## FROM PCI HEADQUARTERS

## **Prestressing Steel Committee changes name, expands focus**

The Prestressing Steel Committee is now the High Strength Steel and Prestressed Reinforcement Committee. With a new focus on high-strength reinforcement, the committee would welcome new members with expertise in this topic. Visit http://www.pci.org/About\_PCI /Join\_a\_Committee/ to complete an application.

# PCI staff testifies at IBC and IECC code hearings

**P**CI's codes and standards activity was successful in getting two of its five code change proposals approved to appear in the 2018 International Building Code (IBC). For the 2018 International Energy Conservation Code (IECC), PCI was able to maintain stringency levels from the 2015 to the 2018 IECC. The 2018 International Code Council's I-codes are finalized and should be available for purchase during the first half of 2017.

Following are PCI's code change proposals submitted to modify the 2015 IBC. The successful proposals will appear in the 2018 IBC.

The 2015 IBC section 406.4.3 Public Parking Garages-Vehicle Barriers (G29-16) proposal would have permitted flexibility in the height of the load application area within vehicle barrier systems and, therefore, in the vehicle barrier height itself. This flexibility becomes important when a designer is struggling to meet the openness requirement in section 406.5 for open parking structures. The ICC Structural Committee disapproved this proposal because it believed that the proposed exception, which would lower vehicle barrier heights, was not sufficiently explained. The committee had a concern about a vehicle jumping the barrier and a concern with why such a specific case should be offered a special exception. The ICC online governmental voting still resulted in disapproval after a public comment was submitted that explained in full detail why these issues were of no concern.

2015 IBC section 423.1 Storm Shelters—General (G33-16) section 306.8, exception 1 to ICC 500 (Storm Shelter Standard) permits joint widths in precast concrete panels to be <sup>3</sup>/<sub>8</sub> in. or less and meet ASTM C920, *Standard Specification for Elastomeric Joint Sealants*, to comply with the standard. This proposal would have permitted the use of slightly wider joint widths where the manufacturers of approved joint material have installation instructions that require <sup>3</sup>/<sub>4</sub> in. joints. The ICC Structural Committee disapproved this proposal based on the belief that there was insufficient justification for the proposed exception to limits on joint widths in storm shelters. The committee said that making a modification to the standard in this was not the right way to go about it. Without additional data to further justify the wider joints, PCI did not submit a public comment.

The 2015 IBC Table 1705.3 Required Special Inspections and Tests of Concrete Construction (S136-16) proposal would have reversed a substantive change made as part of an organizational change in the 2015 IBC. The logic behind mandating continuous special inspection for all reinforcing bar welds other than those of a particular type (and even then, only up to a maximum size) is difficult to see. Thus, the 2015 IBC change represents an unnecessary expansion of special inspection requirements that does not result in any apparent benefit. The ICC Structural Committee disapproved this proposal based on the concern that, with the proposed changes to the concrete special inspections, some critical welds might not be subjected to continuous special inspection. PCI submitted a public comment to address its concern and was successful in getting the Structural Committee action overturned at the public comment hearing; however, the ICC online governmental voting still resulted in disapproval.

The 2015 IBC sections 18101.3.8.3.2 and 18101.3.8.3.3 Precast Prestressed Piles—Seismic Reinforcement in Seismic Design Categories C and D through F (S227-16) proposal incorporates the most recent research from Iowa State University into revised spiral reinforcement requirements for precast, prestressed concrete piles underneath buildings assigned to seismic design categories C through F. The ICC Structural Committee approved this proposal as modified based on the belief that it provides more rational and accurate limits on reinforcement for precast, prestressed concrete piles. The modification correctly limits the axial loads on these elements. This change, which implements the most current research on reinforcement for precast, prestressed concrete piles, will appear in the 2018 IBC.

The 2015 IBC sections 1613.1 Earthquake Loads—Scope and 1901.2 Plain and Reinforced Concrete (S242-16) propos-

al adjusts the way ASCE 7-16, Minimum Design Loads and Associated Criteria for Buildings and Other Structures, is referenced to ensure consideration of the alternative diaphragm design force level in section 12.10.3 of ASCE 7-16, which is mandated for precast concrete diaphragms in buildings assigned to seismic design category C and above. It also incorporates the new precast concrete diaphragm design provisions in section 14.2.4 of ASCE 7-16, which goes with the alternative diaphragm design force level and is based on multiyear, multi-million-dollar research, known as DSDM (Diaphragm Seismic Design Methodology) research, sponsored by the National Science Foundation, PCI, and the Pankow Foundation. The ICC Structural Committee approved this proposal based on the belief that this proposal updates IBC provisions for coordination with the latest edition of the referenced standard, ASCE 7. The modification reinstates the exclusion of chapter 14 in ASCE 7. This approved proposal will result in increased market potential for untopped precast concrete parking structures in regions of high seismicity.

Several code change proposals to the IECC attempted to increase stringency requirements for mass walls or reduce the mass-wall benefit compared with competing materials. PCI was able to maintain *R*-value and *U*-factor requirements for mass walls, as well as maintain air-leakage and air-barrier testing requirements.

The 2015 IECC sections C402.5 Air Leakage—Thermal Envelope (Mandatory) (CE41-16) proposal would have increased the stringency of the air-leakage testing requirements. It also requires that nonconforming work be documented in a report to the code official or design professional. This proposal was disapproved at the committee action hearings, and no public comments were brought forth. There will be no change in the code related to these requirements.

The 2015 IECC Table C402.1.3, Opaque Thermal Envelope Insulation Component Minimum Requirements, R-Value Method and Table C402.1.4, Opaque Thermal Envelope Insulation Component Maximum Requirements, U-Factor Method (CE54-16) proposal would have increased the stringency of the *R*-values or *U*-factors for climate zones 4 and up by taking the most-stringent requirements from either the 2015 IECC or ASHRAE 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings. This proposal was disapproved by the committee but was approved by an assembly motion at the committee action hearings. The committee's reason for disapproval was that a more-specific cost-effectiveness analysis is needed to justify the new requirements. Two public comments requested approval as submitted, but no cost analysis was provided. Again, the proposal was disapproved at the public comment hearings, and that result was confirmed through the ICC online consensus voting. There will be no change to the code related to these requirements. This is a win for the industry because precasters do not need to include more insulation in their products to meet more-stringent energy requirements that are not proven to be cost-effective in energy savings.

The concrete industries were successful in defeating the following proposals:

- allowing nine-story structures built with cross-laminated timber (CLT)
- permitting fire walls to be constructed of CLT
- reducing live loading requirements for fire walls
- eliminating testing for fire-retardant-treated wood
- permitting the increased use of wood products in wildland-urban interface areas
- reducing the need for sprinklers
- The concrete industries were successful in getting the following proposals approved:
- bringing IBC wind loads in line with higher wind loads specified in ASCE 7-16
- rebalancing passive versus active fire risk mitigation by requiring advanced sprinkler systems for wood construction
- permitting a 24-hour fire watch requirement for wood structures under construction
- requiring ignition-resistant material on the exterior of structures in designated wildland–urban interface areas

For more information related to the IBC code change proposals, please contact Jason Krohn, PCI's technical activities managing director, at jkrohn@pci.org, and for more information related to the IECC code change proposals, please contact Emily Lorenz, PCI's sustainability and publications director, at elorenz@pci.org.

### 2017 BIG BEAM COMPETITION DEADLINE APPROACHING

PCI's Big Beam Competition is an engineering student competition designed to give graduate and undergraduate students real in-plant experience while they design a concrete beam to competition specifications. All those intending to submit a report must submit an application online at http://www.pci.org/bigbeamapp. Final reports are due to PCI by June 16, 2017.



Mason Lampton spends time with students during the student poster session at the 2016 PCI Convention and National Bridge Conference in Nashville, Tenn., to learn more about student research and the PCI Foundation education programs. Courtesy of PCI Foundation.

# Students chosen to present posters at 2017 convention

**S** tudents chosen by the Student Education Committee and students from most of the PCI Foundation schools that had education programs operating during the 2016–2017 school year came together Friday, March 3, 2017, at the PCI Convention and National Bridge Conference at The Precast Show in Cleveland, Ohio, to present their posters.

PCI student poster competition winners were Somashekar Viswanath from Tufts University in Medford, Mass., with "Fatigue Demand and Capacity Assessment in Tall Precast Concrete Wind Turbine Towers" and "Application of Nonlinear Concrete Material Model for Finite Element Analysis of Reinforced and Prestressed Concrete Beams;" Chris Hall from the University of Washington in Seattle with a poster on form-active, thin-shell concrete structures; Raed Tawadrous from the University of Omaha in Nebraska with a poster on a zero-energy lifting insert developed specifically for precast concrete insulated wall panels; Matthew Sullivan, Maximillian Ovett, and Katelyn Stallings from the University of Georgia in Athens with a paper on metakaolin for cement replacement in concrete mixtures; Robert Peggar from Iowa State University in Ames with "Precast/Prestressed Hexcrete Wind Turbine Towers for Hub Heights above 100-m (328 ft);" Robert Konzelmann from Southern Illinois University in Carbondale with a poster from a class project on the Obama Presidential Library; and Seyedhamed Sadati from the Missouri University of Science and Technology in Rolla with "Durability of Prestressed Concrete Elements Incorporating Silica Fume in Marine Environments."

# McDougle to be honored with T. Henry Clark Award



The PCI Quality Activities Council has awarded Edwin A. McDougle the 2016 T. Henry Clark Award. McDougle was presented with the award at the 2017 PCI Convention and National Bridge Conference in Cleveland, Ohio. The award recognizes an individual, group of individuals, or

Edwin A. McDougle

firm that has delivered a resource that improves or enhances the quality of precast/prestressed concrete products or processes.

McDougle received multiple nominations for being instrumental in the evolution and success of the PCI Personnel Certification Program, the Plant Certification Program, and the Erector Certification Program. Through his 43-year career with Ross Bryan Associates Inc., he performed more than 1000 plant audits at more than 200 plants and was an active member on many PCI committees. He is a PCI Titan and Fellow and served as chair for the Quality Activities Council and as a member of the PCI Board of Directors, the Joint PCI-NPCA Task Group, and the International Committee.

The intent of this repurposed and relaunched award is to recognize those who create or promote quality in a way that would have made Henry Clark proud.

#### Annual giving will keep PCI Foundation programs on track



Marty McIntyre PCI Foundation Executive Director

When the concept for the PCI Foundation was first envisioned, the trustees hoped to solve a problem that plagued our industry. Few graduates from schools of architecture, engineering, and construction management left school with more than a smattering of knowledge about the design

and construction of precast concrete. For 10 years, we have built a program in partnership with 15 schools and even more local partners to help change this. And at those schools, we have made great strides in educating students, not only in the studios where precast concrete design is taught, but in other classes, where precast concrete has been added to the curriculum, and even in the professional community where the university is located.

We are finding that once a student in our program leaves school, most maintain an interest in working with precast concrete. We recently heard from Clarke Snell, a student who worked with the professors at the University of North Carolina (UNC) at Charlotte. "I continued the work that we did with PCI on the Solar Decathlon through a master's thesis on the thermal properties of geopolymer cement concrete and how a mix design strategy geared toward thermal performance variables might be applied in a complex precast wall system involving several mixes incorporated in the same wythe," he says.

Snell is now the industry associate professor at the Stevens Institute of Technology in Hoboken, N.J., passing on his interest and work with concrete to his students.

Some students take their knowledge in new directions. Melissa Smith, a graduate of UNC, says that she regularly uses what she learned in her work for Tower Engineering Professionals in Raleigh, N.C. "I am currently working in the telecom industry, and I have used some of the knowledge learned in the studio in my job. For many of the sites I work on, we spec precast shelters to house telecommunications equipment for various communications carriers," Smith says. "I also completed an MBA with a focus in real estate following my participation in the precast studio. Exposure to precast proved to be valuable in many of my real estate development classes as we evaluated the financial and design implications for different building types and materials."

We have done so much . . . and still there is more we can do.

The PCI Foundation is entering a new phase of programming and development. When the PCI Foundation first started, it needed large donations from high-volume contributors to get programs off the ground. Today, we need to find a way to make our programs sustainable and keep educating students at schools around the country. Without regular income, we run the risk of having to turn down universities interested in creating new precast concrete-specific programs.

So beginning now, we are suggesting that each PCI member (precaster and associate) make a commitment to the PCI Foundation that is in line with the revenue earned from the precast concrete industry. Please take a moment to review the suggested annual support guidelines listed in the table. A regular donor stream will help us continue and expand the work of the PCI Foundation.

PCI Foundation Suggested Annual Support Guidelines (based on precast concrete related revenue		
Revenue	Annual Giving	Monthly Giving
<sup>\$</sup> 75M+	\$30,000	\$2,500
\$50M-\$74M	\$25,000	<sup>\$</sup> 2,083
\$25M-\$49M	\$20,000	<sup>\$</sup> 1,666
<sup>s</sup> 10M- <sup>s</sup> 24M	<sup>\$</sup> 10,000	\$833
<sup>s</sup> 1M- <sup>s</sup> 9M	\$5,000	<sup>\$</sup> 417

All contributions made to the PCI Foundation, a 501(c) 3 organization, are fully tax deductible. PCI-Foundation.org

#### Wash U students go solar

A t the end of the fall 2016 semester, representatives from four precast concrete companies, two precast concrete engineers, and several students from St. Louis's Washington University 2017 Solar Decathlon team came together to work on details of the precast concrete house that will be entered in the competition this fall.

The U.S. Department of Energy Solar Decathlon is a collegiate competition made up of 10 contests that challenge student teams to design and build full-sized solar-powered houses. The winner of the competition is the team that best blends design excellence and smart energy production with innovation, market potential, and energy and water efficiency.

"Our solar decathlon project went well this semester, and we have one design studio working on architectural design development documents and one seminar course working on 3-D printing technology with a focus on furniture," says Hongxi Yin, the professor heading the team. "Brian Bock of Dukane Precast led the industrial effort on behalf of PCI in this effort and we truly appreciate his championship. Currently, we have Dukane Precast, Gate Precast, St. Louis Prestressing, Enterprise Precast, and several other potential producers from the Denver area working on the production of various components for our house. The effort cuts across four regional PCI chapters."

Bock has a successful record putting together cooperative industry projects and has used those skills for the Solar Decathlon. "Speaking for our entire industry team, I would like to say that it has been a very rewarding experience working with the multitude of students, professors, and numerous higher-level faculty at Washington University in St. Louis on the Solar Decathlon project," Bock says. "The number of students and faculty directly involved in this effort by the time it is completed will be over 150, hailing from the Schools of Architecture, Engineering, Business, Computer Science, Public Health, and Construction Management."



Brian Bock, vice president of sales and marketing at Dukane Precast, talks to a Washington University student working on the 2017 Solar Decathlon house. Courtesy of the PCI Foundation.

Washington University has group of four full-time faculty from the Schools of Architecture and Engineering working on different aspects of the project. They have instructed close to 100 architectural and engineering undergraduate and graduate students through the solar decathlon projects.

"This solar decathlon project in Washington University truly demonstrated the collaboration of academia and industrial partnership," Yin says. "Our faculty and students got tremendous benefits from it already. We hope to collaborate with PCI more closely to make the rest of the work successful, especially the shipping issues."

"The wide-ranging participation amongst individual PCI producers, our material suppliers and allies, and national and regional PCI staff from multiple states has been fantastic! We are enjoying the process and the camaraderie that has developed during this industry effort with academia. We look forward to great things in 2017 and beyond," Bock says.

#### Student call for posters for 2018 Convention

PCI is now accepting abstracts for poster sessions for the 2018 PCI Convention and National Bridge Conference at The Precast Show, February 20–24, 2018, in Denver, Colo. Abstracts are due by August 1, 2017. All abstracts and student posters should relate to the design, analysis, materials, production, erection, sustainable benefits, or maintenance and/or repair of precast concrete. Case studies, research, and project profiles are welcome. Abstracts will be peer reviewed, and final posters will be displayed during the exhibition at the convention.

Abstracts of 200 words or fewer must be submitted via email to education@pci.org. For more information, go to http://www.pci.org/Education/Student\_Education/. For inquiries, contact Alex Morales, PCI's education and membership managing director, at amorales@pci.org.

# Use of PCI's logo on products has specific requirements

Specific rules apply to using the PCI logo due to accreditation guidelines. The placement of any PCI logo could affect PCI's accreditation with the International Accreditation Service (IAS) because PCI is accredited by IAS as a Management System Certification Body in accordance with ISO/IEC 17021-1. Placing a PCI logo on precast concrete products ready to be shipped is not allowed per PCI policy 20.0.

This is not the same as a Product Certification Program in accordance with ISO/IEC 17065, which may require placing a logo on outgoing products. PCI certifies that plants have both developed a quality management system and have demonstrated conformance to the PCI Plant Certification Program through an accepted audit and evaluation process, but PCI does not certify individual products.

In addition, the PCI logo should not be used on plants' laboratory test, calibration, or inspection reports because such reports are considered products in this context.

For more detailed information on the rules and terms of PCI logo use, including access to PCI Member and Certification logos, go to http://www.pci.org/PCI \_Certification/Plant\_Certification/PCI\_Plant\_Certification \_Logo\_Usage/ or email QualityPrograms@pci.org.

# 2016 PCI Design Award winners now on website

PCI has posted the winners in the 54th annual PCI Design Awards online. The award-winning projects, including project details, project team, and photos, as well as honorable mentions, are available at http://www.pci.org/About\_PCI /Awards/2016\_Design\_Awards/2016\_Design\_Award \_Winners/.

Awards will be presented during the PCI Celebration of Excellence Breakfast, Friday, March 3, at the 2017 PCI Convention and National Bridge Conference in Cleveland, Ohio.

The 2017 PCI Design Awards submission site will open May 8, 2017.

#### 2018 PCI Convention and National Bridge Conference two calls for papers

PCI is conducting two calls for papers for the annual PCI Convention and National Bridge Conference to be held February 20-24, 2018, in Denver, Colo. Abstracts and papers will be peer reviewed, and accepted papers will be published in the proceedings.

For the first call for papers, papers and conference presentations are solicited on topics related to materials, design, production, or erection of precast or precast, prestressed concrete products under the two general themes of building construction and bridge construction. Abstracts are due no later than April 15, 2017.

For the second call for papers, papers and conference presentations are solicited on topics related to nanotechnology, specifically technologies that would contribute to the enhancement of material mechanical properties, durability, or repair techniques or the creation of intelligent concrete that would have application in the precast and precast, prestressed concrete industries. Abstracts are due no later than June 1, 2017.

For paper requirements, presentation requirements, and abstract submittal instructions for both calls for papers, go to http://www.pci.org/News\_And\_Events/PCI\_Convention/Call\_for\_Papers/. All presenters of peer-reviewed papers will be required to register for the 2018 PCI Convention and National Bridge Conference and present their papers in person. Registration will open in late 2017. For questions regarding buildings, nanotechnology, and general information, contact Roger Becker at rbecker@pci.org. For questions regarding bridges and transportation structures, contact William Nickas at wnickas@pci.org.



Wells Concrete's Wells, Minn., plant invited students and faculty from the PCI Foundation program at Minnesota State University (MSU) at Mankato to its barbecue. From left are MSU students Alex Fiebiger, Connor Bird, and Tanner Wild; Gregg Jacobson, vice president of operations at Wells Concrete; Mike Johnsrud, executive director of PCI Midwest; Jim Wilde, a professor at MSU; and Dusty Jones, EIT at Wells Concrete. Courtesy of Minnesota State at Mankato.

# PCI Foundation BBQ contest exceeds fundraising goal

A total of 1585 people celebrated the PCI Foundation national BBQ competition during September and early October 2016. In only its second year, the program raised \$63,155.90, beating the goal of raising \$50,000 in one year.

Plants who take part in the competition register their party and then send in the results to the PCI Foundation. This year, the largest donation made on behalf of a barbecue was from the Gate Precast plant in Winchester, Ky. Steve Schweitzer, vice president of operations at the plant, oversaw their event. "This was our second year participating in the PCI Foundation BBQ, and everyone at Gate Precast in Winchester, Ky., has really enjoyed it," Schweitzer says. "Not only do employees attend but so do family members, vendors, subcontractors, and other local precasters, so it is apparent this impacts on a more global stage than just our plant. Other than the delicious pig we roast, the employees enjoy what now is our annual bow-shooting competition to give one of our hunters bragging rights for the year. We have embraced and enjoy this partnership in raising funds and awareness for the PCI Foundation and industry."

Money for the PCI Foundation is raised in a number of ways at the different barbecue events, depending on how the company would like to run it. Some companies solicit sponsors for the event who send checks to the PCI Foundation in the plant's name. Others do fundraisers with employees, giving them a chance to dunk a general manager in a dunk tank or buy raffle tickets for an extra day or week off work. Some sell plates for \$5 apiece, and others have competitions that the employees can join.

Dean Gwin, Gate president and COO, says that the PCI Foundation plays a critical role in the future of the precast concrete industry, and the barbecue events serve as a vehicle for raising money and awareness. Gwin, a member of the PCI



Gate Precast in Hillsboro, Tex., won special honors for the "most unique" food item on the menu with a grilled alligator at its PCI Foundation barbecue. Courtesy Gate Precast Hillsboro.

Foundation Board of Trustees, is a driving force in the effort to educate architecture and engineering students about precast concrete construction.

"If we want to get serious about increasing the number of times precast is chosen for a project, then we have to educate our future industry leaders while they are in college," he said. "If we don't do it, then others will."

In addition to naming the Gate Precast plant in Winchester the overall winner, Gate Precast in Hillsboro, Tex., received the Family and Friends Award and the award for the "most unique" menu item for its smoked alligator; Gate Precast in Monroeville, Ala., received the award for most meat grilled; and Wells Concrete in Wells, Minn., received the Student Attendees Award.

Participants were Gate Precast plants in Ashland City, Tenn., Hillsboro, Tex., Pearland, Tex., Jacksonville, Fla., Kissimmee, Fla., Monroeville, Ala., and Winchester, Ky.; Kerkstra Precast in Grandville, Mich.; and Wells Concrete in Albany, Minn., Grand Forks, N.Dak., Rosemont, Minn., and Wells, Minn.

The Gate Precast plant in Monroeville, Ala., invited several special guests to the barbecue, including retiring PCI director of Architectural Services, Industrial Operations, and Safety, Sid Freedman, who celebrated his birthday at the plant.

The third barbecue competition will take place in September 2017. All precast concrete plants are invited to compete for bragging rights and a high-quality grill valued at \$2500. For more information, contact the PCI Foundation at info@pci-foundation.org.



The crew from Wells Concrete in Wells, MInn., grills at its PCI Foundation barbecue. From left are administrative assistant Danita McDowall, production supervisor Kurt Beuning, QC manager Chad Frieler, and finish operation supervisor Doug Schleicher. Courtesy of Wells Concrete.

#### Nomination period opens for 2017 PCI educator awards

PCI's educator awards program recognizes the work of academic professionals who exhibit a commitment to precast/prestressed concrete in their graduate and undergraduate classrooms. Nominations must include recommendation letters, an updated curriculum vitae or resume, and additional information. PCI's Educational Activities Council recommends that members begin work on their nominations now to have enough time to prepare a thorough nomination packet. A PCI Distinguished Educator and PCI Educator of the Year award are available. The awards are presented in the fall, and nomination forms must be submitted by June 1, 2017. Nomination forms are available online at http://www.pci.org/educator. For more information about the educator awards program contact Alex Morales, managing director of education and information, at amorales@pci.org.



Kim Wacker, corporate director of marketing and communications at Spancrete; Peter Finsen executive director and CEO of Georgia/ Carolinas PCI; and Dawn Parker, the market development managing director of PCI, participate in the 2016 PCI After Dark event at the PCI Convention and National Bridge Conference in Nashville, Tenn. Courtesy of PCI Foundation.



Attendees at the 2016 PCI After Dark at the PCI Convention and National Bridge Conference in Nashville, Tenn., participate in the silent auction, which will be held again this year. Courtesy of the PCI Foundation.

### **PCI Foundation After Dark tradition continues**

On March 3, 2017, the PCI Foundation supporters are invited to attend the third annual "PCI Foundation After Dark" event during the PCI Convention and National Bridge Conference, where attendees will have the opportunity for one-on-one conversation with professors teaching tomorrow's professional designers, engineers, and contractors about precast concrete.

"We have found the After Dark event to not only be fun way to celebrate what we have accomplished but also be a great way to wrap up the evening after a long day working at the convention," says Dean Gwin, PCI Foundation chairman. "We also hope that it gives some of our supporters a chance to meet the professors who are in the trenches teaching students about precast concrete and really making our programs work."

Money raised at the event will go toward programs at the schools of architecture, engineering, and construction management where the PCI Foundation has programs. Each of these programs is developed to satisfy both the curriculum needs of the university and expand knowledge of the local precast concrete industry. In addition to the cocktail party, attendees will have an opportunity to bid on items at a small silent auction.

Sponsors of the event are Thermomass, BASF, and Hamilton Form. Tickets are \$125 each and may be purchased on-site at the PCI Convention and National Bridge Conference registration desk or at the door.

## Research and Development Council releases reports on beam ledges, blast design, and interface shear transfer

Three research projects that were recently completed have had their final reports accepted by the PCI Research and Development Council. The reports are posted on the Members Only page of the PCI website at http://www.pci.org/ Members\_Only/Members\_Only/.

The three new reports are "Behavior and Design of Directly Loaded L-Shaped Beam Ledges" by North Carolina State University, "Development of a Simplified Blast Design Procedure and Response Limits for Load-Bearing Precast Wall Panels Subject to Blast Loads" by Baker Risk, and "Interface Shear Transfer of Lightweight Aggregate Concrete with Different Lightweight Aggregates" by the Missouri University of Science and Technology.



PCI employees tour the ATMI Precast plant in Aurora, III., November 18, 2016. In the back row from left are Toby Bryant, ATMI production manager; Greg Royer, ATMI assistant operations manager; Paul Blair, PCI chief financial officer; Dean Frank, PCI quality programs managing director; Jeff Appel, PCI controller; Royce Covington, PCI bookstore and shipping and receiving manager; Ken Kwilinski, PCI quality management systems coordinator; Dave Anians, PCI education and publications administrative assistant; Jim Lewis, PCI architectural services manager; Jason Krohn, PCI technical activities managing director; and Mike Pels, ATMI operations manager. In the middle row from left are Chris Zajac, ATMI engineer; Nikole Clow of PCI; Becky King, PCI marketing assistant; Brenda Davis, PCI staff accountant; Laura Bedolla, PCI technical services administrative assistant; Lisa Scacco, PCI publications manager; Cindi Ward, PCI membership services administrator; Bob Risser, PCI president and chief executive officer; and David Manny, ATMI QC manager. In the front row from left are Tressa Park, PCI senior graphic designer; Megan Lanning, PCI events and member services senior manager; Brenda Banks, PCI communications manager; Trice Turner, PCI sales administrative assistant; and Sherrie Nauden, PCI education manager. Courtesy of Jason Krohn.

#### PCI staff takes educational tours of Dukane, ATMI plants

Friday, November 18, 2016, PCI staff members toured precasting plants in suburban Chicago, Ill. Veteran and new employees a like got an inside look at the industry from Dukane Precast Inc. in Plainfield and ATMI Precast in Aurora.

The day started at Dukane, where Brian Bock, vice president of sales and marketing, discussed the company's history, precast concrete wall panels, and the significance of the many applications for precast/prestressed concrete products and conducted a tour of its newest manufacturing facility to witness the entire production process from start to finish. "We always enjoy having visitors in our production facilities," says Bock. "Recognizing the fact that the PCI staff who were planning on attending had precast IQs that ranged from very experienced and technical to brand new to the concept, we tried to provide plant tour content that would explain prestressed/precast basics to the least experienced within the group while still throwing around enough information regarding the innovative procedures and materials for the precast 'geeks' in the crowd."

After the Dukane tour, the PCI staff traveled to ATMI Precast for lunch and a presentation about the company and its projects and a question-and-answer session led by ATMI Precast's chief operating officer, Paul Carr, and vice president of marketing, Mike Walsh. "ATMI had a presentation which showed a variety of buildings in the area that they had worked on," says David Anians, PCI's education and publications administrative assistant. "It was really fun to see all of the ones that I already recognized or had been in."

After lunch, the staff toured ATMI's new batch plant and the production facility, where they saw precast concrete wall panels being poured. ATMI hosts tours for various sizes of groups about once a week. "We are very proud of our facility and our work. In addition, we always enjoy sharing experience and information," Carr says. "I think we recognized that a large proportion of the PCI admin and office staff had little or no exposure to precast concrete."

The tours helped add to nontechnical PCI employees' knowledge of the precast/prestressed concrete industry. "I now have a better context of the processes and work our members are involved in each day, which gives me a better understanding of how to connect the dots of our various publications and education programs," Anians says. "It was interesting to learn how the plants are sized and laid out, which was hard to imagine before seeing it in person."

Bock says, "I was impressed with the number of probing follow-up questions by several of the less-experienced PCI staff members. It demonstrated to me that they were truly interested in learning as much as they could about the industry."

## Next PCI Foundation Professors Seminar to be held in Denver

The next PCI Foundation Professors Seminar will take place May 16–18, 2017, at the University of Colorado Denver. In addition to providing information about teaching precast concrete design and construction, the seminar will examine how to develop interdisciplinary curriculum and focus on successful industry partnerships. The program features two half days in the classroom and a full day of tours including a precasting plant, a precast concrete construction site, and meeting in offices of architects who design using precast concrete.

This will be the third Professors Seminar sponsored by the PCI Foundation. "We really see this as a way to immerse faculty and their local partners in how to use all the resources available to teach precast concrete design and construction," says Rich Miller, PCI Foundation's Academic Council chair. "The program will cover not just the nuts and bolts of precast but also look at how to put a curriculum together that meets the requirements of the school while using locally available industry resources."



Bob Konoske of Coreslab leads attendees at the 2016 PCI Foundation Professors Seminar on a tour of USC Village, a large precast concrete project, during the program at the University of Southern California in Los Angeles. Courtesy of the PCI Foundation.

Because of the success of the Professor Seminar in previous years, the PCI Foundation Board of Trustees has decided to expand the program to include hotel rooms for professors who attend, in addition to free registration. The PCI Foundation encourages local partners to attend along with a professor to learn more about how to create a successful partnership.

Free registration for the program is available on the PCI Foundation website at www.pci-foundation.org.



Tekla software boosts the entire precast workflow from bidding to delivery. 3D visualizations and presenting alternative solutions help precast producers win more successful and profitable bids. 1200 Intrepid by High Concrete Group, LLC, Tekla North America BIM Awards 2016 Read more about this project: tek.la/highconcrete

