



PennState



2020

RESIDENTIAL BUILDING DESIGN & CONSTRUCTION CONFERENCE

ANNOUNCEMENT & CALL FOR SUBMISSIONS

MARCH 4-5, 2020

THE PENN STATER CONFERENCE CENTER & HOTEL, STATE COLLEGE, PA, USA

CONFERENCE GOALS

The Pennsylvania Housing Research Center (PHRC), housed in the Department of Civil & Environmental Engineering at The Pennsylvania State University, is pleased to announce the 5th biennial 2020 Residential Building Design & Construction (RBDC) Conference, which provides a forum for researchers, architects, engineers, design professionals, product manufacturers, builders, developers, and code officials to discuss challenges to sustainable, energy efficient, healthy, environmentally friendly, natural hazard resistant, affordable, and innovative residential construction. The event also focuses on the dissemination of recent research findings, state-of-the-art technologies, advanced projects, and new approaches in the field. This conference will focus on various types of residential buildings including single-family dwellings, multi-family multi-story apartment buildings, mid-rise and high-rise residential building towers, factory-built and modular housing, dormitories, and hotels/motels.

SUBMISSION DETAILS

Experts from academia, A/E design firms, builders, developers, manufacturers, and government and code officials are cordially invited to submit abstracts by April 15, 2019 on all aspects of residential buildings, including the following topics:

- Aging-in-Place and Senior Living Housing
- Alternative Renewable Energy Generating Systems
- Building Information Modeling (BIM) Application in Residential Construction
- Building Integrated Photovoltaic Systems
- Building Performance Assessment/Metrics/Verification Methods and Occupant Behavior
- Building Science and Building Enclosures
- Education of Residential Design & Construction
- Energy Efficient Building Components
- Fire Damage and Protection
- High Performance Residential Buildings
- Indoor Air Quality
- Innovations in Green Roofs and Façade/Envelope Systems
- Innovations in Residential Architecture and Design
- Innovations in Modular and Manufactured Housing
- Innovative and Emerging Housing Construction Methods/Systems
- Innovative Wall, Floor, Roof, Window, and Siding Systems
- Learning from the Performance of Residential Buildings under Natural Disasters
- Low-Income and Affordable Housing
- Panelized Building Components
- Passive House Design Approach
- Resilient New Design and Retrofit of Existing Buildings under Natural Disasters
- Retrofit of Existing Buildings for Energy Efficiency
- Rural Housing Materials and Construction
- Serviceability and Life Safety Damage Aspects
- Smart Home Technologies, Design and Construction
- Sustainable Housing Construction Materials and Methods
- Temporary Housing for Disaster Situations
- Whole Building Design Approach
- Zero-Net Energy Homes

Authors of accepted abstracts will submit their full papers for review and comments by the International Scientific Committee for inclusion in the Conference Proceedings. The Conference Proceedings will be an edited document and will require the authors of the papers to transfer copyright to PHRC for its publication with an ISBN number.

By April 15, 2019, submit abstracts through EasyChair conference management software:

<https://easychair.org/conferences/?conf=2020rbdcc>

For any submission questions, authors may contact Conference Secretariat:

Sarah Klinetob Lowe, slowe@engr.psu.edu

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206B Sackett Building
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SUBMISSION DATES

Authors are invited to submit 200-300 word abstracts and indicate the topic area from technical paper session topics appropriate for their paper.

- Abstract Submission Extended Deadline: **April 15, 2019**
- Abstract Acceptance Notification: **April 30, 2019**
- Full Paper Submission Deadline: **August 28, 2019**
- Full Paper Acceptance and Review Comments Notification: **October 7, 2019**
- Camera-Ready Final Full Paper Deadline for Inclusion in the Proceedings: **November 27, 2019**

At the conference, all presenters will have 20-30 minutes for a PowerPoint presentation on their paper and must bring their presentation to the conference on a USB flash drive.

Alternative Submission Option for Authors Who Do Not Wish To Submit Full Papers:

Authors who would only like to have PowerPoint presentations and not a full paper must submit their PowerPoint presentation by January 10, 2020 for distribution at the conference. However, these presentations will not be considered as part of the Conference Proceedings but will later be made available on the PHRC website, www.phrc.psu.edu/Publications/Past-Conference-Proceedings.aspx.

KEYNOTE SPEAKERS

Professor David Prevatt, Ph.D., PE, FASCE

Associate Professor of Civil & Coastal Engineering, Associate Director NSF - NHERI Experimental Facility,
University of Florida

Wind Hazard Resilient Residential Communities—When Engineering Isn't Enough

Lois B. Arena, PE

Director, Passive House Services, Steven Winter Associates, Inc.
Passive House: A Proven Path Toward Resilient, Affordable & Energy Efficient Housing

CONCURRENT: 28TH ANNUAL PHRC HOUSING CONFERENCE

The 28th Annual PHRC Housing Conference highlights best practices, regulation, research, and innovation in the residential construction industry. This two-day event with multiple tracks such as codes, design application, construction management, land development, and more provides information and updates on issues of interest to the residential construction industry. Invited speakers present on a wide range of topics about regulation and best practices in the industry. As an attendee of the Residential Building Design & Construction Conference, you are invited to mix and match with sessions at the PHRC Housing Conference.



RBDC CONFERENCE ORGANIZATION

CONFERENCE CHAIR

Dr. Ali Memari

Bernard and Henrietta Hankin Chair in
Residential Building Construction

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