

**Biomedical Ultrasound/Bioresponse to Vibration Technical Committee Meeting**  
**Oct 29, 2009 7:30 PM**  
**San Antonio, TX**

**1. Welcome**

About 27 attendees in total. First time attendees introduced themselves.

**2. Google Mail List**

You can sign up for the BB mail list by sending an email to:

[ASA\\_BBTC-subscribe@googlegroups.com](mailto:ASA_BBTC-subscribe@googlegroups.com)

This is a separate email list from that maintained by the ASA.

**Minutes are available at:** <http://moab.eecs.wsu.edu/~shira/asa/bubv.html>

**and:** [http://groups.google.com/group/ASA\\_BBTC](http://groups.google.com/group/ASA_BBTC)

List of special sessions for past 5 years is also available on the ASA\_BBTC page on Google groups.

**3. October 26-30, 2009 San Antonio, TX**

Congratulations to:

New Fellows

Michael Averkiou  
Constantine Coussios  
Diane Dalecki  
Mostafa Fatemi  
Kullervo Hynynen  
Michael Insana  
Andrew Szeri  
Shin-ichiro Umemura  
Oleg Sapozhnikov

Best Student Paper Award in Portland

Kelley Garvin (U. Rochester) - "Ultrasound standing wave fields control the spatial distribution of cells and protein in three-dimensional engineered tissue"

Short Course Speaker (1 of 4)

Christy Holland (Acoustical Imaging Applications: Seismic, Underwater, Biomedical, and Speech)

Hot Topic Speaker

Stanislav Emelianov

Thanks to:

TPOM representative and seeker of refreshments

Mark Wochner

Special Session Organizers

[Multiple scattering of waves: From theory to application](#)

Guillaume Haiat and Purnima Ratilal

BB session chairs

Mark Wochner and Parag Chitnis

Fellow's Luncheon "Mentor"

Vera Khokhlova

Student Council Rep (outgoing)

Lucie Somaglino

ASACOS

Peter Kaczkowski and Vera Khokhlova

Web coordinator

Shira Broschat - (<http://moab.eecs.wsu.edu/~shira/asa/bubv.html>)

Membership Committee

Christy Holland (Robin Cleveland filled in for this meeting)

Medals and Awards

Lawrence Crum

BB Related Associate Editors (Based on PACS)

Charles Church, Doug Miller, Doug Mast, Robin Cleveland, Mardi Hastings, Oleg Sapozhnikov, Paul Barbone, and Andrew Szeri

#### **4. Student Council Report**

Two items to disseminate:

1. International travel is a problem these days for students. Cost is preventing many students from going.
2. Nominations for student mentor awards are due before the Baltimore meeting. Information is on the student council website. <http://www.acosoc.org/student/> The award will be presented in Cancun.

#### **Election of new Student Council Representative**

Derek Thomas (UT Austin) was selected to be the next student council rep starting in Baltimore. His terms will end after the Fall 2011 Meeting.

#### **5. ASACOS (Standards)**

Peter Kaczkowski and Vera Khokhlova are now sharing ASACOS duties. Vera acted as rep for San Antonio.

Don't forget ASA members receive up to 5 free standards per year. Info is sent out via email sometime around February.

Wes Nyborg stepped down as chair of S1/WG 22 "Bubble Detection and Cavitation Monitoring" and this working group is no longer active. If anyone would like to take over as chair, please contact Peter, Vera, or Jeff.

#### **6. April 19-23, 2010 Baltimore, MD**

**Special Sessions (In Call For Papers; Abstracts due Nov 16):**

[Ultrasonic characterization of bone](#)

Keith Wear

[Ultrasound induced cellular bioeffects](#)

Carr Everbach and Stu Mitchell

[Numerical modeling for medical ultrasound.](#)

Robert McGough

[Ultrasonically activated agents](#)

Oliver Kripfgans

[Blast-induced traumatic brain injury: Mechanisms, assessment, therapy, and mitigation](#)

Steve Kargl, Willy Moss and Tom Matula

TPOM Rep (Dec.11-12): Keith Wear and Carr Everbach

**7. Nov 15-19, 2010 Cancun**

Special Sessions (finalized in San Antonio):

[Biomedical applications of time reversal acoustics](#)

Armen Sarvazyan and Matthias Fink

[Doppler methods and blood-flow imaging in medical ultrasound](#)

Jonathan Mamou and Michael Oelze

[Image guided therapeutic ultrasound](#)

Tyrone Porter

[Ultrasound contrast agent for molecular imaging and therapy](#)

Azzdine Ammi and Saurabh Dattas

TPOM Rep: Jeff Ketterling

**8. May 23-27, 2011 Seattle (Tom Matula is the Chair)**

Tentative Special Sessions:

[Subharmonic response of acoustic contrast agents](#)

Michel Versluis and Jeff Ketterling

[Photoacoustic imaging topic](#)

Parag Chitnis and Ron Silverman

[Biomedical applications of acoustic standing waves](#)

Armen Sarvazyan and Martin Wiklund

[Lesion detection techniques for therapeutic ultrasound](#)

Larry Crum

[Ultrasonic tissue erosion](#)

Vera Khoklova

TPOM Rep: Your name could be here.

## **8. Future Meetings (Tentative session ideas are welcome)**

Fall 2011, Site not yet selected

Spring 2012, Proposals for Providence or Hong Kong May 13-18 (Joint with WESPAC and ASC)

Acoustical Society of China very interested in supporting the meeting financially. WESPAC already scheduled for Hong Kong. No visa issues with Hong Kong. Growth potential for ASA, good venue for contacts. Question is whether ASA members would attend and if they feel that it is a good idea. Airfares could be high but hotels inexpensive.

A relatively brief discussion ensued and the attendees were generally supportive of the idea although there was concern that the cost could be high and would particularly affect student attendees. The ASA is aware of cost concerns and if the meeting does take place, will make every effort to provide financial assistance to students possibly including a cheap charter flight to Hong Kong, subsidized hotels, etc.

The question was posed "Should the ASA enter into a joint meeting with WESPAC and ASC?" 80% of the attendees were in favor.

Fall 2012, Site not yet selected

June 2-7, 2013 Montreal (Joint with Canadian Acoustical Association)

## **9. Student Paper Award**

Tyrone Porter acted as Chair of an Ad Hoc BB and PA Student Paper Award Committee and Mark Wochner and Kim Lefkowitz assisted.

The goal was to provide a more uniform means of judging and to permit more direct interaction between the students and judges. BB and PA are hoping to implement the method of awarding the student paper award in Baltimore. The Student Paper Award has traditionally only been given at the Spring meeting.

After an in depth discussion at PA on Tuesday night, the consensus was to essentially keep the current format, but to saturate the audience with reviewer forms. Still some work to administer, but hopefully scoring will be more uniform. Judges would write their names on the forms and students would not be allowed to score talks.

## **10. Special Issues in JASA**

Editor in Chief is open to special issues in JASA devoted to one area. Not whole issue from front to back, but a group of papers. Could have a guest editorial that introduces the content. Suggestions can be made to Allan Pierce.

## **11. Special Issues in Acoustic Today**

Dick Stern has indicated that a full issue of Acoustics Today can be devoted to research in one TC. This would involve three contributions from BB. If anyone from BB would like to contribute to Acoustics Today please contact me or Dick.

## **12. Research Direction Papers in JASA**

Suggestion to write “direction papers” for publication in JASA on directions of research in TCs. Would really require a workshop type of meeting after which a collaborative paper would be written taking into account the various positions. Can be useful to guide funding agencies as to what are the emerging areas of research for funding. Downside is that it can be difficult to get a balanced perspective because there is a risk of a few voices dominating content.

The topic was discussed in detail at the TC and there was a feeling that the purpose and format of the direction papers was not well defined. It was pointed out that special sessions essentially highlight areas of active research already but they represent single topics. There was concern that a formal document could end up acting as a fixed roadmap and that it could actually hinder research areas that do not strictly follow the roadmap. It was also not clear to everyone how to generate such a document or who would do it. A comment was also made that if such a document were ever to be developed within the TC, it would be very important to have the involvement of funding agencies.

At the Technical Council meeting on Friday, there was a mixed reception to the idea from the TC with some in favor and some not very interested.

## **13. Discoveries & Breakthroughs Inside Acoustics** <http://www.aip.org/dbis/ASA/>

The ASA brings Discoveries and Breakthroughs Inside Science to its members and to local English and Spanish TV newscasts all over the US. With accurate, scientifically reviewed and reliable science information, DBIS covers many recent developments in acoustics that we use every day. These stories reach an audience that does not have regular access to quality science news.

Members are encouraged to submit story ideas via the website.

## **14. Acoustic Music and Video Competition**

Entries must promote acoustics and/or educate in acoustics and should be targeted toward a student audience. Cash prize. Deadline is Feb 5, 2010.

[http://acosoc.org/diversity/AMV\\_announcement.html](http://acosoc.org/diversity/AMV_announcement.html)

## **15. ASA-AIP Congressional Fellowship**

Looking for applicants. Fellowship starts at the beginning of the Academic Year. Information on how to apply is provided on the AIP web site: <http://aip.org/gov/fellowships/cf.html>

You can apply on-line via this site. Deadline is Jan 15.

## **16. Rossing Prize in Acoustics Education**

Nomination deadline March 1, 2010. <http://asa.aip.org/rossing.pdf>

## **17. Update scope of BB (listed online under Rules, Appendix A)**

We were asked to update the description of the TC and PACS reclassification will eventually follow. Christy Holland, Charlie Church, Doug Mast and Ron Roy served on an Ad Hoc Committee to develop a new scope. This will be finalized at the Baltimore meeting and the draft was discussed in San Antonio.

Current Scope

Includes, but is not limited to, the effects of hand-arm vibration, the effects of whole-body vibration, touch as a communicative sense, impact, and the effects of infrasound and ultrasound.

### Proposed Scope

Concerned with the study of the interactions of acoustic waves with biological materials, including cells, tissues, organ systems and entire organisms. Relevant areas of interest include but are not limited to:

1. Diagnostic and therapeutic applications of acoustics in medicine
2. Biological effects of exposure to mechanical vibration and acoustic waves
3. Acoustic propagation and vibration in biological materials
4. Instrumentation
5. Ultrasound field calibration, exosimetry and dosimetry
6. Ultrasound contrast agents
7. Medical image and signal processing
8. Characterization and processing of biological materials
9. Physiological measurements

The attendees thought the proposed scope was fairly comprehensive and no one complained that their research was left out. While a list approach has its pitfalls, it seems to work well for BB research areas.

**Comments about the proposed scope can be sent to me. The final version of the scope will be voted on in Baltimore.**

### **17. PACS**

There is a plan to reorganize PACS so that they are more in line with each TC. Each TC was asked to select a representative to act as the point of contact for the Editor in Chief. Steve Kargl volunteered for BB. Once the effort is better defined, an Ad Hoc committee will be formed to develop the new PACS classification for BB. It seems we are not restricted to exactly follow the AIP format and that we could perhaps develop a new structure that differs from current AIP format. This process could take 1-3 years.

### **18. Technical Committee Name**

As part of new scope initiative, the Ad Hoc Committee also proposed that we change the Technical Committee name.

#### Current Name

Biomedical Ultrasound and Bioresponse to Vibration (K)

#### Recommend Name

Biomedical Acoustics (K)

After discussion, the consensus was that Biomedical Acoustics is general enough to include everyone within the TC and is an improvement on the current name which is rather cumbersome.

A motion was put forward as to whether the TC should change its name and the majority (> 90%) of the attendees were in favor. Next a motion was put forward to change the name to Biomedical Acoustics and the vote was again > 90% in favor.

This information was conveyed to the Technical Council and the Tech Council approved the motion to change the TC name. The next step is to consult the Society rules to ensure that the name change is carried out with the correct procedure.

#### **19. New ASA website in works**

New servers being implemented and ASA will have new look before too long. I believe acoustics.org will be the main portal.

#### **20. ASA/OSA student outreach posters**

Looking for snappy ideas for posters to be sent to students. Things with animals and musical instruments were said to be the most appealing to students. OSA examples are at below link and you can contact Vic Sparrow or Robin Cleveland for more details or to suggest a topic.

<http://www.osa.org/educationresources/youtheducation/classroommaterials/Translations/default.aspx>

#### **21. Other business**

Preston Wilson had some announcements from Women in Acoustics:

1) Young Investigator (PhD within last 5 years) Travel Grants are sponsored by WIA up to \$300/meeting. Not gender specific.

2) Child Care Grants\*\* are available from WIA up to \$300/meeting. Check call for papers. Not gender specific.

\*\*for child care at meeting

3) WIA is sponsoring a session in Baltimore for the local Girl Scouts. Women are needed to conduct acoustics demos for the Girl Scout visitors. All abstracts submitted for this session will be invited. Contact Marcia Isakson [misakson@arlut.utexas.edu](mailto:misakson@arlut.utexas.edu) for more info.

#### **22. Meeting Adjourned at 8:40 PM.**

Jeff Ketterling  
Chair of Biomedical Ultrasound/Bioresponse to Vibration