

ACI-ASCE Committee 447
Finite Element Analysis of Reinforced Concrete Structures
Meeting at Room C-M101 C
Minneapolis, MN 4/16/2013 11:00:00 AM - 1:30:00 PM
ACI Spring Convention 2013

1. **Call to Order** at 11.02 am

2. **Introduction of Members and Guests**

Members Attending

Allan Bommer, Gianluca Cusatis, Mukti Das, Jason Draper, James Deaton, Michael O’Leary, Y.L. Mo, Sri Sritharan, Ganesh Thiagarajan, Jian Zhao

Visitors

Ahmad Al-Rahmani, Ivan Diaz, David Gianutti, Tim Hines, Trey Hamilton, David L. Hartmann, JiaLiang Le, Jessica Marquhardt, Mike Marohl, Ali Reza Nojavam, Mayuri Patil, Keyan Rahimzadeh, Jade Rodell, B.J. Siljenberg, Eric Williamson, Greg Zeisler.

3. **Excused absences:** None

4. **Review and approve minutes from previous meeting: ACI Fall 2012 Toronto Convention.**

Allan Bommer moved to accept the minutes and Sri Sritharan seconded it. All were in favor. There were none opposed and nobody abstained.

5. **Membership update:**

31 Members
30 Associate Members
14 Consulting Members

7. **Report on possible technical sessions to be sponsored by the committee:**

- a. **Cusatis:** “Development of guidelines for the calibration and validation of concrete models”, Session in Collaboration with ACI-446 on Calibration of Concrete Models.

Carlos Coronado is in the Task Group. Ben Deaton also volunteered to be in the TG. Two sessions are being planned for the Reno Spring 2014 convention.

- b. **Ganesh:** Fall 2013 Session on ‘Blast Blind Prediction Contest’ – Winners to present their results and methodologies. Update.

Very good responses have been received from contestants all over the world. There were four categories of participation namely High Strength Concrete – Finite Element Modeling, High Strength Concrete – Single Degree of Freedom Modeling, Normal Strength Concrete – Finite Element Modeling, Normal Strength Concrete – Single Degree of Freedom Modeling.

- c. **Ganesh:** Announcement of Winners of the Contest (co sponsored by 370).
The top two in each category was announced the winners will be receiving their awards during the session at the Phoenix Convention in Fall 2013.

d. Future sessions to be organized?

- Jian Zhao – Modeling of Bond session during Spring 2014.
- Sri Sritharan – Spring 2015 session on Bridge Modeling for Seismic Loading.

8. Update on State-of-the-Art Reports

- a. **Ayoub/Lowes:** Modeling of Modern Concrete Structures for Performance-Based Earthquake Engineering (447.XR).
 - Ashraf was on a sabbatical and could not attend the meeting. No updates were provided at this point.
- b. **Al-Mahaidi:** Modeling for the Repair and Rehabilitation of Modern Concrete Structures for Performance Based Design (447.ZR)
 - No specific update was provided.
- c. **Sritharan and Zhao (in collaboration with Com. 408):** Modeling of Cyclic Bond in Reinforced Concrete (447.YR)
 - Sri provided a very detailed update

9. NESCC – Concrete Task Group (CTG) Report: Post-Processing Finite Element Analysis Results for the Design of Nuclear Concrete Structures (447.YT)

Edwardsen: She is not continuing this effort due to personal reasons.

Micheal OLeary / Carlos Coronado to continue the effort.

10. Resolving the TechNote Issue on Twisting Moments in Finite Element Based Design of Reinforced Concrete Slabs. Update on the Ballot for the Table of Contents and discussion on next steps.

Allan Bommer discussed the document to be redone as a Design Guide. Ben Deaton and Allan will work together on this document. We need an official number for this document.

11. New business

A discussion on possible educational materials that the committee can produce was held. Possible ways could be by creating videos and presentations. Webinars were also discussed. Creating of modules for using Finite elements for concrete structures by designers was discussed. However, no specific action was taken.

12. Adjourn at 1.10 pm.