

**Minutes from the Emerging Computing Technologies Committee Meeting**  
**2006 Structures Congress**  
Adam's Mark Hotel, St. Louis, MO  
May 19, 2006, 3:00– 6:00 pm

**1. Attendance:**

Members:

Colby Swan, *Chair* (University of Iowa)  
Asghar Bhatti (University of Iowa)  
Chris Foley (Marquette University)  
Abhinav Gupta, *Secretary* (North Carolina State University)  
Shahram Pezeshk (University of Memphis)  
Anne Raich (Lafayette College)  
Michael Scott, (Oregon State University)  
Ian Smith, (EPFL, Switzerland)  
Elisa Sotelino, *Associate Editor*, (Virginia Tech)

Visitors:

Gilberto Mosqueda (University at Buffalo)  
Don Grierson, *Analysis & Computations TAC Chair*, (University of Waterloo)

**2. Call to Order and Introductions**

The meeting was called to order by the chair and all members and guests introduced themselves. The meeting agenda had been e-mailed to all members prior to the meeting and was agreed upon by those in attendance.

**3. Review/Discussion of Committee's Mission Statement and Fields of Interests**

The committee's past activities and focus areas were discussed and the chair emphasized the changing nature of topics that comprise Emerging Computing. The current topics of interest to the committee as a whole were identified as: 1) hybrid simulations of structural systems and related computing and information technologies; 2) structural monitoring involving the design of sensor networks and utilization of data from such networks to detect changes in structural health. The chair invited members and guests to review the current fields of interest to the committee and suggest updates on the field of interests for the committee.

**4. Update of Committee Roster and Selection of New Chair**

New members to the committee Anne Raich of Lafayette College and Michael Scott of Oregon State University were acknowledged. The remaining roster of the committee's current membership roster was reviewed. Members were asked to identify and recruit new members to join the committee. The responsibility of committee members to participate in committee activities was emphasized. These include but are not limited to: (1) attempting to attend the

annual committee meetings held in conjunction with the Structures Congress; (2) being willing to peer review manuscripts submitted to the *Journal of Structural Engineering* related to ECT or conference paper manuscripts; and (3) helping to develop conference sessions and workshops related to ECT for academics, researchers, and practitioners.

Since the chair's term ends September 30, 2006 and he does not wish to continue in the position, he explained the duties and responsibilities of TAC committee chairs. Ordinarily, the vice-chair of the committee would be the nominee to fill the chair position, but the current vice-chair is not in a position at this time to take on this responsibility. Members present thus nominated Abhinav Gupta, currently serving as committee secretary, to serve a three-year term as the chair of ECT starting October 2006. The nomination was seconded and then unanimously approved on a voice vote. Members present nominated and unanimously approved Anne Reich to serve a three-year term as committee Secretary starting October 2006. Members also requested Eduardo de Santiago (not present) to continue as vice-chair.

## **5. Discussion of ECT Sponsored Sessions at 2006 Structures Congress**

Abhinav Gupta and Elisa Sotelino presented a summary of the Hybrid Simulation session they developed and moderated at the 2006 Structures Congress. Four papers were presented in the session which was attended by about 35. A significant interest was observed in this area of research.

This was the only session sponsored by the ECT committee at the 2006 Structures Congress.

## **6. Discussion of Current Activities**

### **a. Proposed Sessions for 2007 Congress**

Members considered developing proposals for two sessions. The deadline is June 15, 2006.

- One session on Hybrid Simulation related research will be developed by Gilberto Mosqueda of SUNY-University at Buffalo.
- One session on Data modeling, specification, communication, mining, visualization, and archival matters related to NEESit will developed by Michael Scott.

Those developing the sessions are expected to show their session proposals to the committee chair before submitting them to the conference website. Session developers were reminded that successful session proposals generally need to have four identified authors/presenters each with a title and abstract for their presentation.

### **b. Other Activities Workshop on IT**

Attendees discussed the idea of a Workshop on Information Technology in Structural Engineering Education for the 2007 Congress to be held in Long Beach, CA. This type of a workshop has been under consideration for a few years now within the ECT

committee. At the previous April 2005 meeting of the committee in NYC, four primary sub-topics were identified for a half-day workshop: (a) Data modeling and Validation; (b) Computation and Simulation; (c) Visualization; and (d) Distance Education.

Members and visitors noted in discussion that a half-day workshop that deals with the four sub-topics above, not all of which are closely related, may struggle with lack of coherence and focus. Attendees also discussed why the ECT committee had not successfully developed such a workshop over the past year for the 2006 Structures Congress. It was agreed that development of such a Workshop on Information Technology in Structural Engineering Education should be pursued only if there is a significant interest and enthusiasm for it among the membership. Most attendees in St. Louis did not express enthusiasm for the workshop as planned.

As a more feasible alternative, attendees re-focused the discussion on sponsoring a NEES/IT workshop at the 2007 Congress in Long Beach, CA. It was noted that NEES is already in the process of offering IT seminars related to NEES technologies around the country. Since NEES is based in California, the geographical location of the conference is suitable for involvement of professionals active in this area at the NEES computational facilities at UC San Diego and UCLA. Such a workshop is also more in line with the committee membership's current interests in hybrid simulations and related technologies. Michael Scott and Asghar Bhatti agreed to explore this possibility further and to report back to the chair within one month.

## **7. Special Publication Activities**

Associate Editor for the Journal of Structural Engineering, Elisa Sotelino reported that the Journal has planned a special issue on the topic of Analysis and Computation based on the papers presented at A&C specialty track at the 2006 Congress. The papers related to the ECT topics will be considered in this special issue. Finley Charney (Viginia Tech) will serve as the Guest Editor.

A discussion was also held regarding the Guest Editor for the Special Issue following the next A&C specialty conference that would be held in 2008. It was suggested that the Associate Editors affiliated with the A&C TAC be asked to serve jointly. Members requested Colby Swan to pursue this matter further.

## **8. Report by ECT's Associate Editor**

Elisa Sotelino, Associate Editor for the Journal of Structural Engineering, reported processing 23 papers between 2005 and 2006. Of these, 10 were accepted and 3 declined. Furthermore, 7 are under review and 3 have been returned to authors for resubmission.

## **9. Adjournment**

The meeting was adjourned at 6:00 pm and member re-convened for the conference ice-breaker session in the exhibition hall.

Minutes of the meeting prepared by:

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