AEI 2013

Building Solutions for Architectural Engineering

PROCEEDINGS OF THE 2013 ARCHITECTURAL ENGINEERING NATIONAL CONFERENCE

April 3-5, 2013 State College, Pennsylvania

SPONSORED BY
The Architectural Engineering Institute (AEI)
of the American Society of Civil Engineers

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Published by the American Society of Civil Engineers

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American Society of Civil Engineers 1801 Alexander Bell Drive Reston, Virginia, 20191-4400

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Acknowledgments

The organization of the Architectural Engineering Institute (AEI) Conference 2013 was different from previous AEI conferences in that AEI decided to have a university with an Architectural Engineering program host the conference. This AEI 2013 conference is therefore a new experience being tried for the first time at Penn State University hosted by the Department of Architectural Engineering. It is hoped that this experience has proved successful and the experience will help and contribute to the organization of future AEI conferences.

The organization of the AEI 2013 conference relied on the contribution of many people. Starting with the conference steering committee, we would like to acknowledge the contribution of Mohammad Ettouney, Tom Babacz, Scott Campbell, Abe Lynn, Mike McGeen, Chuck Meyer, Brian Noonan, Jay Puckett, Thanos Tzempelikos, Filza Walters, and John Zacher in guiding the directions for the technical content of the conference. Next, the contribution of the scientific committee in promoting the conference and offering help in the review process is acknowledged. The support and contribution of several Penn State Architectural Engineering Department faculty, including Kevin Parfitt, Kevin Houser, Robert Holland, Robert Leicht, and Steve Treado for participating in the local organizing committee and helping in the planning and inviting authors to submit papers is acknowledged. Next the significant contribution of the AEI staff Jennifer Balsley (former Manager), Verna Jameson, and Jim Rossberg (Managing Director of ASCE Engineering Programs) is gratefully acknowledged. Last but not the least, the organization of this conference would not have been possible without the impressive hard work of AE Department staff Nancy Smith and Nancy Sabol.

Many other individuals have contributed in planning special programs such as workshops, short courses, and committee meetings. The contribution of all those who have helped is acknowledged. However, the one special event that has taken great effort is the ASCE Charles Pankow Annual Architectural Engineering Student Competition that takes place every year during AEI conferences (AEI Technical Conference and AEI Student Conference). The Chair of the committee overseeing this competition is Kenna Chapin. The significant contributions of Kenna and her committee as well as the financial support of the Charles Pankow Foundation are gratefully acknowledged.

The Architectural Engineering Institute is one of the eight technical institutes of the American Society of Civil Engineers and is led by its Board of Governors currently consisting of Ali Memari (President); Raphael Yunk (Immediate Past President), Mark McAfee (President-Elect); Jim Ruggieri; Mark Sarkisian; Adam Hapij; and Stephanie Guy.

In the preparation of the proceedings of this conference, the contributions of Penn State AE Department staff Nancy Smith and Nancy Sabol are acknowledged. The significant contributions of Jim Rossberg (Managing Director of ASCE Engineering Programs), Adam Hapij (AEI Board of Governors member), Verna Jameson (AEI staff), and the ASCE publications department staff are also gratefully acknowledged.

We would also like to acknowledge the support of our corporate sponsors for the conference, the numerous student volunteers, and all the paper authors and reviewers for their contributions to the conference.

As Chair and Co-Chair of the AEI 2013 Conference, we are highly indebted to all of those mentioned above and many others not named.

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Conference Co-Chair:

Ali M. Memari, Ph.D., P.E., Professor Bernard and Henrietta Hankin Chair in Residential Building Construction Director, The Pennsylvania Housing Research Center (PHRC) Department of Architectural Engineering Department of Civil and Environmental Engineering The Pennsylvania State University

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Rick De La Guardia

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