

ACI-ASCE Committee 447
Finite Element Analysis of Reinforced Concrete Structures
Meeting at ACI Spring Convention 2010, Chicago, IL

1. Introductions

Members attending:

Al-Mahidi, Riadh	Monash Univeristy, Australia
Ayoub, Ashraf	University of Houston
Bazant, Zdenek	Northwestern University
Bommer, Allan	Bentley Systems
Cusatis, Gianluca	Rensselaer Polytechnic Institute
Das, Mukti	Bechtel Power Corporation
Deaton, Ben	Georgia Institute of Technology
Gerstle, Walter	University of New Mexico
Jakovich, John	DYK Incorporated
Lowes, Laura	University of Washington, Seattle
Mo, Y.L	University of Houston
Riveras, Guillermo	Engineering R&D Center, U.S. Army
Sritharan, Sri	Iowa State University

Guests attending:

Ahmed Elremaily	CTL Group, Chicago
Draper, Jason	Burns & McDonnell
Lotfi, Hamid	CTL Group, Chicago
Matta, Fabio	University of South Carolina
Sasani, Mehrdad	Northeastern University
Williamson, Eric	University of Texas at Austin
Hu, Qihang	

2. Minutes approved with change that John Jakovich is organizing the technical session addressing “Practical Numerical Analysis” to be held at the Fall 2010 Convention in Pittsburgh.

3. Membership update

Associate member: Wassim Ghannoum, University of Texas - Austin

Associate member: Ravi Mullapudi, University of Houston

4. Report on upcoming technical sessions

a) Eric Williamson - Technical session addressing blast to be held at Fall 2010 Convention in Pittsburgh

- Organized in conjunction with Com 370: Short Duration Dynamic and Vibratory Load Effects.
- Three three-hour session. Sessions address 1) Simulation, 2) Validation of simulation using experimental data, 3) Experimental testing for blast loading. All 18 speakers have been identified.

- SP: Preliminary approval has been granted. Speakers and others who submitted abstracts for the sessions are submitting papers for an SP; deadline is May and a few papers have been submitted. More than 20 papers are expected for SP.
- b) John Jakovich - Technical session addressing “Practical Numerical Analysis” to be held at Fall 2010 Convention in Pittsburgh**
- Session is being organized in conjunction with Com. 118
 - There will be one session in Pittsburgh; this session has received final approval.
 - Speakers have been identified.
- c) Additional sessions to be held at the ASCE/SEI Structures Congress?**
- Al-Mahaidi will organize a session on analysis for repair and rehabilitation.

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

- a. **Ayoub:** Modeling of Modern Concrete Structures for Performance-Based Design- Two chapters completed, wall structures chapter from Dan Palermo to be completed. Chapter on walls addresses MCFT and five other model types.
- b. **Al-Mahaidi:** Modeling for the Repair and Rehabilitation of RC and Masonry. Document includes six chapters. Five have been completed; author for sixth chapter has asked for more time. Previous chapters have been updated.
- c. **Sritharan (in collaboration with Com. 408):** Modeling Bond in Reinforced Concrete-Sri is having problems organizing writers. One more attempt will be made to find a group of co-authors.

6. Task group to work with ACI 318-C: Members who volunteered: Ayoub, Bommer, Das, Deaton, Jakovich, Lowes, Riveros, Thiagarajan

7. Meeting Schedule: meeting to be moved to 11-2

8. Discussion of negatives of the Tech Note on Twisting Moments in Finite Element Based Design of Reinforced Concrete Slabs.

- a. Negative comments provided by three reviewers were discussed by Allan Bommer and Ben Deaton.
- b. Resolution and discussion results will be transmitted to reviewers by Ashraf Ayoub.
- c. Significant revision of the document was recommended; thus the document will be re-balloted prior to the Fall convention.