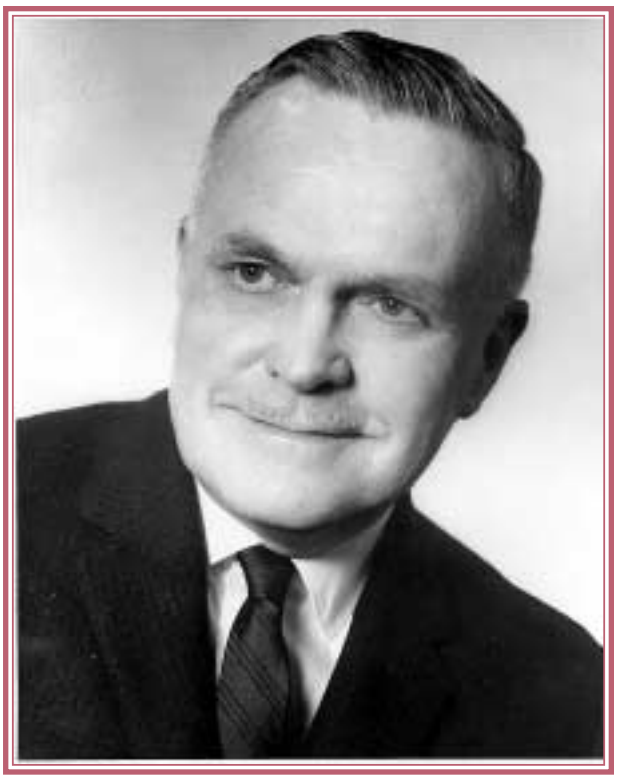
A Lasting Impact

Edwin H. Gaylord contributed much to the steel design community.

By Jenifer Golec



If James M. Fisher could have picked a grandfather, Edwin H. Gaylord would have been his top choice.

"He was such a nice man," said Fisher, who had Gaylord as a professor at the University of Illinois at Urbana-Champaign while working on his Masters and Ph.D. during the mid-60s. "He was the kind of teacher that made me want to excel in his classes because of my deep respect for him."

Fisher, vice-president of Computerized Structural Design in Milwaukee, even credits Gaylord with his continuing career in the steel industry.

"He's one of the reasons I kept my fond affection for steel."

Gaylord, co-author of the popular steel textbook "Design of Steel Structures," died November 2, 1998 in Urbana, IL. He was 95.

His illustrious career began almost 75 years ago when he received his AB from Wittenburg University in Springfield, OH. He went on to receive his BSCE in 1926 from Case School of Applied Science (now Case-Western Reserve University); his MSCE from University of Michigan in 1936; and his D.Sc. (honorary) from Wittenberg University.

He worked at the Mt. Vernon (Ohio) Bridge Company from June 1926 to September 1927; and then joined the faculty of Ohio University's Civil Engineering department. He became a full professor at Ohio University in 1945. In 1956, he moved on to the University of Illinois at Urbana-Champaign as a professor of civil engineering. Since 1971, he was a professor of civil engineering, emeritus.

He was active with several engineering associations, including the American Society of Civil Engineers (ASCE), the American Society for Engineering Education (ASEE) and the American Institute of Steel Construction (AISC).

At AISC, Gaylord served on the Committee of Specification for Design, Fabrication and Erection of

Structural Steel for Buildings from 1960 to 1984. Bill Milek, former vice president of engineering at AISC, said Gaylord was "the principal guiding hand in the development of the AISC column formula."

"(The column formula) was a tremendous change from the formulas that existed in the past," Milek said. The formula, which is still in use today, is used to evaluate and predict the load a column can carry.

Milek also spent time with Gaylord outside of work, getting together for lunch during Christmas for several years.

"Ed was one of the greatest gentleman I've ever known," Milek said.

Milek said that Gaylord was an authority on bins and hoppers, as evidenced by his book "Design of Steel Bins for Storage of Bulk Solids" which he co-authored with his brother C.N. Gaylord in 1984.

"(It is) about the best and (most) definitive book on that subject," Milek said.

Gaylord was also the co-author of the "Design of Steel Structures" (now in its 3rd edition) with his brother and University of Illinois at Urbana-Champaign professor emeritus, James E. Stallmeyer.

"When we were working on the book he never criticized my egregious ideas," Stallmeyer said. "He was always constructive."

Gaylord authored several other books, including the "Structural Engineering Handbook" (now in its 4th edition) with his brother; and "Design of Latticed Steel Transmission Structures" (1991).

Donald R. Sherman, who also attended University of Illinois at Urbana-Champaign during the mid-60s, still has some of his notes from Gaylord's doctoral classes.

"He was absolutely one of the best teachers I ever had," Sherman said. "He has certainly been a guiding light for a lot of us." Sherman, who recently retired, was a long-time professor at the University of Wisconsin-Milwaukee.

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Gaylord has been the recipient of many awards during his career, including ASEE's Western Electric Fund Award (1971); AISC's Special Citation Award (1988); ASCE's Shortridge Hardesty Award (1990); and ASCE's Structural Division Innovations in Transmission Structures (1992). He was awarded the G. Brooks Earnest award from the Cleveland Section of the ASCE in October 1998. His daughter, Marjorie Bardeen, accepted the award on his behalf at the presentation.

Bardeen, manager of the Education Office at Fermi Lab in Batavia, IL, described her father as a man with a great sense of humor who was always very interested in his students. "He wasn't wrapped up in his research."

She said her father was always striving to help people learn new things. "When I was a child, he would drive me crazy when I asked him a question," she said. "He never gave me an answer. He wanted me to think it out."

Bardeen said that her father was always on the cutting edge–in terms of fashion, technology and even which stereo was the best on the market. "He kept up with what was happening."

She said he enjoyed many hobbies throughout his life including singing, acting, reading and playing the piano. Bardeen said there was a "wonderful picture in the CASE yearbook of him at the piano."

She said one of her favorite memories of her father was of him and her son on Gaylord's 85th birthday. "My son got him an electric train set," Bardeen said. "The two engineers were on the floor putting together this train set."

Peter C. Birkemoe, now a professor at the University of Toronto, took several of Gaylord's classes during the mid-60s as a Ph.D. student, assisted him in his classes and later took over teaching of his "Behavior of Steel Design" class at the University of Illinois. Birkemoe said Gaylord was a "gentleman, a scholar and a phenomenal teacher."

Birkemoe said that Gaylord had an easy way with students. "His lectures were so good that students didn't notice when they had ended."