

MINUTES OF MVUQ TECHNICAL DIVISION MEETING

Wednesday 3 February 2010, Hyatt Regency Hotel, Jacksonville, Florida

Attendees:

Sezer Atamturktur, Clemson University
Todd Simmermacher, Sandia National Laboratories
Jim De Clerck, Michigan Technological University
Dan Kammer, University of Wisconsin-Madison
Matt Allen, University of Wisconsin-Madison
Randy Mayes, Sandia National Laboratories
Tom Proulx, SEM
François Hemez, Los Alamos National Laboratory
Scott Cogan, FEMTO-ST Institute

Proposed MVUQ sessions in 2011:

- 1) Applications of model validation (1 session; POC: Todd Simmermacher)
- 2) Uncertainty quantification (1 session; POC: Sezer Atamturktur)
- 3) Intelligent wind turbines (1 session; POC: François Hemez)
- 4) European aerospace applications (1 session; POC: Scott Cogan)
- 5) Joint sponsored session with the sub-structuring TD (1 session; POC: Matt Allen, Randy Mayes)
- 6) Potential: Jim De Clerck will entertain the potential of organizing a session on uncertainty quantification of rotating machinery.

Pre-IMAC short-course in 2011:

Scott Cogan prefers not to re-offer his model updating short-course for a second year in a row (in 2011). Scott notes that most participants were not keen on the hands-on demonstration that the short-course went through.

Tom Proulx emphasized that there has been a tentative agreement with Tom Paez about a possible short course in 2011. TD needs to contact Tom Paez and verify that he is willing to offer a short course in 2011. The short-course would be “probabilistic model validation” or something along the lines of uncertainty analysis.

Scott Cogan emphasized the necessity of setting up a short-course where an end-to-end example is shown for short courses. Scott suggested using a Jim Beam or a similar simple test problem. Scott also suggested that TD might consider inviting the participants to bring their own applications/ problems to the short-course. This suggestion brought up the idea of having a workshop.

Discussion went on about a new setup where the tutorial is given on the pre-IMAC Sunday and follow-up with a workshop session on Wednesday/ Thursday afternoon/ evening. In this workshop, the course instructors may consider answering questions of course participants

or may apply what was taught on pre-IMAC Sunday course to specific problems provided by the attendees. Tom Proulx pointed out that Thursday is more suitable from organizational reasons.

The hands-on demo/workshop concept could be tested at IMAC in 2011 with Tom Paez. If the workshop option is realized, the short course information might be distributed to the attendees before the conference. Tom Proulx emphasized that the information must be circulated by the first week of April.

If successful, this idea can be used for a short-course at the SEM annual meeting in 2011, where the theme will be "making measurements and models better." Todd Simmermacher will talk to Tom Paez about this concept.

Sessions at 2011 SEM annual meeting:

The meeting will be held in June in Connecticut. The theme is Calibration and Uncertainty Quantification. Papers are due March. Todd Simmermacher mentioned that TD should organize a few sessions because of the theme of the meeting. Todd mentioned that a short course will also be nice. The TD will organize their efforts to make some level of participation at the meeting.

MVUQ best paper award:

TD decided that officers of the MVUQ technical division should be excluded from receiving the best paper award from now on. TD decided that session chairs can be nominated. For session chairs, if they have a paper in their session, a separate evaluation of their papers / presentations will be arranged.

Matt Allen started to implement the new selection process by which each one of the MVUQ session chairs nominates one or two papers from their sessions during IMAC. This is so that the process gets started right away, and not six months after the conference is over. Matt will remind the session chairs to get their choices in by the end of February.

The selection committee is composed on MVUQ session chairs and officers of the MVUQ technical division, with the exception of F. Hemez. For the evaluation of the IMAC 2010, the current officers: Todd Simmermacher, Randy Mayes, Matt Allen and Sezer Atamturktur.

Website:

TD agreed to post additional material on V&V for educational purposes. The meeting participants agreed to forward the material they are willing to share on the web site to Sezer Atamturktur, who will organize and forward the PDFs to Tom Proulx. Tom Proulx will help post the new documents on-line.

The following items will be added to the website:

- (1) Make the MVUQ best papers (and runner-up papers) available on the web site. Mat Allen forward the list of the winners and runner ups to Sezer Atamturktur. Mat suggested posting the citations for the journal paper versions of the best papers.
- (2) The V&V tutorial Randy, Laura and Tom Paez organized in 2009 IMAC. Sezer will find the papers and Randy will forward the presentations to Sezer Atamturktur.
- (3) The citations for the special issue on the Sandia challenge problems (RESS, 2007-8?). Todd Simmermacher will ask Tom Paez what this special issue exactly was and obtain the citations. Todd will pass the information to Sezer.

- (4) Once the TD agrees with the write up, the 2011 meeting minutes will be posted on the website.

Miscellaneous:

Date/time of MVUQ TD meeting changed to Monday noon (lunch) in 2011. Tom Proulx agreed to provide free lunch during the MVUQ TD meeting in next year to help increase participation. TD must remind Tom Proulx / Kathy Ramsay to make the arrangements before the conference.

Sezer Atamturktur will contact Ryan Crane of ASME and find out if activities of SEM and the MVUQ technical division can be advertised through their V&V committee mailing list. Tom Proulx will provide Sezer with the write-up SEM distributes to societies.