From PCI Headquarters

T. Henry Clark Award goes to Fink in 2022

ennis Fink was presented with the T. Henry Clark Award at PCI's awards luncheon in September during PCI Committee Days in Rosemont, Ill. This award was established to recognize an individual, group of individuals, or firm that has delivered a resource that improves or enhances the quality of precast concrete products or processes. T. Henry Clark was a believer in quality and quality processes. This



award recognizes those who create or promote quality in a way that would have made Clark proud.

Fink is president of Northeast Prestressed Products, a PCIcertified precast concrete producer in Cressona, Pa.

Since graduating from the Leadership PCI program in 2010, Fink has played a crucial role in many PCI committees, including the Quality Enhancement, Productivity, and Plant Certification Committees. He has served as a committee chair and was the 2021 chair of the Board of Directors. While serving on the PCI board, he maintained active participation on several PCI committees, contributing to the advancement of current initiatives.

The Quality Summit, an annual event during the PCI Tour that promotes quality materials and techniques, is a direct result of his work on the Productivity Committee. Fink is also active on the regional level and currently chairs PCI's Mid-Atlantic Chapter. He has been instrumental in promoting PCI's personnel certification programs in this region, contributing to an increase in the technical knowledge of producer members' workforces.

Fink is widely known and respected for his knowledge ofand passion for—quality control and precast concrete, as well

as his leadership and vision. His dedication to producing quality precast concrete components and training plant personnel to be quality minded has benefitted both PCI and the industry as a whole.

A video honoring Fink is available at https://www.pci.org /PCI/About/Awards/Clark.aspx?hkey=19b5584a-2694-4875 -b185-feb899738c28.

Paper on hollow-core slab web-shear capacity receives 2022 Korn award

he 2022 Martin P. Korn Award was presented to Scott A. Asperheim and Benjamin C. Dymond for their paper "Factors Affecting Web-Shear Capacity of Hollow-core Slabs with Filled Cores," published in the July-August 2021 issue of PCI Journal. The Martin P. Korn Award is given to the best design or research paper appearing in *PCI Journal* during a single year.

The paper describes tests performed on 20 hollow-core slabs that were 12 in. (300 mm) deep to quantify the variation in web-shear capacity that can be gained. The results indicated that adequate composite action between the core-fill material and extruded slab was necessary to realize web-shear capacity gains. In addition, the prestressing strand jacking stress, concrete



Scott A Asperheim



Benjamin C. Dymond

compressive strength at transfer, transfer length, and moment demand can have a large effect on the web-shear capacity of a hollow-core slab.

2023 IRWIN J. SPEYER YOUNG ENGINEER AWARD CALL FOR NOMINATIONS

The Irwin J. Speyer Young Professional Engineer Award honors the legacy of Irwin J. Speyer by recognizing young professional engineers who have made significant contributions to PCI during their early careers and who demonstrate their intent to continue serving the precast concrete industry as Speyer did during his career.

The award will be presented in October at the 2023 PCI Committee Days Conference in Tampa. Fla.

Complete award details and the official nomination form are available at http://www.pci.org /PCI/About/Awards/Speyer-Award. Nominations must be submitted by May 1, 2023.



Paper on pretensioned beam high-cycle fatigue tests receives 2022 Zollman award

he winners of the 2022 Charles C. Zollman Award are Jörn Remitz and Martin Empelmann for their paper "High-Cycle Fatigue Tests of Pretensioned Concrete Beams." The paper was published in the January-February 2022 issue of PCI Journal. The Charles C. Zollman Award is for the best state-of-the-art precast concrete paper appearing in PCI Journal during a single year.



Martin Empelmann

The paper compares the predicted fatigue life of prestressed concrete beams based on experimental data with currently accepted design methods and specifications. The experimental data came from a literature review of previous studies as well as experimental testing of nine beams for this study, which included multiple concrete and tensile reinforcement configurations. The study



Jörn Remitz

found that current models for predicting fatigue life overestimate the fatigue life of embedded strands in pretensioned concrete beams, especially at low stress ranges.

2022 Lyman award goes to paper on 3-D scanning in precast concrete production

he 2022 Robert 📕 J. Lyman Award is being presented to Rongxuan Wang, Yinan Wang, Sonam Devadiga, Isaac Perkins, Zhenyu (James) Kong, and Xiaowei Yue for their paper "Structured-Light



Konq

Sonam Devadiga

Three-Dimensional Scanning for Process Monitoring and Quality Control in Precast Concrete Production." This paper is based on research supported by PCI's Daniel P. Jenny Fellowship program. It was published in the November–December 2021 issue of PCI Journal. The Robert J. Lyman Award goes to the best construction, production, or erection paper appearing in PCI Journal during a single year.





Yinan Wang





Rongxuan Wang

Xiaowei Yue

The paper presents the use of a structured-light, three-dimensional scanner to allow for efficient and real-time inspections of precast concrete specimens. he experimental program demonstrated that the proposed quality assurance system can quantitatively measure the surface finish of a precast concrete object, recognize and check the location of the embedded metal parts, and validate the overall geometry with the design.

Author of paper on strand bond properties wins 2022 Nasser award

The 2022 George D. Nasser Award goes to Anwer Al-Kaimakchi for the paper "Mechanical and Bond Properties of Grade 2205 Duplex High-strength Stainless Steel Strand." The paper, which was co-authored by Michelle Rambo-Roddenberry, was published in the July-August 2021 issue of PCI Journal. The George D. Nasser Award recognizes authors 40 years of age or younger



Anwer Al-Kaimakchi

who write outstanding PCI Journal papers on design, research, production, or construction.

2023 Norman L. Scott Professional Engineer Award call for nominations

The Norman L. Scott Professional Engineer Award honors the legacy of Norman L. Scott by recognizing professional engineers who have made significant contributions to PCI, the American Concrete Institute, the precast concrete industry, and the engineering profession at large.

The award will be presented in October at the 2023 PCI Committee Days Conference in Tampa. Fla. Complete award details and the official nomination form are available at http://pci.org/PCI /About/Awards/Norman L Scott. Nominations must be submitted by May 1, 2023.

This paper describes experimental testing to determine the mechanical and bond properties of Grade 2205 duplex high-strength stainless steel strand. In addition to a review of existing research, tensile testing of 25 strand specimens and pullout testing of six strand specimens was conducted. Results indicate that the high-strength stainless steel strands meet the minimum mechanical properties outlined in the recently published ASTM A1114 standard and the minimum pullout strength criteria recommended by the PCI Strand Bond Task Group and can be tensioned with typical chuck devices without adversely affecting strand strength.

PCI Journal paper wins 2022 T. Y. Lin Award

The T. Y. Lin Award was established in 1968 and is presented annually by the Structural Engineering Institute

of the American Society of Civil Engineers. The award honors the legacy of T. Y. Lin, a visionary structural engineer and expert in the use of prestressed concrete who played an influential role in the formation of PCI. The 2022 T.Y. Lin Award, which was presented at the 2022 Committee Days, goes to Micheal Asaad, David Gee, Maher Tadros, and Chungwook Sim for their paper "Flexural Design of Precast, Prestressed Ultra-high-



Micheal Asaad





Maher Tadros

performance Concrete Members," which was published in the *PCI Journal*, November–December 2020. Asaad and Gee

were also awarded the 2021 George R. Nasser award for their authorship of this paper.

The paper proposes flexural design recommendations for precast, pretensioned ultra-high-performance concrete members. Emphasis was placed on the tensile properties that allow for significant reduction of secondary and shear reinforcement while still achieving excellent durability behavior.

Luxury condo project takes home 2022 Freedman award

The Orchard, a luxury condominium project in Chicago, Ill., was honored with PCI's 2022 Sidney Freedman Craftsmanship Award. The annual award recognizes PCIcertified plants for excellence in manufacturing and craftsmanship of architectural precast concrete and glass-fiber-reinforced concrete (GFRC) structures and individual components.

The Lombard Architectural Precast Products Co. plant in Alsip, Ill., was selected by judges for manufacturing the proj-

The Orchard, a luxury condominium project in Chicago, III., was honored with PCI's 2022 Sidney Freedman Craftsmanship Award. Lombard Architectural Precast's plant in Alsip, III., cast more than 400 precast concrete panels for the project. Courtesy of Dave Burk Photography.



2023 T. Henry Clark Award Call for nominations

Nominations for the T. Henry Clark Award, to be presented at 2023 PCI Committee Days, October 4–8, 2023, at the J. W. Marriott in Tampa, Fla., should be submitted to qualityprograms@pci.org by June 1, 2023. The T. Henry Clark Award nomination form is available at https://www.pci.org /PCI/About/Awards/Clark.

The T. Henry Clark Award was established to recognize an individual, group of individuals, or firm that has delivered a resource that improves or enhances the quality of precast concrete products or processes. T. Henry Clark believed in quality and quality processes, and this award is to recognize those who create or promote quality in a way that would have made him proud.

For more information, contact Gary Wildung, the Quality Activities Council chair, at gary.wildung @fdgcolorado.com or Mike Kesselmayer, PCI managing director of quality programs, at mkesselmayer@pci.org. ect's exterior precast concrete panels with a limestone-like finish. The structure's intricate balcony design, roof-level cornices, door and window trim, and various lineal reveals required unique formwork with highly complex build-ups and precise detailing. Lombard Architectural Precast cast more than 400 precast concrete panels to realize the architect's design and detailing goals.

"The color, texture, and finishes of the precast were consistent throughout the entire project. Overall, it was very impressive," says Mike Mourad, vice president of customer service at International Precast Solutions, of River Rouge, Mich, who was a member of the award jury. "All of the different components consisting of 400 panels came together beautifully and elegantly to showcase the architect's intent."

"Our greatest accomplishment on this project was how the team overcame the design challenges," said Adam Lombard, estimator at Lombard Architectural Precast. "This project challenged the team here at all levels, from estimating and production to quality control, trucking, and project management. With precast concrete, repetition is the name of the game. When a manufacturer can produce many similar panels, the job can be quickly engineered and produced without a lot of interruption; however, this project had little-to-no repetition. Each separate piece required unique formwork; our production team was constantly adjusting siderails and formwork while trying to stay within the constraints of the basic molds."

The award is named after retired PCI director of architectural systems Sidney Freedman, who was a leading voice in precast concrete architectural design for more than 43 years with the organization. Read the project profile with further details, a video, and photos.

A video discussing Orchard is online at https://www .youtube.com/watch?v=QDtf3kStkOY.

2022 EPP Program participants recognized

Seven PCI-certified member plants were recognized for their commitment to continuous quality improvement through participation in PCI's Exceptional Precast Practices (EPP) program at PCI's awards luncheon during PCI Committee Days in September.

The EPP program is a voluntary, continuous quality improvement tool developed specifically for the precast concrete industry by PCI's Quality Enhancement Committee. The program offers both a road map for improvement efforts and milestones for measuring progress.

Here is how this voluntary program works: a plant fills out the self-assessment survey for each of the seven sections/modules: productivity, personnel, safety, field operations, sales and marketing, sustainable plant, and concrete. This process allows the plant not only to benchmark where they are today but also to review programs of proven worth that other PCI plants find valuable.

That process allows plant personnel to decide on a road map for the future. If this process is managed well, that road map becomes the goals and programs for improvement and

2023 Sidney Freedman Craftsmanship Award call for entries

PCI is accepting entries for the 2023 Sidney Freedman Craftsmanship Award. Launched in 2012, the award recognizes PCI-certified plants for excellence in manufacturing and craftsmanship of architectural precast or glass-fiber-reinforced concrete structures and individual components. Any kind, size, or type of structure and/or element may be entered. Judging is based on success in overcoming obstacles to production, solutions to formwork or finishing challenges, and quality of individual units. Therefore, entries should include source documents, shop drawings, production photos as well as finished project photos to fully demonstrate the complex solutions implemented for the project. For more information, visit http://www.pci.org/SFCA. The deadline for all entries is July 1, 2023.

2022/23 Big Beam Contest Call for Entries

The PCI Student Education Committee is inviting entries from students to participate in the Engineering Student Design (Big Beam) Competition for the 2022/23 academic year. Each student team must work with a PCI producer member to build a precast/prestressed concrete beam that is 20 ft long. The beams will be tested and prizes awarded for best performance in the stated areas. Students must discuss both the structural design and the concrete mixture proportions for the beam.

For more information, visit https://www.pci .org/BigBeam. All intending to submit a report must submit an application online at http:// www.pci.org/bigbeamapp. Final reports are due to PCI by June 12, 2023.

Welcome the students

• One of the things you may have noticed in the past few years is an uptick in students attending the PCI Convention as we add more Precast Studios to the PCI Foundation roster. This is a win-win for both the industry and the students. We get to meet some of the best and the brightest from the schools our industry is supporting, and the



Greg Force PCI Foundation Chair

students get to learn more about our industry in ways that would never be possible in the classroom.

Anusha Acharya, a 2022 student attendee, came from McNeese State University in Lake Charles, La. "We've been to a few plants, and that's been really interesting," she says. "Before taking the class, I didn't know anything about precast. This convention has been great. I would tell another student thinking about taking a precast studio that they should go for it. You get to know a lot of people through the convention and about the concrete world, and if you are a civil engineer you have to know about precast concrete."

Eric Matsumoto, professor at Sacramento State University, runs the Precast Bridge Studio, and he says he has multiple reasons to bring students. He says not only does the trip build camaraderie among students and within his program, but they also build relationships with other students nationwide. "They also are able to interact with leaders who impart wisdom and excitement about the industry," Matsumoto says. "The industry learning about technical advances and presentations is great, and the networking with industry through the show floor is life changing, as many of them

it provides the basis for accountability for achievement. The plant's benchmark score allows plant personnel to actually measure progress from year to year. There is no minimum score required. This is not a contest. Scores will not be published. There is no overall winner. All participating plants are provided with an annual certificate of participation and are recognized at the PCI Committee Days.

The 2022 participating plants were Conewago Precast Building Systems, Hanover, Pa.; Gate Precast Co., Ashland City, Tenn.; International Concrete Products Inc., Germantown, Wis.; Nitterhouse Concrete Products Inc., Chambersburg, Pa.; Northeast Prestressed Products LLC, Cressona, Pa.; Prestressed Casting Co.–Springfield plant, Springfield, Mo.; and Wells-Albany, Albany, Minn. end up wanting to pursue job opportunities within the precast industry."

Last year, one of the Sacramento State students ended his trip to the convention with six job offers. Many other students in Matsumoto's program went on to work with Caltrans and consulting engineers, ready to put the knowledge they gained at convention to work designing new precast concrete bridges.

Many of the students who attend the PCI Convention at the Precast Show use the time as an opportunity to present their work on the show floor in a poster session. Last year, bioengineering student Katie Bender of Clemson University in Clemson, S.C., showed her work in the architectural precast studio. "The tiles we use for my work in civil engineer are precast tiles that Tindall made for us," she says. "Precast gives us a great opportunity to work with tessellations, which is what we do. The tiles give us a unique ability to build different patterns and structures out of something that is cast, which is way easier for us to change the shape of our tiles. I never worked with concrete at all, so having precast as precursor to concrete really set my expectations high compared to other types of concrete."

Coming to the PCI Convention takes the theoretical work that a student has completed and makes it come alive by introducing them to people with knowledge and experience, helping them make connections, and showing them the new advances in the industry. So when you see a student in a session or on the show floor this year, be sure to give them a warm welcome to the precast concrete industry.

Pizzano recognized with 2022 Speyer Award

The Irwin P. Speyer Young Professional Engineer Award was presented to Charles Pizzano for his passion for engineering and commitment to PCI and the precast and prestressed concrete industry.

The award recognizes a PCI member who serves on at least one PCI committee and is a registered professional engineer or structural engineer for less than 15 years.



Charles Pizzano

After working for the engineering firm Simpson Gumpertz & Heger, he started his own firm, Pizzano Consulting Engineers, in 2014. Pizzano has actively served on many committees since joining PCI in 2010.

The award was presented in September at the 2022 PCI Committee Days Conference in Rosemont, Ill.

Certification exam waiting period shortened

PCI Policy 28, Quality Personnel Certification Program, mandates a minimum waiting period following a failed certification exam before the exam can be retaken. This is to allow a sufficient opportunity for study or reinstruction to improve the candidate's opportunity for success on the subsequent exam.

At its 2022 PCI Committee Days meeting in September, the PCI Board of Directors approved a revision to Policy 28 that reduces the waiting period between exams from 60 days to 14 days. This revision is effective immediately. A copy of the updated policy is available on the PCI website at https://www .pci.org/PCI_Docs/Certification/Personnel/Polpro28.pdf?_zs =D2IFa&_zl=P2pI3.

PCI Foundation After Dark returns to 2023 convention

After Dark, the PCI Foundation's Annual Fundraiser, lights up again in February at the 2023 PCI Convention at the Precast Show in Columbus, Ohio.

On February 23, the silent auction returns with a casino theme. Tickets are \$125 at the door. The party is from 9:30 p.m. to 11:30 p.m. at the Hyatt Columbus.

2022 Les Martin Award split three ways

Members of the PCI Erectors Committee Task Group, PCI Architectural Certification subcommittee, and Plant Certification committee and Quality Control Fast Team received the 2022 Leslie D. Martin Certificate of Merit Award, which recognizes a PCI-published document judged to be technically outstanding and worthy of special commendation.

The Erectors Committee Task Group was recognized for its work on *Structural Grouting of Load-Bearing Precast Concrete Elements: Issues and Solutions*. Members of the task group include Craig Durgarian, Brandon Farley, Ashley Fortenberry, Carl Harris, Bo Kusznir, Helmuth Wilden, and Gary Wildung. The Architectural Certification subcommittee was recognized for the PCI Architectural Certification Program. Its members include Dusty Andrews, John Arehart, Collin Bender, Dave Bourgault, Joe Bunkers, Jay Cariveau, Jimmy Crawford, Todd Culp, Scott Davis, Matt DeVoss, Matt Graf, Leon Grant, Mark Greiner, Carl Harris, Marvin Hartsfield, Cathy Higgins, Les Kempers, Stephen Kenepp, Steve Kloos, Edward Knowles, Jim Lewis, Joe Lombard, Lance Lorah, James Miller, Monty Oehrlein, Monty Overstreet. Michael Paris, Scott Robinson, Steve Schweitzer, Keith Wallis Jr., Gary Wildung, and Bradley Williams.

The Plant Certification Committee and Quality Control Fast Team was recognized for *The Manual for Quality Control for Plants and Production of Structural Precast Concrete Products.* Members of the committee and fast team include Patrick Carlin, Dean Frank, David Jablonsky, Ronald Harmon, Cathy Higgins, Venkatesh Iyer, Daniel Kennedy, Edward Knowles, David Malaer, James Miller, Edwin McDougle, Michael Paris, Paul Ramsburg, Ralph Schwarzer, Joel Sheets, Timothy Skiba, Jason Tucker, Colin Van Kampen, Keith Wallis Jr., Gary Wildung, and Mike Wolff.

The award was presented in September at the 2022 PCI Committee Days Conference in Rosemont, Ill.

Past PCI conference proceedings now online

Proceedings from PCI conventions and bridge conferences are now available on the PCI website at https://www.pci .org/PCI/News-Events/Call_for_Papers.aspx?_zs=D2lFa &c_zl=SGDK3. Proceedings from 2002 to present, except years when no program was assembled, are provided in Buildings/ Materials, Transportation, or Student tracks.

PCI Foundation adds new feature to website

A new feature has been added to PCI-Foundation.org to ensure university data, images, names, and events are easily found. A new Studios tab brings it all together, and visitors can search for specific information. The new feature helps users navigate the increasing number of PCI Foundation studios, which now stands at 43 across North America.

Alabama Team B wins 2022 Big Beam Contest

University of Alabama, Team B, has won the 2022 PCI Engineering Student Design Competition, also known as the Big Beam Contest.

The national competition, which is in its 22nd year, teaches college students important structural engineering skills in an applied learning environment.

Teams of students and a faculty advisor designed, built, and tested a 20 ft, precast, prestressed concrete beam, and local PCI-certified precast concrete producers acted as mentors to the teams. Entries were judged on a variety of criteria, including the beam's performance in stress tests that simulate the types of real-life conditions that structural building and infrastructure components must endure to ensure life safety and the quality of the team's analysis, reports, and video overviews of their projects.

Fewer teams than usual entered this year because of the pandemic. The winning team will be recognized in February at the 2023 PCI Convention at the Precast Show in Columbus, Ohio.

The 2022 Big Beam Contest was sponsored by ALP Supply and PCI's *Aspire* magazine. Cash prizes of up to \$2000 are awarded to the top performers in efficient design, highest load capacity, and other categories.

First place: University of Alabama, Team B, in Tuscaloosa, Ala.

Faculty advisor: Sriram Aaleti PCI producer: Gate Precast in Monroeville, Ala. Student team: Monica Amaral, Revanth Naidu Vasireddy, and Bipul Poudel

Second place: University of Minnesota Duluth

Faculty advisor: Ben Dymond PCI producer: Molin Concrete, Ramsey, Minn. Student team: Sam Pommeranz, Alex Kulzer, Dalton Scharmer, and Kal Jackman

Third place: University of Alabama, Team A, in Tuscaloosa, Ala.

Faculty advisor: Sriram Aaleti PCI producer: Gate Precast, Monroeville, Ala. Student team: Azize Ceren Satioglu, Maysam Bahmani, and Rebekah Spoor

Best Video: Lehigh University in Bethlehem, Pa.
Faculty advisor: Clay Naito
PCI producer: Northeast Prestressed Products in
Pottsville, Pa.
Student team: Tucker Bayda, Riley Conklin, Thomas
Szewczkyk, and Jillian Tamarazzo

Student teams to present Project Precast designs at PCI Convention

Student presentations, part of the Project Precast competition, will be held on Friday, February 24 at the 2023 PCI Convention at the Precast Show in Columbus, Ohio. This year there will be an additional team, for a total of six, and more students on each team. Prize money will be given for best presentation, people's choice, and wow factor.

Professors Seminar to be Miami in 2023

The 2023 Professors Seminar will be May 17 through 19, 2023, in Miami, Fla., in conjunction with Florida International University. Miami Lakes Inn will host the seminars. All professors who have received a grant, have current funding, or are looking to apply for a future PCI Foundation grant are welcome to attend. Details can be found at https:// www.pci-foundation.org/2023-professor-seminar-registration.

PCI's Calendar

Events

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PCI event details are subject to change. For the most current information, visit https://www.pci.org/events.

PCI West 2023 Annual Board Meeting World of Concrete, Las Vegas, Nev.	January 18, 2023
Georgia/Carolinas PCI Winter Meeting Columbia, S.C.	January 18-20, 2023
Florida Prestressed Concrete Association Winter Meeting Orlando, Fla.	January 25-26, 2023
PCI Mid-Atlantic Winter Membership Meeting The Hotel at Arundel Preserve, Hanover, Md.	February 17, 2023
2023 PCI Convention at the Precast Show Greater Columbus Convention Center, Columbus, Ohio	February 21-25, 2023
PCI Gulf South Spring Meeting Birmingham, Ala.	April 4-5, 2023
PCI Midwest Spring Meeting Kansas City, Mo.	April 18-19, 2023
PCI Productivity Tour Charlotte, N.C.	May 1-3, 2023
2023 PCI Northeast Meeting Westbrook, Conn.	May 9-10, 2023
PCI West 2023 Summer Board Meeting Woodland, Calif.	May 24, 2023

PCI personnel training and certification schools

Quality Control School event details are subject to change. If you have any questions about the Quality Control School schedule or need help completing a registration form, please contact PCI's education department at education@pci.org. Registration forms are available at https://www.pci.org/qc_schools.

Levels I and II	January 16-18, 2023 February 6-9, 2023 May 10-12, 2023 June 26-29, 2003 September 18-21, 2023 October 25-27, 2023 November 13-16, 2023	Las Vegas, Nev. online Chicago, III. online online Nashville, Tenn. online
Level III	January 30-February 2, 2023 May 9-12, 2023 August 14-17, 2023 October 24-27, 2023 December 11-14, 2023	online Chicago, III. online Nashville, Tenn. online
Certified Field Auditor	January 16-18, 2023 April 10-13, 2023 September 11-14, 2023	Las Vegas, Nev. online online
Certified Company Auditor	April 14, 2023 September 15, 2023	online online

Compiled by K. Michelle Burgess (mburgess@pci.org)