



Grand Opening

Friday, April 29, 2022

**Civil and Environmental
Engineering Building**

301 N. Mathews Ave. | Urbana

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

GRAND OPENING

Civil and Environmental Engineering Building April 29, 2022

2:00 p.m. – 3:00 p.m. OFFICIAL RIBBON CUTTING CEREMONY

Remarks by leadership

3:00 p.m. – 6:00 p.m. OPEN HOUSE

Self-guided tours

Faculty and students will be present in several spaces to share information about the building and the type of research that will be conducted in the laboratories. Student-led demonstrations on the bridge will showcase the built-in sensors.

Floor Ribbon Cuttings with Group Photos

A separate ribbon cutting ceremony will be held for each floor. Donors and named space honorees are invited to join the group photo for their floor(s).

3:30 p.m. Basement

4:00 p.m. First floor

4:30 p.m. Second floor

5:00 p.m. Kavita and Lalit Bahl Smart Bridge

5:30 p.m. Third floor

6:00 p.m. – 8:00 p.m. COCKTAIL RECEPTION

Bridge and third floor common area

BASEMENT LABORATORIES

0012 Ernest J. Barenberg Concrete Materials and Pavement Instructional Laboratory

Alumnus and Professor Emeritus Ernest J. Barenberg (PhD 65) served for more than 40 years on the transportation engineering faculty at the University of Illinois Urbana-Champaign. During that time, he served as Associate Head for four years and as an Associate Director for the Federal Aviation Administration Center of Excellence for Airport Technology for more than eight years. Over the course of his long career, he made many contributions through consulting and research in his primary areas of expertise – concrete pavements, paving materials and railroad track systems. He was active in a number of professional societies and was a founding member and first president of the International Society for Concrete Pavements.

0017 Geotechnical Laboratory honoring Karl von Terzaghi, Ralph B. Peck and Don U. Deere

Engineering geologist Don U. Deere (PhD 55) and geotechnical engineer Ralph B. Peck, both professors of civil engineering at Illinois, and “father of soil mechanics” Karl von Terzaghi, a visiting research professor and frequent lecturer at Illinois, built the world’s premier geotechnical engineering program at the University of Illinois Urbana-Champaign. These pioneers shaped the education of geotechnical engineering leaders around the world, both directly and through their mentorship of the Illinois geotechnical engineering faculty who followed them — and redefined the field of geotechnical engineering in the process.

0019 LANGAN Geotechnical Engineering Laboratory honoring Edward J. Cording, Melvin T. Davisson, Gabriel G. Fernandez, Alfred J. Hendron, Peter A. Lenzini, Gholamreza Mesri and Alberto Nieto

The geotechnical engineering program at Illinois has its foundation in the earliest days of the university, when civil engineering students studied topics like tunneling and mining engineering. The early years of the geotechnical group were dominated by Ralph B. Peck, Thomas H. Thornburn, Herbert O. Ireland and Donald U. Deere, with Karl von Terzaghi as visiting research professor. Later waves of faculty further contributed to the growing reputation of geotechnical engineering at Illinois. Edward J. Cording, Melvin T. “Tom” Davisson, Gabriel G. Fernandez, Alfred J. “Skip” Hendron Jr., Gholamreza Mesri, Peter A. Lenzini and Alberto S. Nieto are among those names, and they are being honored with this named laboratory.

0021 Gary Parker Morphodynamics Laboratory

A member of the CEE faculty since 2005, professor Gary Parker is the only current faculty member to be named to the National Academy of Sciences, and only the third faculty member to receive this honor in the history of the department; the first was Nathan Newmark, and the second was Don U. Deere. Parker’s major research interests are the mechanics of sediment-laden flow in rivers and turbidity currents, and resulting flow-boundary morphodynamic interactions. His current efforts focus on delta



Top, L-R: Ernest Barenberg, Ralph Peck, Don Deere, Edward Cording, Melvin “Tom” Davisson, Gabriel Fernandez, Karl von Terzaghi.
 Bottom, L-R: Alfred “Skip” Hendron, Peter Lenzini, Gholamreza Mesri, Alberto Nieto, Gary Parker, John Pfeffer

evolution, bedrock-alluvial transitions, bedrock meandering, drainage network formation, advection-dispersion of tracer pebbles, formation of continental shelves, muddy tidal morphodynamics, role of washload in rivers, long-runout turbidity currents and natural dam formation in meteogenic travertine systems. He is a Fellow of the American Geophysical Union and has received numerous awards from the American Society of Civil Engineers (ASCE) and the International Association of Hydraulic Research.

0023 John T. Pfeffer Sanitation and Resource Recovery Laboratory

John T. Pfeffer served on the environmental engineering faculty at Illinois from 1967-1996. Pfeffer’s research included work in waste management engineering. He served as a trustee for the Urbana-Champaign Sanitary District for 18 years and worked with the Illinois Environmental Protection Agency. Pfeffer died in 2017 at age 81. The Sanitation and Resource Recovery (SR2) Laboratory will be a Bio-Safety Level II lab that will allow researchers access to urine for experimentation purposes thanks to a direct connection to a restroom on the first floor of the building. While researchers in other environmental programs also utilize human waste streams, Illinois’s lab will be unique in that it will provide researchers access to both a continuous supply of source-separated waste streams and lab space to conduct experiments in real time.

0030 Environmental Fluid Mechanics Laboratory

The department has a long history of leadership in the area of environmental fluid mechanics. A state-of-the-art laboratory dedicated to fluid mechanics research and instruction will ensure that CEE students receive an excellent education in this critical field and that Illinois retains its preeminence in this area.

FIRST FLOOR

1015 Vernon L. Snoeyink Water Chemistry Laboratory

During more than 35 years on the faculty of the Department of Civil and Environmental Engineering at the University of Illinois Urbana-Champaign, Professor Emeritus Vernon L. Snoeyink educated and inspired generations of students in the area of water quality engineering. His many honors include membership in the National Academy of Engineering. The Vernon L. Snoeyink Water Chemistry Laboratory features a glass wall so that visitors can view the activities going on inside. As such, this laboratory offers the most visible example in this new space of the work done in CEE.

1017 William J. and Elaine F. Hall Classroom

Professor Emeritus William J. Hall (MS 51, PhD 54) served on the CEE at Illinois faculty for 40 years. He was involved with many major engineering projects, including being part of the design team for the Trans-Alaska petroleum pipeline, many nuclear power plants, and major projects of agencies of the U.S. government, for example, Department of Defense protective structures and nuclear materials. His accomplishments included Distinguished Membership in the ASCE, being named a National Honor Member of Chi Epsilon, receiving the Housner Medal of the Earthquake Engineering Research Institute, and being elected to membership in the National Academy of Engineering — one of the youngest people ever elected. He led the department as Head from 1984-1991.

Robert H. Dodds Jr. Commons

Professor Emeritus Robert H. Dodds Jr. (MS 75, PhD 78) spent his career on the CEE at Illinois faculty, where he taught courses on structural analysis, finite element methods, fatigue and fracture mechanics and software development-design methods for civil engineering. He served as department head from 2004-2009, advancing the department significantly in that short time with the achievement of the M.T. Geoffrey Yeh Student Center and the establishment of the department's successful professional master's degree program. Dodds is a member of the National Academy of Engineering.

Robert and Glenda Johnson Student Collaboration Space

The Robert and Glenda Johnson Student Collaboration Space communicates CEE's commitment to diversity and invites students of all backgrounds – particularly the underrepresented population of students of color – to commit their talents and energy to the critical profession of civil and environmental engineering. CEE alumnus Rashod R. Johnson (BS 00, MS UIC 05), president and CEO at Ardmore Roderick in Chicago, shared this vision, and made a gift to establish this student collaboration area in honor of his parents, Robert and Glenda. The art in the space celebrates the beauty of Chicago and gives a reminder of home to the many students from the Chicago area.



L-R: Vernon Snoeyink, William and Elaine Hall, Robert Dodds, Mr. Robert and Dr. Glenda Johnson, the first Concrete Canoe team (1971)

Concrete Canoe Display

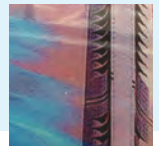
The first-ever concrete canoe competition took place in 1971, a year after Professor Clyde E. Kesler (BS 43, MS 46) tasked his students in the concrete design class with making a concrete canoe as an alternative to the standard high-strength cylinders or reinforced beams. Since that first class, and that first competition (against Purdue), the Concrete Canoe has been an annual tradition. Eventually, the concrete canoe races became an official ASCE event and now teams from around the world compete in the annual challenge. This display honors that history and celebrates the unique tradition that remains a part of students' lives to this day.

First Floor Art, selected by the UIUC Art and Architecture Committee

The painting titled "Windy City" by Mukaila Ayoade that hangs in the Robert and Glenda Johnson Student Collaboration Space provides a familiar landscape for the many CEE students who grew up in the city of Chicago.

The wooden sculpture by Barbara Cooper that hangs from the ceiling was inspired by the meander flume forms in the Hydro Lab, showing the dynamic energy of the water moving through them and the ability of water to move energy and materials.

Artist Shan Shan Sheng's glass art installation that extends along the hallway wall acknowledges the department's rich history and celebrates the exciting future of civil and environmental engineering.



SECOND FLOOR

2008 Ben Chie Yen Library and Maurice N. Quade Faculty Lounge

During 35 years on the CEE at Illinois faculty, Professor Ben Chie Yen educated and inspired students who became civil and environmental engineering leaders around the world. He worked with Ven Te Chow, pioneering the investigation of hydrologic problems from the perspective of fluid mechanics and the development of computer models in the holistic modeling of watersheds. Yen's contributions also include being one of the first researchers to work on urban storm water drainage. The room will house a number of rare and historical books related to the Water Resources Engineering and Science area which previously did not have a protected space in which to be displayed. The library will ensure that faculty and students gain secure access to these important hydraulic engineering texts as well as an appreciation for the contribution of one of the department's most eminent educators.

Father and son John Conrad Quade (BS 1895) and Maurice Northrup Quade (BS 25, MS 27) are two of the department's earliest and most notable alumni. As practicing engineers in the early years of the 20th century, they made fundamental contributions at a time when civil and environmental engineers were building our nation's infrastructure and shaping modern society as we know it. They were students as the University of Illinois Urbana-Champaign was building its international reputation for civil and environmental engineering innovation and leadership. Maurice N. Quade was described by his fellow partners at Parsons Brinckerhoff Quade & Douglas as "an engineer's engineer" and "the best structural engineer in the country." He worked on some of the firm's most important bridges in the 1930s, '40s and '50s. A colleague described him this way: "Maurice Quade was a father to me. ... I could always go into his office and discuss things in my brash way and would always come out with a friendly, well-thought-out answer. Sometimes he even made me believe it was my idea." (from "Parsons Brinckerhoff Through the Years: 1885-2012")

2012 Illinois Alumni Employees of ExxonMobil Conference Room

For many years, graduates of CEE at Illinois have gone on to exciting careers at ExxonMobil. In addition, the company's commitment to philanthropy in higher education has benefited generations of civil and environmental engineering students. In recognition of this strong partnership, CEE at Illinois alumni and friends who are current or retired ExxonMobil employees have contributed to fund this conference room.

2015 Milhouse Family Classroom

The Milhouse Family Classroom was established by a gift from alumnus Wilbur Milhouse (BS 94, MS 95) and his wife, Dawn. The classroom name has a dual meaning: in addition to Milhouse's personal family, it also refers to the individuals who work at Milhouse Engineering & Construction Inc., the firm he founded in 2001. A longtime supporter of the University of Illinois and the



L-R: Ben Chie Yen, Maurice Quade, Wilbur Milhouse III, Jerry Benson, Steven Fenves, John Melin

Department of Civil and Environmental Engineering, Milhouse is a recent winner of the CEEAA Distinguished Alumnus Award and, in 2020, received the Grainger College Award for Distinguished Service for “entrepreneurship that advances opportunities for minorities in the engineering field, exceptional commitment to mentoring children and lifting up disadvantaged communities in the United States and abroad, and for dedicated support and service to the University of Illinois.”

2016 Jerry and Terry Benson Faculty Lounge

Jerry Benson (BS 75) retired after 30 years with the U.S. Army Corps of Engineers, Construction Engineering Research Laboratory. He founded and was one of four owners of Isotech Laboratories Inc., which used elemental isotopes for a variety of environmental applications. The company grew to establish branches in Egypt, Australia and Brazil. When Isotech was sold in 2011, Benson retired to Lafayette, Colo. He made a gift to name the faculty lounge in honor of his late wife, Terry, who passed away in 2017. Benson died in 2020.

2017 Graduate Student Office Suite

Graduate student offices have long been in critically short supply in the department. These new office spaces will ensure that the top students and future leaders of the profession who pursue advanced study and research in the department will have adequate spaces in which to work. In addition, the availability of new office spaces will help greatly with graduate student recruiting. One of the suite’s workstations is named in honor of former faculty member Steven J. Fenves (BS 57, MS 58, PhD 61), an early pioneer in the use of computers for structural engineering applications. While on the CEE faculty, he taught courses in the design of engineering information systems and computer methods in civil engineering. Fenves is a member of the National Academy of Engineering.

2018 John W. Melin Faculty Office

The late CEE alumnus and Professor Emeritus John W. Melin (MS 56, PhD 61) was a member of the CEE at Illinois faculty for more than 30 years. He specialized in structural dynamics and analysis of roof shells, and application of computers to civil engineering problems. One of his early achievements was the development of structural engineering software for analyzing guyed towers. Melin was a notable addition to the Construction Engineering and Management program, and hundreds of students learned the fenced bar chart scheduling technique he pioneered in his Construction Planning and Project Controls course. In addition to being a dedicated teacher, he was generous with his time and service to the university, department and community. Melin died in 1999.



L-R: James Clark, Leonard Lopez, Albert Valocchi, David Byrd

2020 James G. Clark Faculty Office

As a member of the department faculty for 20 years, professor James G. Clark taught generations of CEE students from 1936-1956. He provided structural engineering consulting on projects throughout the state of Illinois and beyond, including the Chesapeake Bay Bridge and the College of Law building on the University of Illinois campus. When he left the department to pursue a consulting career, Clark founded a prominent civil engineering consulting firm, Clark-Dietz. Not done building his legacy, Clark left Clark-Dietz in 1981 and became a key founder and sustaining supporter of ESCA Consultants, a civil and structural engineering firm located in Urbana, Ill., where he worked until his retirement in 1989.

2022 Leonard A. Lopez Faculty Office

Leonard A. Lopez earned his B.S. (1962) and M.S. (1963) in civil engineering from Tufts University and his Ph.D. (1966) from the University of Illinois. After a year of teaching at Lehigh University, he spent his career in CEE at Illinois, retiring in 1998. Lopez was an early leader in the use of computers for structural engineering applications. He taught, conducted research, published, consulted and lectured on computer-related topics for over 30 years. During his tenure, Lopez advanced the department's capacity in the area of computer use in engineering education and his courses became the model for similar courses taught at many other universities in the United States. Software systems that resulted from his research include SCAN, POLO, FINITE and SICAD. In 2019, Lopez received the Distinguished Faculty Award from the CEE Alumni Association.

2024 Albert J. Valocchi Faculty Office

Albert J. Valocchi joined the CEE at Illinois faculty in 1981. He was Associate Head/Director of Graduate Studies from 2004-2012, and served as Interim Head from 2020-2021. As a professor, Valocchi taught undergraduate and graduate courses in water resources engineering, groundwater hydrology and contaminant transport, groundwater modeling and numerical methods. During the course of his career at Illinois, he was honored with many awards for teaching, including the Campus Award for Excellence in Graduate and Professional Teaching in 2015. Valocchi was named a Fellow of the American Geophysical Union in 2009, an honor bestowed on no more than 0.1 percent of society members.

2025 Byrd Family IT Closet

Alumnus David L. Byrd (BS 01, MS 06) is the Vice President of the CEE Alumni Association Board of Directors, and an active supporter of the department. He is District Manager for Envista Forensics, where he brings over 20 years of combined engineering, construction and management experience to his work. The Byrd family opted to fund this technology hub in recognition of its vital function to the overall building, supporting those that use the facility for their research and education.



David Lange, Neil Hawkins, Douglas Foutch

2026 David A. Lange Faculty Office

Professor Emeritus David A. Lange holds a B.S. (Valparaiso University 1981) in civil engineering, MBA (Wichita State University 1984), and Ph.D. (Northwestern University 1991) in civil engineering. Lange joined the CEE at Illinois faculty in 1992 where he taught graduate and undergraduate courses in civil engineering materials, repair of civil structures, systems engineering and engineering economics. He served as Associate Head of the department from 2004-2010 and was also Director of the Center of Excellence for Airport Technology. Lange's expertise and research in the area of cement-based materials attracted significant attention and funding from federal and state agencies, industry partners and research organizations. Throughout his career, he received several research awards and was named fellow of the American Concrete Institute and the American Ceramic Society. Lange retired from the department in 2020.

2028 Neil M. Hawkins Faculty Office

Alumnus and Professor Emeritus Neil M. Hawkins (MS 59, PhD 61) joined the CEE at Illinois faculty in 1991, serving as Head from 1991-1996 and Interim Head from 2001-2002. Hawkins taught graduate and undergraduate courses in structural analysis, reinforced and prestressed concrete design, steel design, earthquake engineering and bridge design. He authored the book Reinforced Concrete Structures in Seismic Zones (American Concrete Institute, 1977). Hawkins is Chapter Honor Member of Chi Epsilon, Distinguished Member of ASCE and Fellow of the Structural Institute of ASCE, Honorary Member and Fellow of the American Concrete Institute, Titan and Fellow of the Precast/Prestressed Concrete Institute, and Legend of the Post-Tensioning Institute.

2030 Douglas A. Foutch Faculty Office

Douglas A. Foutch holds a B.S. from the University of Illinois Urbana-Champaign (1970), M.S. from the University of Hawaii (1972) and Ph.D. from the California Institute of Technology (1976), all in Civil Engineering. He joined the CEE at Illinois faculty in 1976, where he taught classes in design of steel structures, design of structural systems, structural dynamics and earthquake engineering. He has served as a consultant on several major projects, including a major cable-stayed bridge crossing the Mississippi River and an elevated mass transit system in Taiwan. Among his honors are the Haliburton Education Leadership Award, the Arthur M. Wellington Research Prize and the Norman Medal. Foutch was named a Distinguished Visiting Scholar by the Japan Society for the Promotion of Science in 1994.



L-R: Nathan Newmark, Jon and Judith Liebman

2032 Nathan M. Newmark Distinguished Faculty Office

The faculty and students who have passed through the CEE department at Illinois throughout its long history have shaped the nation, defined the future of the profession and made Illinois synonymous with great civil and environmental engineering. The era of the mid-20th century in particular has been called the Golden Era of CEE, when Nathan M. Newmark served as Head. During those decades, top engineering minds from around the world converged on Champaign-Urbana, drawn by its already impressive reputation and to the stellar research and teaching faculty Newmark was assembling. The resulting connections and collaborations led to unprecedented advances in science and engineering. It was largely this epoch that forged the world-class reputation the department enjoys today. Newmark's individual contributions to the field of structural engineering led to a long list of honors and a reputation as one of the most influential figures in American civil engineering history.

Judith and Jon Liebman Gallery

Judith S. Liebman began her career at the University of Illinois Urbana-Champaign in 1972 as an assistant professor in the Department of Civil and Environmental Engineering, later moving to the Department of Mechanical and Industrial Engineering. From 1986 to 1992 she served as Vice Chancellor for Research and Dean of the Graduate College. Professor Jon Liebman joined the CEE at Illinois faculty in 1972 as a professor of environmental engineering. During his tenure he was Associate Head of the Department from 1976-1978, and Head from 1978-1984. Among his many honors are being named the first recipient of the UIUC College of Engineering Rose Award for Teaching Excellence; Distinguished Engineering Alumnus Award, University of Colorado at Boulder College of Engineering; Tsuan Hua Feng Distinguished Lecturer, University of Massachusetts; and induction into the Society of Scholars, The Johns Hopkins University. Avid collectors of contemporary glass art, the Liebmans donated an art glass piece entitled "Engineer," by British artist David Reekie, that is displayed in the Liebman Gallery.



Engineer, by David Reekie

"Reekie is known for his humorous figures that show aspects of the human condition, usually with an underlying serious social commentary. This work, with its almost-robotic figure with a screwed-on arm, is a reflection on under-utilization of highly-educated technical skill." – Jon Liebman

THIRD FLOOR

3012 Sidney Epstein Alumni Welcome Center

A gift by CEE alumnus Mickey Kupperman (BS 57, MS 58) and his wife, Janice, has established this Alumni Welcome Center in honor of Mickey's 45-year career and 60-year friendship with Sidney Epstein (BS 43). Epstein (1923-2016) is remembered in Chicago for both his engineering accomplishments and his philanthropy. A. Epstein and Sons Inc. has been credited with pioneering the "design-build" concept of construction. The firm worked on such projects as the Federal Center and the Harold Washington Public Library, both in Chicago, and the Maine Montparnasse Tower in Paris. Epstein was elected a Fellow of the American Society of Civil Engineers in 1959 and a Fellow of the Society of American Registered Architects in 1969. He was also co-founder, with Elliott Donnelley, of Chicago Youth Centers, Chicago's largest private urban youth organization.

3015 Graduate Student Office Spaces

Along with the expansive office area on the second floor, this suite of workstations will ensure that the graduate students at CEE will have adequate spaces in which to work.

3017 J. L. Merritt Structural Design Laboratory

J.L. Merritt Structural Design Laboratory was funded by a gift from an alumnus who preferred to remain anonymous, in honor of former professor and alumnus J.L. Merritt (MS 55, PhD 58) and Merritt's wife, Eleanor. Merritt served on the CEE faculty at Illinois from 1958 until 1968, teaching and doing research in structural engineering. In 1968, he left academia and became an engineering consultant. His area of expertise was in evaluating and developing design criteria for seismic and other accidental effects on a variety of structures, including nuclear reactors. Merritt died in 2018.

3018 Alfredo H.-S. Ang Faculty Office

Structural engineer Alfredo H.-S. Ang (MS 57, PhD 59) joined the CEE faculty in 1959 and retired in 1988. He is now Emeritus Research Professor at the University of California-Irvine. During his career Ang combined academic research and teaching in several aspects of structural mechanics and structural engineering. His major effort was directed toward structural safety by applying probability and reliability concepts in structural engineering and he made significant pioneering contributions to probability-based safety analysis and design applied to a variety of problems in structural engineering. Ang is a member of the National Academy of Engineering. In 2003, he received The Grainger College of Engineering Alumni Award for Distinguished Service in recognition of his "notable and pioneering contributions to the development of rational safety criteria for the design of structures by applying probabilistic methodology and for his dedicated service to his profession."



L-R: Mickey Kupperman and Sidney Epstein, J.L. Merritt, Alfredo Ang, Barry Dempsey, Marshall Thompson, Moreland Herrin, Ellis Danner

3019 Transportation Faculty Classroom Honoring Barry J. Dempsey and Marshall R. Thompson

During their long careers at the University of Illinois, alumni and professors emeriti Barry J. Dempsey (BS 60, MS 66, PhD 69) and Marshall R. Thompson (BS 60, MS 62, PhD 64) educated and inspired generations of students who became leaders in transportation engineering. Dempsey served on the CEE faculty for 35 years, retiring in 1999. In addition to his role as educator, Dempsey was the founding Director of the Advanced Transportation Research and Engineering Laboratory and helped expand the facility during his leadership, before stepping down in 2004. Thompson joined the faculty in 1964 and retired in 1996, though he is still active in research and consulting, and maintains an office in Newmark Lab. In addition to research and teaching, Thompson's career has afforded him field experience with the Illinois Division of Highways and contractors, and consulting experience in airfield and highway pavements, soils and materials, and railroads.

3020 Moreland Herrin Distinguished Faculty Office

A member of the CEE at Illinois faculty for more than 30 years, professor Moreland Herrin was a leader in the transportation engineering group and an early contributor to the science of pavement engineering. Specializing in bituminous materials and pavement design, Herrin was described by a colleague as the "go-to asphalt guy" for the Illinois Department of Transportation for many years. He founded the Illinois Bituminous Paving Conference, served as president of the International Association of Asphalt Pavement Technologists in 1978 and was recognized as the Illinois Asphalt Paving Association's Man of the Year in 1985. Having practiced engineering as a consultant and researcher before teaching at the university level, Herrin brought critical expertise and knowledge of the industry to his role in academia.

3022 Ellis Danner Faculty Office

Professor Ellis Danner earned his B.S. in Railroad Civil Engineering (1930) and M.S. degree in Civil Engineering (Highways) (1949) from Illinois. Danner worked for the Illinois Division of Highways until 1940, when he was called to active duty in the U.S. Army. He joined the CEE at Illinois faculty in 1946, where he served until his retirement in 1974. Danner's research was primarily in the areas of highway administration and management of professional and technical personnel, project management and pavement materials. He was noted for early studies on the effects of soil types and characteristics in the design and construction of pavements. Danner was considered to be an excellent teacher and developed several new transportation courses. Many of his students became prominent transportation engineers both in practice and academia.



John Haltiwanger, LeRoy Boyer, Sharon Wood, L. Richard Shaffer

3024 John D. Haltiwanger Faculty Office

Since the mid-1960s, the U.S. Coast Guard (USCG) sent its officers to UIUC to earn degrees in civil engineering. For most of them, the faculty member who helped define their experience was Professor John D. Haltiwanger, who served as adviser to the Coast Guard students from 1965-1980. Haltiwanger served as Associate Head for Undergraduate Affairs in CEE from 1967-1983, and was a member of the USCG Academy Academic Advisory Committee from 1980-1983. He was honored with many notable awards during his career, including a Public Service Commendation and the Meritorious Public Service Award from the USCG, the Bliss Medal of the Society of American Military Engineers, and election to Honorary Membership in the ASCE. Throughout his career, he was widely considered to be one of CEE's most gifted teachers by both students and faculty.

3026 LeRoy T. Boyer Faculty Office

LeRoy T. Boyer joined the CEE at Illinois faculty in 1966, after earning a B.S. (1960) and Ph.D. (1966) from University of Minnesota. He was part of the Construction Engineering and Management group and centered his research on design and management of information systems; estimating, bidding and cost control; construction process risk allocation; and construction automation. An active member of the ASCE, Boyer was a Registered Professional Engineer in Illinois and also served as consultant on many projects, including NASA's static inflation tests of the Passive Geodetic Earth Orbiting Satellite series.

3028 Sharon L. Wood Faculty Office

Sharon L. Wood (MS 83, PhD 86) began her career as a professor on the CEE at Illinois faculty in 1986. In 1996, she joined the University of Texas at Austin faculty and rose to the position of chair of the Department of Civil, Architectural and Environmental Engineering, and later dean of the Cockrell School of Engineering. In 2021, she was named executive vice president and provost of UT Austin. Wood is a structural engineer whose research interests focus on improving the structural response of reinforced concrete buildings, design and evaluation of bridges, and development of passive sensors for infrastructure systems. She was elected to the National Academy of Engineering in 2013.

3030 L. Richard Shaffer Faculty Office

Louis Richard "Dick" Shaffer (MS 57, PhD 61) taught for nearly 40 years on the CEE at Illinois faculty, beginning as an instructor in 1955 and appointed chair of the Construction Engineering group in 1961. During his tenure the curriculum for construction engineering and management was revamped so as to be based on more scientific principles associated with computer usage, namely operations research, systems engineering, linear program and queuing theory. In 1963 he obtained funding to establish the U.S. Army Construction Engineering Research Laboratory, which, under his direction, grew to a world class research facility.



L-R: Edwin Gaylord Jr., 1924 Chi Epsilon, 2019 CEEAA Board of Directors

3032 Edwin H. Gaylord Jr. Distinguished Faculty Office

Edwin H. Gaylord Jr. graduated from Wittenberg College in Springfield, Ohio; received a bachelor's degree from Case Institute, Cleveland, Ohio; and a master's degree from the University of Michigan at Ann Arbor. Gaylord joined the civil engineering faculty at UIUC in 1956 where he stayed until his retirement in 1971. He co-authored a number of structural engineering textbooks, including Handbook of Structural Engineering and Design of Steel Structures. Among other honors, Gaylord was awarded the G. Brooks Earnest Award for outstanding contributions to the civil engineering profession by the Cleveland section of the American Society of Civil Engineering.

Chi Epsilon Alpha Chapter History Display

Chi Epsilon is an honorary civil engineering fraternity established in 1922 by students at the University of Illinois with the support and guidance of Dean M.S. Ketchum, Professor Ira O. Baker and Professor C. C. Williams. The 25 charter members took steps to expand the organization into a national fraternity and in following years additional chapters were established at a number of universities around the country. Chi Epsilon recognizes outstanding students and graduates for their scholarship, character, practicality and sociability in order to foster excellence, connectivity and engagement in the civil engineering community.

CEE Alumni Association Board of Directors Collaboration Area

The CEE Alumni Association was established in 1963 to support "faculty, staff, students and alumni and to inspire lifelong loyalty and pride among alumni and friends by developing and enhancing their continued relationship with the department." The CEEAA remains actively engaged with the department, hosting several alumni events each year, supporting student activities and honoring exceptional faculty and alumni. In support of CEE's plan to expand and upgrade its facilities and in recognition of its long history of service to the department, current and past members of the CEE Alumni Association Board of Directors have funded this named collaboration space located next to the Alumni Welcome Center.

KAVITA AND LALIT BAHL SMART BRIDGE

The Kavita and Lalit Bahl Smart Bridge has already become a campus landmark. The 2,200-square-foot suspension bridge connects the new CEE Building with the Newmark Lab Yeh Center. The bridge is a comfortable space with collaborative and lounge areas, and is fully instrumented to make it a teaching tool and showcase for the latest infrastructure monitoring technology. The bridge itself is fully funded thanks to a generous gift by Kavita and Lalit Bahl.

Lalit is an alumnus of Illinois' Electrical and Computer Engineering department who earned his master's degree in 1966 and his Ph.D. in 1969. Kavita's late first husband, Ravindar K. Kinra, earned his Ph.D. in 1968 from CEE at Illinois. Gratitude for their education and the research assistantships the two men received during that time motivates Lalit and Kavita's continued philanthropy to this day.

BRIDGE FEATURES:

Permanent Weather Station

A permanent weather station provides wind information such as direction, speed and barometric pressure, allowing for monitoring of wind events and their effects. Using data collected from the anemometer during periods of high wind and comparing it to data from the other sensors, faculty and students can analyze how wind speed and direction impacts bridge measurements (for example, accelerations and strain).

Roof Vibration Sensor Arrays

Vibration sensor arrays on the roof measure horizontal motion. Data is collected via cables running through the ceiling to the data acquisition and storage hub located in the CEE Building.

Floor Vibration Sensor Arrays

Vibration sensor arrays located along beam lines on the floor level measure horizontal and vertical motion, providing data from which accurate vibration motions can be computed and linked to weather, pedestrian traffic or other structural stimuli.

Expansion Sensors

Expansion sensors monitor the expansion joints on the abutments.

Dynamic Glass

Dynamic glass windows adapt from clear to dark in sunlight, helping to moderate the interior temperature.

Geothermal Foundations

Inside four 60-foot deep geothermal energy foundations, fluid circulates through high density polyethylene pipes to heat or cool before leading to a heat pump, providing heating and cooling to areas of the new building. The foundations are instrumented with thermistor strings, fiber optic cables and strain gauges to continuously collect data to monitor the performance of the system as well as thermo-mechanical response of the ground. Collected data will be used to evaluate system performance and for classroom analysis.



Lalit and Kavita Bahl



L-R: Chester Siess, William Gamble, German Gurfinkel, Mete Sozen, Arthur Robinson

Piano

Professor Emeritus Al Valocchi and his wife, Anne Silvis, made a gift of the piano located at the entry to the bridge to encourage students to take occasional breaks from their studies and enjoy themselves.

BRIDGE COLLABORATION SPACES

A series of furniture groupings on the bridge define separate collaboration spaces, named in honor of esteemed faculty from throughout CEE's history:

Chester P. Siess Smart Bridge Gateway Student Collaboration Space

Chester P. Siess (MS 39, PhD 48) spent nearly 30 years on the CEE faculty, serving as Head from 1973-1978. While at Illinois, he conducted research that provided the basis for much of the thinking behind the building codes for reinforced and prestressed concrete. His many honors include membership in the National Academy of Engineering.

William L. Gamble

William L. Gamble (MS 61, PhD 62) taught on the department faculty from 1963 until his retirement. He taught undergraduate and graduate courses in the areas of reinforced and prestressed concrete, plus a course on the fire resistance of structures. He is co-author of the book "Reinforced Concrete Slabs" (Wiley, 2nd Ed., 2000).

German Gurfinkel

German Gurfinkel (MS 57, PhD 66) has taught in the department for more than 50 years. He officially retired from the CEE at Illinois faculty in 1998 but continues to teach classes. Gurfinkel has received numerous awards for teaching, research and professional practice in the field of Structural Engineering.

Mete A. Sozen

Mete A. Sozen (MS 52, PhD 57) made a profound, lasting impact on students and colleagues during his 65-year career in structural engineering research and education. He taught at Illinois from 1957-1994, where he is remembered as a transformative and inspiring educator and a brilliant engineer.

Arthur R. Robinson

Arthur R. Robinson (MS 53, PhD 56) taught for five years at the University of Minnesota before returning to Illinois to teach on the CEE faculty. He specialized in the fields of dynamic elasticity, numerical methods analysis, non-linear structural problems, earthquake ground motions and numerical solutions of ordinary differential equations.

Thank you to all the donors whose
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