Our Members

Alan H. Mattock

Alan Hanson Mattock of Issaquah, Wash., died June 6, 2014. He was 89.

A Titan of PCI, Mattock was born in Halifax, England, on January 2, 1925. "I was always fascinated by bridges, and this drew me into civil engineering and structural engineering," he told *PCI Journal* in 2009. In 1945 he received a BSc in engineering from Halifax Technical College. After completing his two-year National Service, he conducted research on prestressed concrete design at Imperial College at London University, receiving his MSc in 1949. "I was inspired to make prestressed concrete my primary interest through studies of Freyssinet's work on the Marne river bridges," he told *PCI Journal*. "Research on the behavior of prestressed concrete structures has engaged me throughout my career."

After graduation he moved to what was then British Guiana to serve for three years as a district engineer for the British Colonial Engineering Service. There he oversaw all government buildings, roads and bridges, drainage and irrigation works, and sea-defense works.

Returning to London in 1952, he became a lecturer in civil engineering at Imperial College. He received his PhD in 1955 for his research on the ultimate strength of prestressed concrete beams. His graduate advisor encouraged him to develop a course in prestressed concrete design. "This is how I came to be in academia, something that had not even entered my head previously," he told *PCI Journal*.

In 1957 Mattock moved to the United States to serve as principal engineer at the Portland Cement Association (PCA) in Skokie, Ill. At the time, PCA employees were able to choose whichever research topics they thought would advance concrete construction. "The project of which I was most proud and found most challenging concerned the design of prestressed, precast concrete bridges made continuous over multiple spans by reinforced concrete connections," he told *PCI Journal.* This research culminated in the testing of a half-scale two-span, two-lane bridge.

In 1964 Mattock took a position as full professor at the University of Washington in Seattle. In 1975 he received PCI's Martin P. Korn Award for his coauthored paper, "Shear Transfer in Reinforced Concrete with Moment or Tension Acting Across the Shear Plane." In 1990 he received a Special PCI Award of Commendation "in recognition that his published works have led to improvements in the design of prestressed concrete structures." In 1994 he received the Arthur J. Boase Award from the Reinforced Concrete Research Council "in recognition of a fruitful career of outstanding research contributions in reinforced and prestressed concrete resulting in many substantial advances, such as the introduction of high strength steels, design provisions for torsion, and the refinement of shear transfer design models." He received PCI's Distinguished Educator Award in 1999.

Mattock was probably best known for his work with the American Concrete Institute's Committee 318, Structural Concrete Building Code. He became a member of this committee in 1971 and twice served as chair of Subcommittee E on shear and torsion. He also served as a member of Subcommitee G on precast and prestressed concrete.
Mattock was an active member of PCI well into his 80s, most recently serving on the Ledge Advisory Committee and the Dapped Ends Task Group.
Sources: *Seattle Times*, *PCI Journal*

Michigan Tech recognizes Ahlborn for teaching

Tess Ahlborn, a professor of civil and environmental engineering at Michigan Technological University, received the 2014 Distinguished Teaching Award in the associate professor or professor category.

"Dr. Ahlborn is enthusiastic, almost to the point of being weird—and I mean that in the best possible way," wrote one of her students. "It's contagious! Absolute genuine enthusiasm. This woman loves concrete, and if you don't love it, it's okay, but you sure can appreciate it solely based on her absolute love for it."

Wrote another, "You want to come to class and would be crazy to miss it or sleep during it. It's a great folly and only hurts you to miss."

David Hand, chair of civil and environmental engineering, calls Ahlborn "well deserving of the Distinguished Teaching Award."

"She works hard at her teaching and takes it very seriously," he said. "And the students really like her. She's an excellent teacher."

Ahlborn, who joined the faculty in 1995, primarily teaches structural engineering courses focusing on concrete and the design of concrete buildings and bridges. As for her secrets to good teaching, she insists there aren't any.

"All you have to do is be fair and consistent and crack a joke once in a while," Ahlborn says. "When you get into structural details, students can get glassy-eyed pretty fast. A 30-second break can do wonders for bringing your class back."

Actually, there may be more to it than that. "I hate to say it, but I'm an entertainer," she says. Ahlborn makes a conscious effort to avoid speaking in a monotone when she lectures. She invites alumni to speak to her classes on life after Michigan Tech, and she regularly brings in current news articles relating to the course, not to mention chunks of concrete with stories to tell. Altogether, "it helps the students understand why what they are learning is important."

She also connects her material with the rest of the civil engineering curriculum, helping provide students with a cohesive body of knowledge that can launch their careers. "They start to realize how important their education has been," Ahlborn says. "I tell them, you and your Tech education, you will make us proud."

Yes, it's a lot of work, she says. "But the students empower me. I used to think I was there to inspire them, but a couple years ago, I realized, these guys are so engaged, they are inspiring me. And all of a sudden, my teaching changed. It's their reactions that keep me going."

Ahlborn received a cash prize of $2500.

—Source: Marcia Goodrich, Michigan Tech

Welcome to PCI!

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Robert Fleischman receives the 2014 NEES Outstanding Contributor Award for most influential NEES research project in the area of structural engineering in July during the Quake Summit in Anchorage, Alas., for his work on the research project "Development of a Seismic Design Methodology for Precast Floor Diaphragms." Courtesy of Linda Berglan/NEES.

NEES names Fleischman outstanding contributor

The research project "Development of a Seismic Design Methodology for Precast Floor Diaphragms" (DSDM) led by principal investigator Robert Fleischman at the University of Arizona was selected by the George E. Brown Network for Earthquake Engineering Simulation (NEES) to receive the 2014 NEES Outstanding Contributor Award for most influential NEES research project in the area of structural engineering.

In a statement informing Fleischman of the award, NEES says, "The project's exemplary outcome, producing a seismic design methodology for precast floor diaphragms, is a significant contribution to earthquake engineering and to society."

The DSDM Project was a PCI research project cofunded by the National Science Foundation (NSF) and the Charles Pankow Foundation and involved co-principal investigators Jose Restrepo of University of California, San Diego; Clay Naito and Richard Sause of Lehigh University; industry co-principal investigator S. K. Ghosh, and the 12-member DSDM Industry Task Group, including Tom D'Arcy, Ned Cleland, Neil Hawkins, Susy Nakaki, Joe Maffei, S. K. Ghosh, Doug Sutton, Harry Gleich, Roger Becker, Chuck Magnesio, Paul Johal, and Dave Dieter. Fleischman was honored in July during the Quake Summit in Anchorage, Alas.

Stresscon project earns LEED gold certification

The University of Colorado–Colorado Springs' (UCCS) Summit Village Residence Halls have earned LEED gold certification from the U.S. Green Building Council. Located in Colorado Springs, Colo., the Copper House and Eldora House residence halls help meet the university's need for residential housing, providing suites for an additional 192 students. The halls also house multipurpose rooms, administrative space, and the Office for International Affairs. These are the first LEED-certified UCCS residence halls, and the fifth UCCS building project to receive LEED certification.

A collaborative design team including H+L Architecture in conjunction with Hanbury Evans Wright Vlattas + Company for Architectural Design, Landscape Architecture and Interior Design, Martin/Martin Consulting Engineers, Rimrock (a BCER Group), Rider Levett Bucknall, Hines Inc., ME Engineering, Group 14 Engineering, Cator Ruma and Associates, and Stresscon participated in the creation of the approximately 60,000 gross ft^2 (5600 m^2) facilities.

Both Copper House and Eldora House are total–precast concrete structures. Stresscon provided all precast concrete components, including 806 pieces of floors, hollow-core, beams, columns, walls, shafts, and stairs. Stresscon also designed 7 in. (180 mm) thick gray exterior wall panels with loading-bearing edges on the non–load bearing side for fire protection in the residence halls.

Opened in August 2013, the residence halls incorporate sustainable design practices throughout with the use of water-efficient landscaping, local and recycled content and sourced materials, construction waste recycling, and roof fittings for future solar panels. In addition, UCCS provided additional funding through the sustainability department for the installation of an interactive display monitoring system that tracks real-time energy use.
—Source: Encon United

Meadow Burke appoints Crawford VP of Operations and Development

Doug Crawford

Doug Crawford has joined Meadow Burke as vice president of Operations and Development. In this newly created role, Crawford will be tasked with improving performance by leading collaboration between Meadow Burke's manufacturing and sales functions along with the company's business development activities to further strengthen its enterprise operating structure, improve leadership, and increase Meadow Burke's ability to execute its strategies to achieve long-term performance and growth.

Crawford joined Oldcastle, parent company of Meadow Burke, in 2008 as a vice president of Development for Oldcastle's Architectural Products Group and has led the Development Function for Oldcastle Building Products since 2011. Prior to joining Oldcastle, Crawford was a consultant with the Boston Consulting Group.

Crawford received his MBA from Northwestern University's Kellogg School of Management and his undergraduate degree from Penn State University.

—Source: Meadow Burke LLC

Marsh named BergerABAM president, CEO

BergerABAM announced that its Board of Directors has appointed M. Lee Marsh president and chief executive. He succeeds Arnfinn Rusten, who retired.

Since joining the firm in 1994, Marsh has spearheaded many of BergerABAM's seismic design and assessment projects. During his tenure as senior project manager and principal, his work has included design, assessment, project management, and business development for bridges; transit guideways; marine structures; buildings; and specialized projects, such as cranes for nuclear power plants. In addition to his operational and project duties, Marsh has served on the firm's Board of Directors since 2006.

Marsh also teaches a National Highway Institute course on the seismic design of bridges, serves on the Transportation Research Board's seismic design and accelerated bridge construction committees, and assists the American Association of State Highway and Transportation Officials Subcommittee on Bridges and Structures with seismic design code development.

—Source: BergerABAM

Meadow Burke acquires Bowco Industries

Meadow Burke recently acquired Bowco Industries. Bowco Industries is known for precision-engineered products for the utility and underground precast concrete industry. In addition to the Bowco product line, Meadow Burke is gaining a wealth of industry experience and knowledge and an expanded customer base through the acquisition.

"We see the synergy between Meadow Burke and Bowco as a win-win. The combined strengths of the two companies will logically diversify and grow our market share," says Doug Crawford, vice president of Operations and Development at Meadow Burke.

—Source: Meadow Burke LLC

Edith Smith

Cassandra Nicolai

Bobby Doyle

Gage Brothers hire Smith, promote Nicolai, Doyle

Gage Brothers has welcomed an additional engineer to its team and has promoted two employees into management positions. Edith Smith joins Gage Brothers as a senior engineer, Cassandra Nicolai has been promoted to human resources manager, and Bobby Doyle has been promoted to safety manager.

Smith has more than sixteen years of precast concrete experience and brings a wide range of product and technical knowledge to the Engineering department. Her experience includes engineering cladding, parking structures, data centers, stadiums, and detailing in high seismic areas. She holds a bachelor of science in structural design and construction engineering technology from Penn State Harrisburg.

Nicolai first joined Gage Brothers in 2010 as an intern in human resources. Upon the completion of her internship, she joined Gage Brothers full time as a human resources generalist. Nicolai will oversee the human resources department and staff, including recruiting and hiring, employee development, employee recognition, and the employee wellness program. She has her bachelor of business administration in management from the University of South Dakota.

Doyle joined Gage Brothers in 2011 and oversees safety education and compliance. His responsibilities include equipment training, safety orientation for new employees, OSHA regulations and reporting, and workers compensation claim management. He is OSHA 30-hour General Industry trained and has more than seven years of safety experience.
—Source: Gage Brothers

Finley named one of top structural firms to work for by ZweigWhite

Finley Engineering Group was named one of the "Best Structural Engineering Firms to Work For" by ZweigWhite.

The Best Firms to Work For award recognizes the top architecture, structural engineering, civil engineering, environmental, and multidiscipline firms in the United States and Canada based on their workplace practices, employee benefits, employee retention rates, and much more. Since the Best Firms to Work For list began in 2001, hundreds of outstanding architecture, engineering, and environmental consulting firms have been recognized for this achievement. This year's winners will be honored in September at the Hot Firm and A/E Industry Awards Conference.
—Source: Finley Engineering Group

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