

OUR MEMBERS



Fattah Shaikh

UWM establishes scholarship in memory of Shaikh

Several colleagues of University of Wisconsin–Milwaukee (UWM) Professor Fattah Shaikh, who died unexpectedly in 2008, have set up a scholarship fund in his honor. Shaikh contributed significantly toward the advancement of engineering practice and application in the field of concrete; was named a Titan by PCI; and was recognized as a Fellow by PCI, the American Concrete Institute, and the American Society of Civil Engineers.

The group is soliciting a one-time contribution to allow for an endowed scholarship fund to be established at UWM. The goal is to raise at least \$50,000 for two annual scholarships to be awarded to talented civil engineering students who could benefit financially and continue in their field of study.

To make a contribution to the scholarship fund, please send checks payable to “UWM Foundation—Professor Fattah Shaikh Scholarship Fund” to Professor Al Ghorbanpoor, Department of Civil Engineering & Mechanics, University of Wisconsin–Milwaukee, 3200 N. Cramer Street, Milwaukee, WI 53211.

For more information, contact PCI technical director Jason Krohn at jkrohn@pci.org.

—Source: Department of Civil Engineering & Mechanics, University of Wisconsin–Milwaukee

Standard Concrete fabricates first Florida I-beam

The Florida Department of Transportation (FDOT) Structures Design Office announced that in December 2009, Standard Concrete Products of Tampa, Fla., completed the first Florida-I Beam (FIB). This is the first major change in beam design for FDOT in decades.

The beam, developed by FDOT, the Florida Prestressed Concrete Association (FPCA), and Maher Tadros of the University of Nebraska, is expected to be more efficient to fabricate, safer during construction, and more cost effective than those previously used.

A short video is available on the FPCA website at www.fpcaweb.org/videopage/fib2009.html.

—Source: Richard Stepp of FDOT and FPCA

BergerABAM hires Barta, Arthay

Aaron Barta and Antonio Arthay have joined BergerABAM at the Houston, Tex., office. Barta is working in BergerABAM's Offshore division on the Wheatstone LNG Tank consulting project for Chevron Energy Technology Inc. Arthay expands the engineering capabilities of the firm in the Houston area and will focus on port and waterfront facilities projects.

—Source: BergerABAM



Aaron Barta

Royal raises money for cancer cure

Royal Concrete Concepts has raised money as part of its participation in the local Race for the Cure event on January 30, 2010, in West Palm Beach, Fla., to help end breast cancer.

Cancer has hit close to home for the company. Its founder, Wally Sanger, lost a sister to breast cancer, says Royal's Renee Albert.

"So many people and their families have been affected by this type of cancer, and this event is a way for our fellow employees to pull together and support a notable cause," Albert says.

—Source: Royal Concrete Concepts Inc.



Antonio Arthay

Nitterhouse Concrete receives sustainable development award

Nitterhouse Concrete Products Inc. of Chambersburg, Pa., was one of eight organizations recently honored by the New Jersey Department of Community Affairs (DCA) and the Housing and Mortgage Finance Agency (HMFA) with an Excellence in Housing Award in recognition of its outstanding work in sustainable housing development.

Nitterhouse received the award for Outstanding Green/Sustainable Development for its work on Kent Avenue Apartments in Pennsville, N.J., a 101-unit affordable-housing development with total green construction.

The Excellence in Housing Award recognizes projects and professionals that are on the cutting edge of innovation in the field of affordable housing. This year's recipients were honored for outstanding achievement in the areas of green/sustainable development and urban in-fill.

—Source: Nitterhouse Concrete Products Inc.

Tekla BIM awards showcase exemplary projects

The first Tekla Global BIM Awards competition showcased building information models (BIMs) and descriptions of more than 40 construction projects around the world.

Entries to the Global BIM Awards competition were the winners of regional Tekla model competitions held by Tekla area offices and resellers during 2009. The competition was divided into three categories: BIM, steel, and concrete and other projects.

More information about the competition, the winners, and other entries is available at www.tekla.com/international/Tekla-global-BIM-awards/Pages/Default.aspx.

—Source: Tekla Corp.



John Wang

Spancrete gains VP of engineering services

Precast concrete structural engineer John Wang recently joined Spancrete Group Inc. as vice president of engineering services.

With more than 20 years of precast concrete engineering experience, Wang is responsible for the design of more than 250 precast concrete parking structures, as well as precast concrete stadiums, high-rise hotels, and industrial facilities. In his new role, Wang will oversee Spancrete's engineering standards and strategies, having a direct impact on the design and engineering specifications of every precast concrete project.

—Source: The Spancrete Group Inc.

Lafarge releases improved online LEED guide

Lafarge has introduced a newly improved version of its interactive online product guide for LEED project certification. The enhanced, easy-to-use product-evaluation web tool features more-comprehensive information on Lafarge construction materials that can be specified to help meet green building requirements under the LEED rating system.

Users can now research which lightweight aggregates and concrete materials best meet the environmental and performance needs of their project. The online guide can be searched by product or LEED credit category, and each search result will display the product name, image, and description; list the LEED credit categories it applies to; and provide an explanation of how the product satisfies credit requirements.

To learn more about the online Lafarge Product Guide for LEED Project Certification, visit certguide.lafarge-na.com.

—Source: Lafarge North America





From left are Terry Chung; Kim Seeber; Terry Dittrich; John Morgan; and Xiong Xue Yu, professor at Tongji and the symposium host. Courtesy of Kim Seeber.

Seeber and Chung present at symposiums in China

On November 20, 2009, PCI members Kim Seeber, a partner of Seaboard Services of Virginia Inc. in Taylors, S.C., and Terry Chung, a structural engineer for Spancrete Machinery Corp. in Waukesha, Wis., gave presentations at the fifth annual Shanghai Prestressing Symposium in Shanghai, China.

More than 100 professional engineers, academics, and precast concrete producers attended the symposium, which was hosted by Professor Xiong Xue Yu and the Tongji University Civil Engineering Department. Chung and Seeber were accompanied at the symposium by Terry Dittrich, international sales manager for Spancrete Machinery Corp., and John Morgan, managing director of Beijing Thermomass.

Seeber's presentation focused on the importance of communication among engineers, producers, suppliers, academics, and code officials in the precast concrete industry. Chung's presentation concentrated on the engineering principles concerning the use of Spancrete hollow-core in multistory, residential construction.

Earlier in 2009, Seeber and Chung also traveled throughout China to give presentations on the structural engineering principles associated with use of precast/prestressed concrete structures in high-seismic areas.

Seeber made his first presentations in China in 2007. In 2008, Seeber and Ned Cleland made additional presentations to Chinese structural engineers on the use of precast/prestressed concrete seismic-resisting moment frames. Since 2007, Seeber has seen the use of precast/prestressed concrete grow substantially in China.

—Source: Kim Seeber



David Darwin

Darwin honored in Cairo

PCI member David Darwin was honored as a Distinguished Visiting Professor at the American University in Cairo (AUC) in December 2009.

Darwin is the Deane E. Ackers Distinguished Professor of Civil, Environmental and Architectural Engineering and director of the Structural Engineering and Materials Laboratory at the University of Kansas in Lawrence.

While in Egypt, Darwin lectured at both AUC and the Housing and Building National Research Center on the subjects of sustainability, control of cracking and corrosion in concrete structures, and the bond of reinforcing steel to concrete.

—Source: David Darwin

Flood, Rule retire from Molin

Molin Concrete reports that Bob Flood and Rick Rule are retiring. Flood started at Molin in 1972 and served as manager of the maintenance department, outside sales representative, vice president in the sales department, and a member of the board of directors for Molin. Rule started his career at Molin Concrete in 1975 when he took a temporary position with the company. He served as drafting manager.

—Source: Molin Concrete

Accelerated bridge construction arrives in Utah

EnCon Utah LLC has been awarded its first project using the recently adopted standard UDOT Bulb-Tee (UBT) girder section.

The project, identified as the 2009 Provo City Lakeshore Drive Road and Bridge Construction Project, owned by the City of Provo, Utah, was originally designed by Civil Science in Lehi, Utah, with ten American Association of State Highway and Transportation Officials Type V girders. The bridge was converted to ten UBT-58s that are 98 ft (30 m) long and weigh about 84,000 lb (38,000 kg) each. This conversion was done through a value-engineering process proposed by EnCon Utah.

One unique aspect regarding the design phase was that the girders were value engineered to a smaller, less-expensive section while still providing ample capacity and performance. EnCon Utah utilized EnCon Design LLC in Denver, Colo., to facilitate the design of the section while fulfilling the structural requirements and coordinating them with the manufacturing facility's needs.

EnCon salesperson Chad VanKampen indicated that by accepting this value-engineering proposal, the customer would save more than 20% in manufacturing costs and nearly 18.5 tons (16.8 tonne) of cement. From a sustainability perspective, these savings equate to almost 18.5 tons of carbon dioxide emissions that would have been produced during the cement manufacturing process.

The general contractor for the project is VanCon Construction of Springville, Utah.

—Source: EnCon United



The Visco Probe, which was recently released in the United States, is designed to control the viscosity of self-consolidating concrete. Courtesy of Skako Inc.

Visco Probe makes its way to U.S.

After successful beta testing in Europe, the Visco Probe, designed to control the viscosity of self-consolidating concrete (SCC) during the mixing process, became commercially available in the United States last year.

The Visco Probe can be retrofitted to all counter-current (planetary) and turbine mixers. Concrete consistency is calculated and adjusted based on the probe-measured relative values for two basic mixing parameters, internal forces of mixing that are important to the workability and flowability of SCC. The system does not use power readings from the mixer motors. The Visco Probe inside the mixer transfers its data via wireless signals to a receiver/automatic process controller. The interface screen allows data entry with a real-time color graphic that illustrates progress toward the target consistency, then flashes a bulls-eye hit as it discharges the mixer.

Visco Probe technology automatically incorporates the influence on concrete consistency of all incoming materials and can register a change of consistency in the concrete resulting from the addition of as little as 26 fl oz. (770 mL) of water in a cubic yard of homogeneously mixed concrete.

The current operating unit in the United States is at Cretex Concrete Products Midwest plant in Marshalltown, Iowa.

Skako Inc. is the sole distributor for the Visco Probe in the North American market.

—Source: Skako Inc.



Finrock Construction Inc. recently broke ground on this 440-car parking structure in Dania Beach, Fla. Courtesy of Finrock.

Finrock breaks ground on second Dania Beach project

Finrock Construction Inc. was recently selected by Downtown Dania Beach Development LLC to provide the design and construction services for a 440-car parking structure for Dania Beach City Hall in Florida. The ground-plus-three-elevated-level parking structure is scheduled for completion by the end of 2010.

Finrock is currently constructing another Dania Beach parking structure for the South Florida Regional Transportation Authority. The precast/pre-stressed concrete for the structure will be provided by Finrock Industries Inc.

—Source: Finrock



Marshall Bassett



Brian Griffis



Hagen Lambert



Tom Newton



Vern Smith



Glen Switzer

Gate announces management changes, reorganizes sales divisions

Gate Precast/Gate Concrete Products, a subsidiary of Gate Petroleum Co., has named Hagen Lambert senior vice president of Operations at Gate Precast Co. in Oxford, N.C. Lambert previously served in this same capacity at Gate Concrete Products Co. in Jacksonville, Fla.

Tom Newton, previously vice president of Sales and Marketing for Gate Concrete, will assume the role of vice president of Operations at the Jacksonville manufacturing facility. In addition to his plant operations responsibilities, Newton will oversee the final months of construction on a state-of-the-art, 144,000 ft² (13,400 m²) enclosed plant. Gate Concrete will increase its capability to produce total precast concrete systems in addition to its current lines of structural and hollow-core production.

Brian Griffis, Southeast Sales and Marketing manager, has been tapped to lead the newly reorganized Southeast Sales and Marketing team. The reorganization of this division will lead to a marketing and sales approach to include both architectural and structural precast concrete marketing and sales efforts in the Southeast. His team will consist of Glen Switzer, Vern Smith, and Marshall Bassett.

—Source: Gate Precast Co.



Minnesota Governor Tim Pawlenty talks about job growth during the economic downturn on January 26, 2010, at Wells Concrete in Albany, Minn. Courtesy of Wells Concrete.

Minnesota governor promotes job growth at Wells

On January 26, 2010, Governor Tim Pawlenty addressed a crowd of nearly 200 employees, friends, family, and supporters of Wells Concrete at its new Albany, Minn., facility. Pawlenty was there to recognize the success of Wells Concrete's growth during the economic downturn.

"We are all in the business of creating jobs," Pawlenty says. "We must continue to work to make Minnesota more competitive for businesses. With strong leadership, a devoted workforce, and a community of support, Wells Concrete is a shining example of how the public sector and private sector can come together to help businesses grow."

The speech comes four months after Wells Concrete opened the new 185,000 ft² (17,200 m²) facility, creating 50 new jobs. Another 100 jobs are expected to be added over the next five years.

Speakers at the event included Wells Concrete CEO John Rivisto and Albany Mayor Dennis Sand.

—Source: Wells Concrete

High undertakes leadership transition

Jeffrey D. Smith has been promoted to president and chief executive officer of High Industries Inc., effective April 1. In this role, Smith is responsible for providing the leadership and overall direction to High Steel Structures Inc., High Concrete Group LLC, and High Steel Service Center LLC. He will also serve as co-chair of the executive committee of the High companies. Smith was most recently executive vice president of High Industries.

With this transition, W. Thomas Kennedy III, who currently serves as president and chief executive officer of High Industries Inc. and is a member of the Board of Directors, will assume the position of executive assistant to the chairman, S. Dale High. In this role, Kennedy will be responsible for assisting with high-level strategic initiatives and providing ongoing operational support and counsel to High and Smith.

—Source: High Industries Inc.



Jeffrey D. Smith



W. Thomas Kennedy III

Stresscon hosts tour for U.S. military

Stresscon Corp. recently hosted a plant tour and load-test presentation for 11 people from the U.S. Army Corps of Engineers, Fort Carson Division.

The tour of Stresscon's main plant in Colorado Springs, Colo., showcased its extensive architectural precast concrete manufacturing capabilities. The Corps of Engineers had an opportunity to view the production of some of Fort Carson's newest buildings, scheduled for completion in the fall of 2010.

In addition to the plant tour, Stresscon included a load test of a prestressed double-tee.

—Source: EnCon United

Oldcastle provides cells for new Miramar prison

Oldcastle Precast Modular is currently working with Clark Construction Group California LP to provide 200 precast concrete prison cells for the new 99,000 ft² (9200 m²) regional confinement facility—a brig—at Marine Corps Air Station Miramar.

The Naval Consolidated Brig Miramar will be a multistory structure comprising concrete masonry units with precast concrete cells. The design is a level 1 facility for 120 male service members and a level 2 facility for 80 female service members who are awaiting trial or serving sentences up to seven years. The brig's design allows for flexible configurations in order to accommodate divisions by gender, sentence length, disciplinary status, and special program or treatment needs.

Each of the 200 precast concrete cells that Oldcastle is designing and manufacturing will have a monolithic balcony. Oldcastle is supplying and installing the detention furniture, interior wall paint, exterior wall insulation, and formliner finish. The cells will be delivered to the site and erected.

The project will be designed to achieve LEED silver certification and to meet the military's Anti-Terrorism/Force Protection standards. When it is finished, the brig will absorb prisoners from other correctional facilities that will be closed from the 2005 Base Realignment and Closure Act. It is expected to open in February 2011.

The project architect of record is KMD Architects of San Francisco, Calif.

—Source: Oldcastle Precast Modular



Wes Dees

Dees new sales VP at Stress-Con

Stress-Con Industries of Kalamazoo, Mich., has appointed Wes Dees to the new position of vice president of Sales and Marketing.

Dees routinely speaks and participates in several major university architecture and engineering programs focusing on the application of precast/prestressed concrete products.

—Source: EnCon United

High's new ECast reduces weight

High Concrete Group LLC has introduced ECast, a weight-saving precast concrete that allows the company to strategically tailor the weight of precast concrete members to specific project requirements.

Formulated from lightweight sands and aggregates, ECast helps to directly reduce transportation costs and fuel use. High uses ECast to optimize truckloads, as when weight adjustments will allow two pieces to ship instead of only one. Weighing from 110 lb/ft³ to 149 lb/ft³ (1760 kg/m³ to 2390 kg/m³), ECast can also reduce the size of the crane needed to erect a building. Designing with ECast can allow architects to safely reduce a building's foundation and superstructure requirements.

ECast is available in High structural products, including parking structure double-tees, architectural backer mixtures, and the back wythes of insulated wall panels.

—Source: High Concrete Group

Oldcastle awarded New York projects

Oldcastle Precast Building Systems was recently awarded the floor and roofing systems for The Dempsey Apartments and Erbograph Apartments in New York, N.Y.'s Harlem neighborhood.

For the Dempsey project, Oldcastle will manufacture more than 86,000 ft² (8000 m²) of precast concrete hollow-core for the six-story building. The Dempsey will consist of 80 affordable-housing units in 78,000 ft² (7200 m²) of total living space. The project will provide affordable housing for those eligible by not exceeding 60% of the area median income.

The property is currently occupied by a small parking lot, playground, and basketball court used by the Oberia Dempsey Center. The center will be relocated to make room for the pre-war design that is intended to blend into the architecture of the surrounding block.

Oldcastle will also manufacture precast concrete stairs and landings as part of the \$1 million contract.

For the Erbograph Apartments, Oldcastle will manufacture nearly 57,000 ft² (5300 m²) of precast concrete hollow-core for the eight-story structure. The project will create sustainable affordable housing for low-income seniors. The hollow-core will support a green roof and outdoor terrace for residents and contribute to the quest for LEED silver certification.

Jonathan Rose Companies and Harlem Congregations for Community Improvement (HCCI) are codevelopers of Erbograph Apartments, a 65-unit, sustainable affordable-housing development for seniors earning no more than 50% of the area median income. It is being built on an old brownfield site. The \$24 million project is scheduled for completion in 2011. The city-owned site was occupied by an abandoned film storage warehouse known as the Erbograph Building, which was recently demolished to make room for the apartments.

Oldcastle will also manufacture precast concrete stairs and landings in addition to the hollow-core.

—Source: Oldcastle Precast Building Systems



NewCem slag cement from Lafarge is being used in the new Woodrow Wilson Bridge over the Potomac River. Courtesy of Lafarge North America.

NewCem used in new Woodrow Wilson Bridge

NewCem slag cement from Lafarge is playing a key role in one of the largest public works projects in the mid-Atlantic region. A partnership of the Federal Highway Administration (FHWA), the Maryland State Highway Administration, and the Virginia and District of Columbia Departments of Transportation, the new Woodrow Wilson Bridge is designed to eliminate one of the worst traffic bottlenecks in the country and reduce driving delays for hundreds of thousands of daily commuters.

The \$2.5 billion project involves a 7.5 mi (12 km) corridor beginning in Maryland and connecting to Virginia by a bridge over the Potomac River. It consists of replacing the original 5900-ft-long (1800 m) span that opened in 1961, rebuilding nearly 12% of the Capital Beltway and reconstructing four interchanges for easier entry and exit from the highway.

Lafarge's NewCem slag cement and Type I/II cement are used in concrete mixtures for the foundations, concrete pedestals, bascule span, and Virginia approach spans and abutments. Due to the large size of the bridge foundations and strict mass concrete requirements, slag cement was specified to help control shrinkage, creep, and thermal cracking. In addition, NewCem slag cement and Type II cement are used in the concrete for interchange construction and Lafarge fly ash was used to produce foam concrete for space filling and soil stabilization.

Construction of the Woodrow Wilson Bridge project began in 1999 and is now more than 80% complete, with the last interchange scheduled to be upgraded by 2013.

—Source: Lafarge North America

PCI members help build award-winning bridges

Five of the seven winners named in Portland Cement Association's (PCA's) Twelfth Biennial Bridge Awards Competition involved PCI members. The competition recognizes excellence in design and construction of concrete bridges. *Roads and Bridges* magazine was a cosponsor.

The 2010 program attracted 38 entries from Canada and the United States, covering a variety of structure types and construction methods. All structures were essentially completed between April 2008 and September 2009.

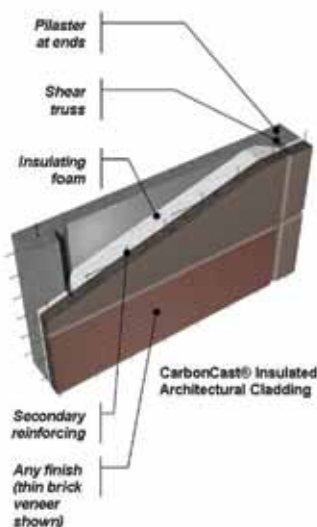
This year's winning projects are the Seattle Sound Transit Central Link Light Rail—Tukwila Segment in Seattle, Wash.; the pedestrian bridge over Interstate 5 in Eugene and Springfield, Ore.; the new I-35W bridge in Minneapolis, Minn.; the 106th Street and 126th Street bridges in Carmel, Ind.; Hawk Lake Bridge in Thunder Bay, ON, Canada; the Wilson Street Bridge Replacement in Batavia, Ill.; and the Gulf Intracoastal Waterway Bridge in Matagorda, Tex.

Bethlehem Construction Inc. was the precaster for the Seattle Sound Transit Central Link Light Rail—Tukwila Segment, Knife River Corp. was the precaster for the pedestrian bridge over Interstate 5, FIGG Bridge Engineers was the engineer for the new I-35W Bridge, Prestress Services Industries LLC was the precaster for the 106th Street and 126th Street Bridges, and Lafarge North America was the precaster and concrete supplier for the Hawk Lake Bridge.

Winning projects were selected based on creativity, functionality, aesthetics, sustainability, and economy in design and construction. The winners were recognized at the 2010 Concrete Bridge Conference on February 25 in Phoenix, Ariz. The next installment of the bridge awards is scheduled for 2012.

—Source: PCA

High introduces CarbonCast Insulated Architectural Cladding



Courtesy of High Concrete Group.

High Concrete Group LLC has introduced CarbonCast Insulated Architectural Cladding, new, patented thermally efficient precast concrete facade panels for commercial construction. The panels attach to the superstructure of high-rise office, university, health care, and other projects requiring continuous insulation with an *R*-value of 12 or higher to form the skin of the building.

The panels are the first of their kind and are constructed with a layer of rigid insulating foam sandwiched between two precast concrete wythes. Incorporating a patented pilaster design, the wythes are joined together by carbon-fiber shear trusses. The insulated exterior walls can accept reveals, rustications, returns, and other architectural shapes and may be pigmented or finished in virtually any color or texture.

The new insulated precast concrete cladding panels may be oriented vertically or horizontally and help control the carbon footprint of building projects by reducing the energy required to operate the building.

—Source: High Concrete Group

Gear joins IPC as regional sales manager

Curtis Gear has joined IPC Inc. as regional sales manager for Iowa. Gear's responsibilities include providing information on IPC's capabilities to architects, engineers, and general contractors and ensuring satisfaction with all company products and services. Gear will also represent IPC on bridge projects for the Department of Transportation.

—Source: IPC Inc.



Curtis Gear



Rotondo Weirich employees hold up the Quality Subcontractor Award that they recently received from Caddell Yates. Courtesy of Rotondo Weirich Enterprises Inc.

Rotondo Weirich credits processes for Quality Subcontractor Award

Rotondo Weirich Enterprises Inc. (RW) recently received the Quality Subcontractor Award from general contractor Caddell Yates.

Caddell Yates management nominates and then selects the winner based on the number of nonconformances, quality of finished product, compliance to Caddell Yates safety requirements, compliance to project specifications, compliance to documentation requirements, and responsiveness to contract and work issues.

RW project manager Bill Ray credits RW's active formal program of skills improvement, typically through the local junior college. "RW pays the tuition fees. This has a real payoff in productivity and quality."

In addition, RW performs weekly safety walks, focusing heavily on what it calls "near misses" in the daily plantwide meetings and addressing those issues immediately. It also requires all employees to take turns in selecting a relevant safety topic and making a brief presentation in the daily plant meeting. RW creates visual charts of critical items in each operation as a tool not only to focus on what is important but to use as a training tool for the employees.

The company has created an internal customer relationship between each department. Once tasks are completed, the downstream department employees inspect the work for accuracy and quality with the upstream employees before accepting the product. This process continues from the first task to the final task in RW's manufacturing process. "This creates a learning opportunity and provides employees with immediate feedback regarding the impact of their work on the overall process," says RW project manager Ayaz Ahmed.

—Source: Rotondo Weirich Enterprises Inc. 

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