

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

Meeting at  
SPIE 2014  
San Diego, CA

Tuesday, March 11, 2014 from 7:00-10:00 PM in Windsor Hampton Room

**AGENDA**

Members in Attendane (Last Name ONLY): Akhras; Akle; Brei; Browne; Ciocanel; Collet; Cruz-Gonzalez; Dapino; Daqaq; Erturk; Flatau; Freeman; Gibert; Giurgiutiu; Goo; Goulbourne; Harne; Hartl Johnson; Joshi; Kim; Leng; Liao; Lynch; Myers; Naguib; Niezrecki; Oates; Ohayon; Park; Peters; Philen; Richards; Semperlotti; Shu; Smith; Sodano; Wang; White; Yoon; Zagrai; Zuo

- 0.0 Attendance and acknowledgment of visitors (Mohammad Elahinia)
  - 0.1 Meeting called to order at 1915 by welcoming the members and visitors
- 1.0 Review and acceptance of SMASIS 2013 meeting minutes (Mohammad Elahinia)
  - M. Elahinia opens the floor for discussion of the minutes. No questions/comments/corrections were raised.
    - Motion by K-W Wang to accept the minutes. Seconded by D..Brei Motion passed and body unanimously voted to accept the minutes as reported
- 2.0 Membership Report (Oliver Myers)
  - 2.1 Circulation of roster for updating
  - 2.2 Breakdown of memberships per categories:
    - 2.2.1 139 Members
    - 2.2.2 32 Friends
    - 2.2.3 123 Academic Affiliation
    - 2.2.4 27 Industrial Affiliation
    - 2.2.5 17 Government Affiliation
  - 2.3 M. Elahinia reminds everyone that membership requires attending at least one meeting
  - 2.4 D. Brei asks all TC chairs to send her an updated roster of the TC membership by June
- 3.0 Treasury Report (Mohammed Daqaq)
  - 3.1 Status and update
    - 3.1.1 A slide presentation offered by M. Daqaq (attached)
    - 3.1.2 Thanks to members who donated their SPIE registration fee waivers. Names are listed on bullet 3.2
      - 3.1.2.1 Gary Anderson award may possibly be elevated to division for funding.
      - 3.1.2.2 D. Brei mentioned that the cost of the award are covered by the division.
  - 3.2 M. Elahinia asked for acknowledgement of donors for 2014 (Wei-Hsin Liao, Nakhiah Goulbourne, Victor Giurgiutiu, and Mohammad Elahinia) who donated their SPIE conference fee waivers to cover the expenses of Branch Dinner
- 4.0 Update on Aerospace Division by Aerospace Division Executive Committee Chair (D. Brei)
  - 4.1 A presentation was given on the new changes at the ASME level (presentation attached)
  - 4.2 Nomination and voting on new representative to Aero Division (N. Wereley)
    - 4.2.1 Currently have M. Dapino & Mary Frecker
    - 4.2.2 Wereley requests nominations
      - 4.2.2.1 D. Brei nominates M. Elahinia for consistency in leadership. No other nominations were offered.
      - 4.2.2.2 W. Oates handles voting as M. Elahinia leaves the room
      - 4.2.2.2.1 Requests discussion.

- 4.2.2.2.2 D. Brei requests strong leadership, further endorses Mohammad
- 4.2.2.2.3 W. Oates requests show of hands from the body. The branch unanimously votes M. Elahinia as the new representative to the Aero Division as he transitions from Branch Chair.
- 4.3 Adaptive Structures Prize and Gary Anderson Early Achievement award and elevation to the division level (Mary Frecker) – Given by D. Brei
  - 4.3.1 Endowment of Gary Anderson & Adaptive Structures Award is being processed at the ASME level.
- 4.4 Discussion by D. Brei on leadership:
  - In 2014 Diann rolls off as the chair, Norm Wereley will become the chair for two years with Nancy Johnson as the vice chair
  - 4.4.1.1 D. Brei presents strategic plan finalized @ SMASIS after Branch meeting.
- 4.5 One ASME
  - 4.5.1 ASME decided to reorganize
  - 4.5.2 Plans to dissolve Knowledge & Community Sector
  - 4.5.3 Divisions will stay in place, assuming everything under division stays in place
  - 4.5.4 ASME plans to follow a Facebook model – possible replication of groups
  - 4.5.5 ASME is contemplating a shift from volunteer led to professionally managed
  - 4.5.6 Market facing business model
  - 4.5.7 Details to Board of Governors in April 2014
  - 4.5.8 Transition is proposed for the 2014-15 academic year
  - 4.5.9 Considerable resistance from individual TCs and divisions
  - 4.5.10 Possible Risk/Mitigation considerations for the ASMS Branch and TCs
    - 4.5.10.1 There is currently \$250K in the custodial accounts
    - 4.5.10.2 Endowment of the Gary Anderson & Adaptive Structures will take place at \$75K each. This will account for \$150K of the total.
    - 4.5.10.3 A decision on the future of SMASIS can be made at SMASIS 2014 when we have all the information on the nature of the transition.
    - 4.5.10.4 D. Brei, C. Lynch, SMASIS Chairs and M. Elahinia are reviewing other potential options for SMASIS 2015
    - 4.5.10.5 The priority to maintain ASMS/SMASIS Community
  - 4.5.11 Next Planned Steps by ASMS Branch
    - 4.5.11.1 Petition to divisions
    - 4.5.11.2 Transparency in communication
    - 4.5.11.3 Votes of “no confidence”
    - 4.5.11.4 SMASIS & SPIE Community should maintain status and function
    - 4.5.11.5 Provide comments/questions to D. Brei & C. Lynch
    - 4.5.11.6 C. Lynch comments
      - 4.5.11.6.1 Thanks Diann for her efforts
      - 4.5.11.6.2 Encourages support
      - 4.5.11.6.3 Suggests running conferences outside of ASME
      - 4.5.11.6.4 Discusses future funding commitments to run SMASIS
- 5.0 Status of Branch's Technical Committees (William Oates)
  - 5.1 William Oates offers awards of appreciation for each TC chair.
    - 5.1.1.1 Mike Philen, Alper Erturk, Travis Turner, Eric Roggiero, Mohammed Daqaq, Oliver Myers
  - 5.2 Active Materials and/or Multifunctional Materials (Chair: Travis Turner and co-Chair: Hani Naguib) given by Hani
    - 5.2.1 Voted & accepted bylaws
    - 5.2.2 New chairs & co-chairs
    - 5.2.3 SMASIS special sessions – nanocomposite, energy harvester

- 5.2.4 New hardware demo session
- 5.2.5 Best paper of symposium & special issue
- 5.2.6 Adding a short course (Darren Hartl)
- 5.3 Adaptive Systems Dynamics and Controls (Chair: Mohammed Daqaq and co-Chair: Eugenio Dragoni) given by Mohammad
  - 5.3.1 Eugenio ascends to chair, Jeong-Hoi Koo as Co-chair, James Gibert as secretary
  - 5.3.2 Voted and accepted bylaws
  - 5.3.3 Special issue in ASME Journal of Vibration and Acoustics
- 5.4 Structural Health Monitoring (Chair: Oliver Myers and co-Chair: Andrew Swartz)
  - 5.4.1 Ascension of new leadership
  - 5.4.2 JIMSS & SHM special issues
  - 5.4.3 Mike Todd Short Course
- 5.5 Active Material Technology and Integrated Systems (Chair: Phillip Evans and co-Chair: Chai Hutapea) (Previous Chair: Eric Ruggiero and co-Chair: Ganesh Krishnamoorthy)
  - 5.5.1 Share success stories for final product and sales of smart materials products
  - 5.5.2 GM discussion on success stories
- 5.6 Bio-inspired Structures and Systems (Chair: Michael Philen and co-Chair: Vishnubaba Sundaresan) given by Mike
  - 5.6.1 Co-chair Andy Sarles
  - 5.6.2 Effort to increase recruitment
  - 5.6.3 Special issues with SMS
  - 5.6.4 Bylaws are being developed
- 5.7 Energy Harvesting (Chair: Alper Erturk and co-Chair: Yi-Chung Shu) given by Alper
  - 5.7.1 Ascension of Adam Wickenheiser to become co-chair
  - 5.7.2 Energy harvesting best paper award proposal
    - 5.7.2.1 Funding from JIMSS & SMS
    - 5.7.2.2 Potential support for 1<sup>st</sup> 3 years
    - 5.7.2.3 Preferred ASME support/sponsorship
    - 5.7.2.4 Norm mentioned Aero division may offer funds up to \$1K to TC. Proposal (one page) needs to be forwarded to Aero Division (Norm Wereley & Diann Brei) by end of March beginning of April for SMASIS 2014
    - 5.7.2.5 Diann Brei wants to standardize @ \$500 across TC
      - 5.7.2.5.1 Invited speakers, guest lecturers
      - 5.7.2.5.2 Suggested Sustainability clause/mechanism to be developed by branch
      - 5.7.2.5.3 Should be done for 3 years @ TC level
    - 5.7.2.6 M. Elahinia suggest beginning w/ journal and using TC funding for other programs
    - 5.7.2.7 Motion proposal “B” to branch to support energy harvesting best paper award starting 2014/15, not limited to JIMSS & SMS, open to any journal
    - 5.7.2.8 Moved back to TC level
- 6.0 Update on SPIE Best Student Paper competition (Constantin Ciocanel and Darren Hartl)
  - 6.1 120 submissions
    - 6.1.1 Advertising from SPIE to authors/students
  - 6.2 6 finalists to present Wednesday March 12, 2014 @ 1:30pm in Sunset Room
  - 6.3 Appreciation offer to over 30 judges from branch/TC
- 7.0 Report on SMASIS conference (Nancy Johnson)
  - 7.1 2013/2014 – Conference General Chair: Nancy Johnson; Conference Technical Chairs: Andrei Zagrai and Ralph Smith
    - 7.1.1 325 Attendees, record balance on budget
    - 7.1.2 Andrei Zagrai – 2014 Chair

- 7.1.3 2014 will be in Newport, RI, 9/8 – 9/10/2014
- 7.1.4 March 21, 2014 Deadline
- 7.1.5 Copyrights by June 2, 2014

7.2 2015/2016 – TBD

- 8.0 Report on SPIE Smart Structures/NDE conference (Chris Lynch and Victor Giurgiutiu)
  - 8.1 Conference registration should be on par with past conferences
    - 8.1.1 2013 – 738 registered/attendees by Thursday
    - 8.1.2 2014 – 709 registered/attendees by Tuesday
  - 8.2 2014 – Symposium Chairs: Victor Giurgiutiu and Chris Lynch; Symposium Co-Chairs: Jayanth Kudva, Theodoros Marikas
  - 8.3 2015 - Symposium Chairs: Victor Giurgiutiu and Chris Lynch; Symposium Co-Chairs: Jayanth Kudva, Theodoros Marikas
  - 8.4 Report on Specific Conferences at SPIE
    - 8.4.1 Active and Passive Smart Structures and Integrated Systems VII (Henry Sodano)
      - 8.4.1.1 100 talks
      - 8.4.1.2 30 poster
    - 8.4.2 Behavior and Mechanics of Multifunctional Materials and Composites VII (Nakhiah Goulbourne)
      - 8.4.2.1 fewer cancellations
      - 8.4.2.2 55 papers/posters
      - 8.4.2.3 Hani Nagib is co-chair
    - 8.4.3 Industrial and Commercial Applications of Smart Structures Technologies VII (Kevin Farinholt)
      - 8.4.3.1 43 submissions
      - 8.4.3.2 7 poster presentations
    - 8.4.4 Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems (Jerome Lynch)

9.0 Report on AIAA/ASME/AHS Adaptive Structures Conference (David F. Voracek)

- 9.1 2014- January 2014 @ National Harbor in MD - SciTech
  - 9.1.1 Approximately 300 papers
  - 9.1.2 Large SciTech format with over 30 parallel sessions
- 9.2 2015 in Orlando, FL in early January (F. Ghandi)

10.0 Report on International Conference on Adaptive Structures & Technology (ICAST)

- 10.1 2013 – Chair Nakhiah Goulbourne, Co-Chair: Dan Inman (Aruba) - October 6-9, 2013
- 10.2 2014 – Check website for Call for papers - Netherlands

11.0 Honorific Subcommittee

- 11.1 ASME Adaptive Structures and Material Systems Prize (Norman Wereley)
  - 11.1.1 Award was given in September to Michael Friswell who will give a lecture @ SMASIS
  - 11.1.2 Award will be given at the SMASIS banquet
- 11.2 ASMS Best Paper Awards (William Oates)
  - 11.2.1 Structures and Structural Dynamics (Report by Wei Hsin Liao)
    - 11.2.1.1 Zhongjii Li, Lei Zuo, Jian Kuang and Georg Luhrs
  - 11.2.2 Materials and Material Systems (Report by Nakhiah Goulbourne)
    - 11.2.2.1 Aneesk Kok and Henry Sodano
- 11.3 Gary Anderson Award (William Oates)

- 11.3.1 Recognition of this year's winner – Mohammed Daqaq
- 11.3.2 Request for new nominations for 2014-15
- 11.4 ASME Fellow Nominations (Marcelo Dapino)
  - 11.4.1 Recognizing service to ASME & ASMS Branch
  - 11.4.2 Asking for amendment to roster for year of ASME corporate membership
    - 11.4.2.1 Student membership does not count
- 11.5 SPIE Fellow (Norm Wereley) – encouraged members to express interest in fellow
  - 11.5.1 Critical mass of current fellows
  - 11.5.2 Asking for amendment to roster for year of SPIE corporate membership
- 12.0 AIAA Business (Norm Wereley)
- 13.0 AIAA/ASME joint newsletter (Diann Brei)
  - 13.1 TC provided technical content
    - 13.1.1 Copies were sent out via direct email and via the ASMS Branch.
  - 13.2 Need submissions for next year from Branch, TCs, student groups, individuals
  - 13.3 Key articles, highlights
  - 13.4 Distribution goes to entire division
- 14.0 Branch web site report
  - 14.1 Web site report and updates (New webmaster: Onur Bilgen)
    - 14.1.1 Given by M. Elahinia – congratulated Onur for service on website
    - 14.1.2 Encourages all to visit website for support/comments
  - 14.2 LinkedIn group and Twitter (Barbar Akle)
    - 14.2.1 LinkedIn (ASMS) - Very little activity (7-8 members), encouraged to join the group
    - 14.2.2 Twitter was activated week of March 2, 2014
  - 14.3 Facebook page (LeAnn Faidley) – still in need of “Likes” for support and growth
- 15.0 Nomination of new Branch members
  - 15.1 Visitors asked to leave the meeting
  - 15.2 Nominators comment on nominees
  - 15.3 Mark Balas (Nominator: Ralph Smith) – not in attendance
    - 15.3.1 N. Wereley Motions, Andrei Zagrai seconds
    - 15.3.2 Unanimously acceptance by a sign of “Aye” by the body with no “Nay”
  - 15.4 Falviano Tateo (Nominator: Ralph Smith) – not in attendance
  - 15.5 Yi-Chung Shu (Nominator: Wei-Hsin Liao) – CV attached
    - 15.5.1 Chris Lynch Moves to vote on acceptance, N. Goulbourne seconds
    - 15.5.2 Unanimous acceptance by a sign of “Aye” by the body with no “Nay”
- 16.0 Adjourn
  - 16.1 Motion to adjourn by D. Brei, M. Elahinia adjourns @ 2100