantin Ciocanel): Constantin mentioned that the submissions are low. He suggested that the long-term solution might be adjusting the timeline for submission. The SPIE submission is in May and students might have committed their work to SMASIS. If we can delay the submission that might help. Nakhiah mentioned that SMASIS has been a reason for the lower number of submissions to SPIE. There has been a steady decrease for the last 3 years. Andrei mentioned that SPIE requires an extended abstract version for the competition. He suggested that we ask too much and too early from students for the competition. Marcelo mentioned a solution could be to review the actual paper. Constantin said it could be too late and suggested following the model of SMASIS by submitting an abstract and submit only a month before the submission. Zoubeida said it is possible to make these changes. Diann mentioned the process could be fixed. Facilitating the process for the students will encourage more of them to submit. One approach is to ask for the papers at the same time that the papers are submitted to the conference. At SMASIS it has been possible to do the reviews in 1 month. Alison suggested to make the changes in the current submission cycle and to inform the current participants about the change of policy at SMASIS 2011 due to TC recommendation. This community has enough active members to help with the review. Andrei suggested postponing the deadline for submitting the final paper. Henry suggested sending more reminder emails. Marcelo mentioned Rob could help with spreading the word. **The action item for Constantin and Karla:** is to find a way to fix the problem and to broaden the participants from other conferences.
- 6.0 SMASIS conference 2011 (Diann Brei) gave the presentation **attached**. The registration is at around 300. For next year there is a chair and two co-chair model at the conference. The next year will be in Stone Mountain near Georgia. LeAnn reported on 48 submissions for best student paper award and many judges volunteered. Also there has been a successful outreach program. Andrei mentioned 9 submissions for the hardware completion with 8 demonstrations.

2011 – General Chair: Diann Brei; Technical Chair: Stefan Seelecke and Nancy Johnson
2012/2013 - General Chair: Stefan Seelecke; Technical Chairs: Nancy Johnson, Andrei Zagari
- 7.0 Reports on SPIE Smart Structures/NDE conference 2011 (Don Leo) Don has prepared a document **attached**. The total of number is 968 submissions 930 participants about 15% more than the past year. There was very small number of no-shows.

2011 – Chairs: Don Leo and Kara Peters; Co-Chairs: Norbert Meyendorf and Norman Wereley

2012 – Chairs: Norbert Meyendorf and Norman Wereley; Co-Chairs: Victor Giurgiutiu and Chris Lynch

8.0 Reports on AIAA Adaptive Structures Conference

2011 – Chair: Norm Wereley; Co-Chair: Ed White 6 sessions in Denver, 31 papers presented, 34 abstracts submitted.

2012 Ed White general Technical Chair David Gracheck NASA will be Honolulu

9.0 Reports on International Conference on Adaptive Structures & Technology (ICAST)

2011– Corfu, Greece, Dimitris Saravanos (October 10-12, 2011)

2012 will be in China 10-12 October

10.0 Honorable Subcommittee

10.1 ASME Adaptive Structures and Material Systems Prize (Dimitris Lagoudas) nominations are accepted brief bio and statement of the impact: leadership technical contribution. By thanksgiving the nomination is closed and the voting is by the past 5 recipients. The nominees are kept in the pool for 3 years. The prize is awarded at the AIAA SDM conference.

10.2 Request for nominations for the ASMS Best Paper Awards (Zoubeida Ounaies) is open for nomination for next year awards. Norm is the chair for the structure subcommittee, and Nakhiah heads the materials subcommittee. Nomination is possible by members and from conferences. Papers are selected from journals in the field of smart material; the prize is \$500.

10.2.1 Structures and Structural Dynamics (Norman Wereley)

10.2.2 Materials and Material Systems (Nakhiah Goulbourne)

10.3 Request for Gary Anderson Award (Zoubeida Ounaies). Nominations will be accepted until the end of year. Graduates of 2004 and after are eligible. \$1000 prize and plaque are awarded.

10.3.1 Announcement of this year's winner: Dr. Lisa Weiland.

10.4 ASME Fellow Nominations (Don Leo) Dr. Diann Brei is the recipient of the fellowship recognition.

11.0 AIAA Business (Norm Wereley) the meeting will be on Wednesday at noon.

12.0 AIAA/ASME joint newsletter (Diann Brei) there are a few elements such as industrial elements, international collaborations, and student highlights that are needed. These are due in December. On the committee serve Diann, Sergio, Mehrdad, and Marcelo.

13.0 ASME/AIAA data base report (Diann Brei and Poorna Mane) the list has been cleaned. Diann will share them with Mohammad.

14.0 TC web site report (Kam Leang): Website is updated and running. Mohammad will send Kam the bylaws and members' list. Members can send info to Kam for the web. Sergio has looked into using a email list with opting out option. **Action item:** Kam will work with Chris to link the TC website to division and group. Sergio will work on the email list and TC will pay for the cost.

15.0 Nomination of new TC members:

15.1 Yirong Lin (Henry Sodano)

15.2 Bjoern Kiefer (Mohammad Elahinia)

15.3 Darren Hartl (Dimitris Lagoudas)

15.4 Uwe Marschner (Alison Flatau)

- 15.5 Jinsong Leng (Alison Flatau)
- 15.6 Oliver Myers (Andrei Zagrai)
- 15.7 Ken Cunefare (Chris Lynch)
- 15.8 Eugenio Dragoni (Mohammad Elahinia)
- 15.9 Whitney Reynolds (Andrei Zagrai)
- 15.10 Phillip G. Evans (Marcelo Dapino)

After introduction of all nominees and discussion, a motion was made by Chris to approve all nominations and Norm seconded the motion. The motion has passed.

- 16.0 Adjourn was at 9:17 PM. Lisa made the motion to adjourn which was seconded by Zoubeida and passed.