

CALL FOR PAPERS & PRESENTATIONS



AEI 2019 CONFERENCE

April 3 – 6, 2019 | Tysons, VA
(Washington, DC Metro Area)



PennState
College of Engineering

**ARCHITECTURAL
ENGINEERING**

Integrated Building Solutions – The National Agenda

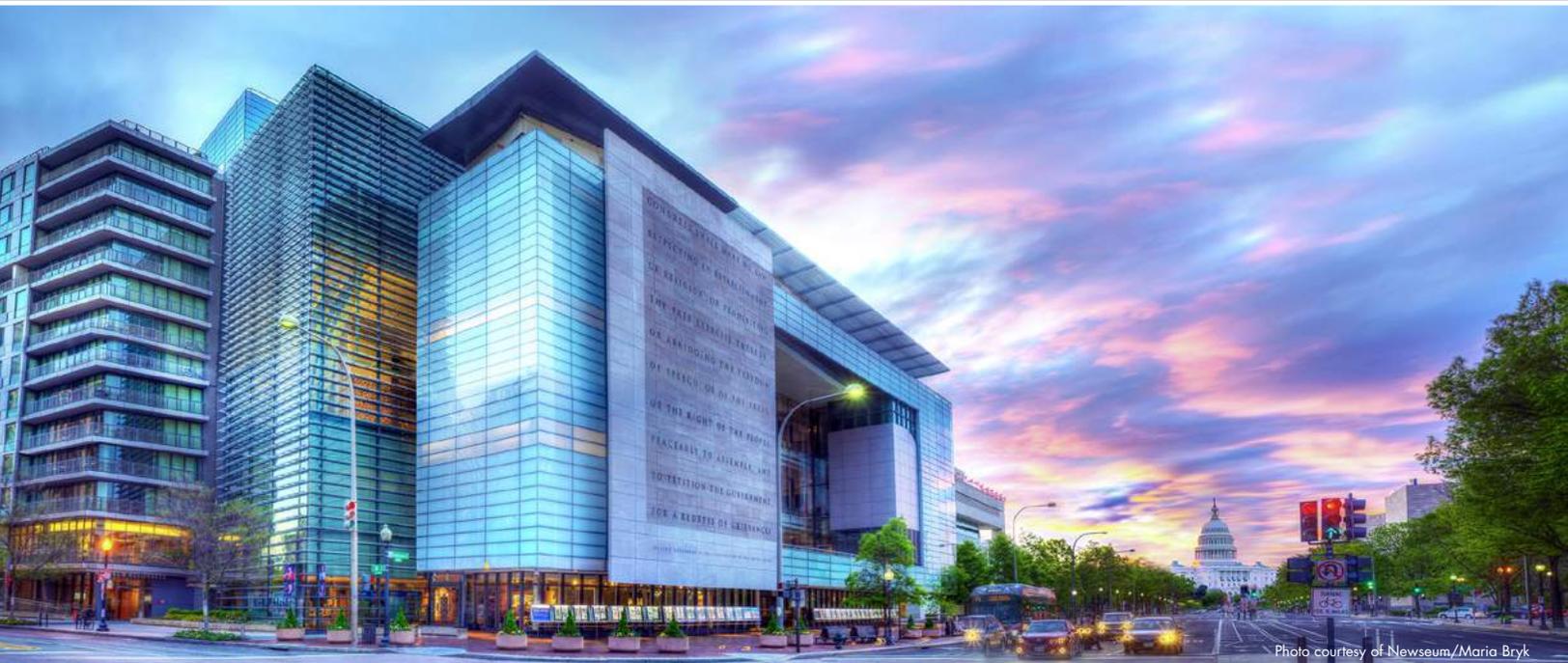


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www.aei-conference.org

About the Conference

The **Architectural Engineering Institute (AEI)**, in partnership with **The Pennsylvania State University (PSU)**, is pleased to announce the **8th Biennial Professional Conference for 2019**. The theme of the conference is the **"The Integrated Building: A National Agenda."**

The 2019 AEI Conference offers an opportunity for members of the building industry – structural, mechanical, and electrical engineers, construction management professionals, owners, and architects – to engage in conversations on advanced strategies and state-of-the-art practices of integrated building solutions. The metro Washington DC area was specifically selected for the 2019 AEI Conference to move forward this national scale agenda. The capital location provides a unique setting to encourage dialogues between all segments of the industry, particularly the federal building owners and the architectural engineering design and construction community.

The conference will feature presentation on building integration, project delivery, and leading practices in the many areas of building design, construction, and operation. The AEI conference offers a balance between academics and practitioners creating programs that support the AEI mission and vision.

AEI Vision: To be the worldwide resource for the advancement of the design and construction of integrated buildings.

AEI Mission: To promote an integrated, multi-disciplinary approach to planning, design, construction and operation of buildings, by encouraging innovation, collaboration and excellence in practice, education and research of architectural engineering.

The dynamic program will feature invited speakers from government and private sectors, including keynote presentations. This conference will offer engaging panel discussions and case studies, technical paper sessions, and a graduate student poster session.

DETAILS ABOUT YOUR SUBMISSION

For this upcoming conference, new track types will be offered alongside with the traditional technical presentations. At time of submission, you must select your first choice of one of the following options. Multiple submissions per author/team are permitted to multiple tracks/areas of interest. Abstracts are peer reviewed and grouped with other like abstracts to create technical sessions.

- **Panel Sessions:** multi-disciplinary teams discuss, debate, or present knowledge in an engaging way with the audience. (90 minutes sessions)
- **Case Studies:** the presentation must include a multi-disciplinary project team. Teams will describe in detail an entire project including: project management, architecture and engineered design, challenges, failures, successes, outcome, and the owner perspective. (1 to 2 per 90 minutes session)
- **Individual Technical Sessions:** present a single subject that advances the AEI Builds. (3-4 presentations/papers per 90 minutes session)
- **Graduate Student Poster Session:** presentation of technical work in a visual display for attendees to view and interact with. Master's and Ph.D. students only. There will be an award for best poster.

NEW THIS YEAR! The AEI Conference is teaming with the ASCE Journal of Architectural Engineering to provide opportunities for exceptional papers to be considered for publication in the Journal. Because of this, conference papers will be limited to 6 pages to allow those interested and selected for the journal version of the paper to expand upon the writing with new knowledge. When submitting your abstract please indicate if you would be interested in advancing your paper for journal publication after the conference if deemed acceptable by the reviewers.

The Technical Program and AEI Build

The AEI Build Initiative provides a framework for the technical program. AEI Build draws on the best ideas in design, construction, and maintenance of buildings in eight practice-focused areas of the architectural engineering profession: **Deliver, Enclose, Learn, Modular, Perform, Resilient, Secure, and Sustain.**

Authors will be required to identify the best fit AEI Build category when submitting abstracts.

The AEI Build initiative was developed to provide a technical forum to amass a growing knowledge base for the Architectural Engineering community to discuss, debate, and share new ideas that affect a more pronounced change in the design, construction, and operations of buildings. For more information please visit the website at AEI Build, www.asce.org/aei/aeibuild

Abstracts/proposals, a maximum of **300 to 400 words**, should be submitted for consideration by **April 2, 2018**. Papers and presentations should consider focusing on suggested topics listed below. All submissions should be sufficient to judge the quality and appropriateness of the work for consideration in the conference. Papers and presentations will be selected from the open call, as well as by special invitation. Submissions will be reviewed by the AEI Technical Proceedings Sub-committee (TP) for decisions on acceptance. Abstracts/proposals should be clearly marked with the names, titles, credentials and affiliations of authors and co-authors, presenters and co-presenters. The name, organization, address, phone number, and email address of the primary author/presenter should be included. Abstracts should be submitted online through our abstract submissions site at www.aei-conference.org.

Authors whose abstracts and/or final papers are selected for inclusion in the technical program will be required to register for the conference, attend the conference, and make their presentations in person. All sessions will be offering professional development hours (PDHs) to conference attendees.

Please note that it is the author's/presenter's responsibility to obtain any necessary permissions and/or approvals from employers, project owners, clients, photographers, or other parties prior to final submission. Material included in your submission from previously published sources, including the Internet, may require permission from the copyright holder of that publication or website. It is the author's responsibility to obtain the permission for reuse of this material and include the appropriate credit information in the paper or presentation.



Submit Your Abstract and Plan to Participate in 2019

Abstract Content Information

Authors are asked to provide a detailed description of what will be presented. This description should be approximately 300-400 words and the following sub sections must be identified in the first submitted abstract if the abstract is to be considered. Questions that each section might answer is listed but do not explicitly need to be filled out.

Topic and Target Audience

- Is this a research topic or and industry focused design talk?
- What is the topic (clearly identify scope, methods, and results)?
- Who is the target audience?

Audience Takeaways

- What will the audience take away from your presentation? Try to list 3-5 specific items.
- Explain how the audience will be able to use what they learn?
- Does this provide a practical solution to a problem?

Abstract/Session Impacts and Improve the Architecture Engineering Mission: Advancing Integrated Building Solutions

(must provide Max 50 words)

- How does this presentation help prepare leaders to meet the mission?
- What impact does this presentation have nationally (economically, technically and socially)?
- How does this presentation bring together broader project teams?
- How does this presentation drive innovation for the future of integrated building solutions.

Abstract Evaluation for acceptance to the conference will be based on:

- Technical content
- Contribution to science and/or practice of AE
- Quality of methodology / approach
- Impact/advancement on AE Profession
- Practical applications
- Potential for a quality presentation in the format you picked

NOTE: All accepted authors are required to register for the conference by November 14, 2018 prior to final paper upload. Papers and presentations without a registered presenting author(s) will be removed from the proceedings and not included in the technical program.

Call for Papers

Authors of accepted abstracts, who wish to be published and present at the conference, are required to submit a 6-page final paper for inclusion in the proceedings. The proceedings will be copyrighted and published electronically by ASCE (on a CD or other media). Authors may submit individually or as part of group (3-4 abstracts) to form a full session proposal. PowerPoint presentations will be posted on AEI Collaborate (AEI's online technical forum).

Call for Presentations

AE practitioners proposing a presentation only are encouraged to focus subjects on the most current industry practices in a vendor neutral format. Must be presented by a multidisciplinary team. PowerPoint presentations will be posted on AEI Collaborate (AEI's online technical forum).

Suggested Conference Topics

The 2019 Steering and Local Committee is particularly interested in papers and presentations that include but are not limited to the following:

DELIVER

- Profession practice, law, ethics, licensing, globalization
- Building integration solutions
- New planning, design, and construction methods for complex projects

ENCLOSE

- Curtain wall design and retrofit
- Innovative products
- Multi-disciplinary performance

LEARN (EDUCATOR SIDE)

- Teamwork, non-technical, and architecture education
- Learning and education reform for a global engineer
- Forward thinking active learning strategies

MODULAR

- Designing for modular buildings
- Performance of modular systems and buildings

PERFORM

- Building failures and restoration: structures, foundations, envelope, etc.
- Building energy performance from small scale integration to city level systems
- Achieving higher levels of systems' performance

RESILIENT

- Integrating resiliency into designs through design and construction
- Multi-hazard mitigation strategies
- Reliability of building systems

SECURE

- Healthier and safer buildings from unwarranted problems
- Building security assessment and standards
- Protection of occupants

SUSTAIN

- Life-cycle performance and analysis
- New sustainable materials
- New ideas advancing sustainability thinking



Photo courtesy of Turner Construction Company

DESTINATION

Conference Hotel

Sheraton Tysons

8661 Leesburg Pike
Tysons, VA 22182
(703) 448-1234

www.sheratontysonscorner.com

Tysons, Virginia

Known originally as Peach Grove, the area received the designation Tysons Crossroads after the Civil War. William Tyson, a Maryland native from Cecil County, purchased a tract of land from A. Lawrence Foster. Tyson served as postmaster of the now discontinued Peach Grove Post Office from 1854–1866. As recently as the 1950s, Tysons Corner was a quiet rural intersection flanked by a few small stores, and a fruit stand operated by Mr. Tyson, who sold apples and apple cider from the corner of his property. Big changes came in 1962 when the Fairfax County Board of Supervisors approved the Tysons Corner Shopping Center (now Tysons Corner Center).

Now with over 500 shops, eateries and department stores, including flagship stores such as Bloomingdale's, Macy's, Nordstrom, Saks Fifth Avenue, and Neiman Marcus, Tysons Corner Center invites you to enjoy a complete shopping, dining, and entertainment experience.

ARTS & CULTURE

- Wolf Trap National Park for the Performing Arts 1.6 km/1.0 miles
- Arlington National Cemetery 16.1 km/10.0 miles
- Smithsonian Institute 22.5 km/14.0 miles
- The Holocaust Museum 22.5 km/14.0 miles
- Washington Monument 22.5 km/14.0 miles
- Newseum 25.1 km/15.6 miles
- International Spy Museum 25.3 km/15.7 miles

LOCAL ATTRACTIONS

- Meadowlark Botanical Gardens 6.6 km/4.1 miles
- Mt. Vernon, VA 32.2 km/20.0 miles

NEARBY DESTINATIONS

- Georgetown 19.3 km/12.0 miles

RECREATION

- Jogging and Biking Trail 0.6 km/0.4 miles
- Great Falls Park 8.9 km/5.5 miles
- Verizon Center 25.6 km/15.9 miles
- Smithsonian National Zoological Park 25.8 km/16.0 miles
- Nationals Park (Washington Nationals) 27.4 km/17.0 miles

KEY DATES

Abstracts Due	April 2, 2018
Abstract Acceptance/ Rejection Notification	June 15, 2018
Draft Papers Due	August 15, 2018
Registration Opens	October 10, 2018
Final Papers Due	November 14, 2018
Presenting Author Registration Deadline	November 14, 2018 <i>(Papers and presentations without a registered presenting author(s) will be removed from the proceedings and not included in the technical program)</i>

Local Planning Committee

Conference Chair

Moses D.F. Ling, P.E., R.A., LEED AP, The Pennsylvania State University, University Park, PA

Technical Program Co-Chairs

Ryan L. Solnosky, Ph.D., P.E., The Pennsylvania State University, University Park, PA

Robert Leicht, Ph.D., The Pennsylvania State University, University Park, PA

National Conference Steering Committee

Chair, Conference Steering Committee

Jeffery S. Volz, SE, PE, PhD, University of Oklahoma, Oklahoma City, OK

Robert Grotenthaler, P.E., LEED, AP, Barton Malow Company, Baltimore, MD

Steph Guy, P.E., LEED AP, Alvine Engineering, Omaha, NE

Amy L. Hackney, P.E., LEED, AP, M.ASCE, Simpson Gumpertz & Heger, Inc., Los Angeles, CA

Ali Memari, Ph.D., P.E., F.ASCE, The Pennsylvania State University, University Park, PA

Christopher H. Raebel, P.E., S.E., M.ASCE, Milwaukee School of Engineering, Milwaukee, WI

ASCE Staff

Catherine M. Tehan, Aff.M.ASCE, Director, Architectural Engineering Institute

Verna L. Jameson, Aff.M.ASCE, Manager, Architectural Engineering Institute

Christina Charron, Conference Manager, ASCE

ON EXHIBITING

Showcase your company at an exhibit table during the AEI CONFERENCE where attendee networking events and food and beverage breaks take place several times a day. Please contact **Drew Caracciolo** at dcaracciolo@asce.org or (703) 295-6087. Please visit the conference website at www.aei-conference.org for more information.

ON SPONSORING

This biennial event attracts attendees from practice, academia, government, industry, and allied fields. Highlight your company by sponsoring and having your company's name added to our list of 2019 AEI CONFERENCE sponsors. To learn more about sponsorship opportunities and associated benefits, please contact **Catherine Tehan**, AEI Director, at ctehan@asce.org or at (703)295-6026. Please visit the conference website at www.aei-conference.org for more information.