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For Immediate Release

PCI Announces 2022 Big Beam Winners

CHICAGO, September 1, 2022 – The Precast/Prestressed Concrete Institute (PCI) is pleased to announce that the University of Alabama – Team B has won PCI’s 2022 Engineering Design Competition, also known as the Big Beam competition.

Now in its 22nd year, the national competition teaches college students important structural engineering skills in an applied learning environment that will benefit them in their future professions.

Teams of students and a faculty advisor design, build, and test a 20-foot, precast, prestressed concrete beam. Local PCI-certified precast concrete producers act as mentors to the teams. Entries are judged on a variety of criteria, including the beam’s performance in stress tests that simulate the types of real-life conditions structural building and infrastructure components must endure to ensure life safety, as well as the quality of their analysis. Reports, and a video overview of their project.

“PCI Big beam competition is truly a great way to teach and make the students learn and experience the process of prefabrication, prestressing, detailing and engineering prediction/failure behavior,” said Sriram Aaleti, faculty advisor for the winning team and associate professor in the department of civil, construction and environmental engineering at The University of Alabama. “It’s a been a great experience to see the students enjoying themselves when designing and interacting with the precast concrete producer.” GATE Precast, Monroeville, Ala., was the sponsoring PCI member of the winning team.

“Congratulations to the students of the University of Alabama – Team B and to Professor Aaleti for winning the 2022 PCI Beam Big competition, and to the Lehigh University team for being awarded best video,” said Bob Risser, P.E., PCI president and CEO. “The hands-on experience of the Big Beam competition and working directly with PCI producers is something the students will carry with them throughout their careers. These students are the future of our industry. Thank you to all the PCI producer-members who worked with the students and faculty to further the knowledge of prestressed concrete technology.”

Fewer teams than usual entered this year because of the pandemic, so each team should be recognized for participating under challenging conditions. The winning team will be honored at the 2023 PCI Convention, February 21-25, in Columbus, Ohio.

The 2022 Big Beam competition was sponsored by [ALP Supply](#) and PCI’s [ASPIRE magazine](#). Cash prizes of up to \$2,000 are awarded to the top performers in efficient design, highest load capacity, and other categories.

Overall Results

First Place: University of Alabama – Team B

Faculty Advisor: Sriram Aaleti

PCI Producer: GATE Precast, Monroeville, Ala.

Student Team: Monica Amaral, Revanth Naidu Vasireddy, Bipul Poudel

Award: \$2,000, plus other prizes

Second Place: University of Minnesota Duluth

Faculty Advisor: Ben Dymond

PCI Producer: Molin Concrete, Ramsey, Minn.

Student Team: Sam Pommeranz, Alex Kulzer, Dalton Scharmer, Kal Jackman

Award: \$1,750

Third Place: University of Alabama – Team A

Faculty Advisor: Sriram Aaleti

PCI Producer: GATE Precast, Monroeville, Ala.

Student Team: Azize Ceren Satioglu, Maysam Bahmani, Rebekah Spoor

Award: \$1,500

Remaining finishers in alphabetical order. All teams received awards of at least \$1,000

Iowa State University

Faculty Advisor: Hartanto Wibowo

PCI Producer: Forterra, West Des Moines, Iowa

Student Team: Danny Vieceleli, Nayana Sreekumar, Bharath Melugiri Shankaramurthy

Lehigh University

Faculty Advisor: Clay Naito, PhD, P.E.

PCI Producer: Northeast Prestressed Products, Pottsville, Pa.

Student Team: Riley Conklin, Thomas Szewczyk, Tucker Bayda, Jillian Tamarazzo

University of Nebraska – Lincoln

Faculty Advisor: George Morcouc

PCI Producer: Coreslab Structures (OMAHA), Bellevue, Neb.

Student Team: Taylor Drahota, Jack Wilke, Luis Tuarez, Ammar Al Maabreh, Maryam Al-Bayati, Soumitra Das, Abdelrahman Awawdeh

Northern Arizona University

Faculty Advisor: Robin Tuchscherer

PCI Producer: TPAC (an Encon Co.), Phoenix, Ariz.

Student Team: Rebecca King, Logan Gallaga, Mohammed Alyaseri

Keith Kaufman Award for Best Report

Judges considers the overall presentation of the report when deciding on a best report winner. In addition to verifying the report contains all the requested sections and required signatures, judges look for clear presentation of data, professional look and formatting, and an overall well-written report.

Iowa State University

Faculty Advisor: Hartanto Wibowo

PCI Producer: Forterra, West Des Moines, Iowa

Student Team: Danny Vieceleli, Nayana Sreekumar, Bharath Melugiri Shankaramurthy

Award: \$500

Best Video

Requirements include a video taken of the precast concrete beam being tested. Teams are encouraged to be as creative as they wish when preparing the final video. Videos with a storyline related to the big beam competition are clear standouts and the judging committee may elect an entry to receive a best video award.

Lehigh University

Faculty Advisor: Clay Naito, PhD, P.E.

PCI Producer: Northeast Prestressed Products, Pottsville, Pa.

Student Team: Tucker Bayda, Riley Conklin, Thomas Szewczyk, Jillian Tamarazzo

Award: \$500

To see the student videos, please visit [PCI's Big Beam Channel](#) on YouTube.

Photo caption: University of Alabama – Team B won the 2022 Big Beam competition. From left to right are Monica Amaral, Bipul Poudel, Revanth Naidu Vasireddy, and faculty advisor Sriram Aaleti.

About PCI

Founded in 1954, The Precast/Prestressed Concrete Institute (PCI) is a technical institute for the precast concrete structures and systems industry. PCI develops maintains, and disseminates the Body of Knowledge for the design, fabrication, and construction of precast concrete structures and systems. PCI develops consensus base standards, industry handbooks, quality assurance programs, certification, research and development projects, design manuals, continuing education and periodical publications. PCI members include precast concrete producers, erectors, suppliers, professional engineers and architects, educators, students, and industry consultants who complement the wide range of knowledge of precast concrete. For more additional information, visit pci.org/howprecastbuilds.