John Kevern Receives ESCSI's Frank G. Erskine Award

Pictured John Kervern accepting award from ESCSI Chairman Daron Brown

John Kevern, Ph.D., P.E., senior researcher at the National Laboratory of the Rockies, is the latest recipient of ESCSI's Frank G. Erskine Award.

ESCSI Chair Daron Brown of Arcosa Lightweight presented the award during the Institute's Midyear Meeting awards reception and dinner on May 13, 2026, in Dallas, Texas. The longtime award honors individuals whose work has advanced the understanding and use of expanded shale, clay and slate lightweight aggregate.

Broad Reach in Concrete Research

During the introduction, Brown told the audience that the prepared biography he was reading from captured only a small snapshot of Kevern's work.

"I can tell you from personal experience, the bio John sent us could have gone on five times longer," Brown says.

Brown recalls first meeting him more than 20 years ago, when Kevern was a new professor at the University of Missouri-Kansas City and was becoming widely recognized for his work in pervious concrete. Brown says that early work helped establish Kevern as a concrete researcher willing to explore specialized applications and push beyond conventional questions.

That broader technical curiosity later extended into lightweight aggregate.

“He’s always taken an interest in lightweight,” Brown says. “He’s been very pro-lightweight for us and has done a tremendous amount of work.”

Brown says that interest was not limited to the lab. He recalls Kevern even being excited about having lightweight concrete masonry units in his own Kansas City home.

Established Uses, Emerging Material Questions

In accepting the award, Kevern pointed to internal curing as one of the first areas where lightweight aggregate reshaped his understanding of concrete performance. He described internal curing as “one of the most generational changes to concrete we could have ever imagined.”

In a short interview after the ceremony, he connected that history to newer work involving supplementary cementitious materials and critical minerals.

“It’s an interesting industry, from concrete boats and Stephen Hayde’s early work to critical minerals for advanced batteries and artificial intelligence infrastructure,” Kevern says. “It’s interesting how a seemingly simple industry can be very impactful.”

To explain, he points to lightweight aggregate fines. Kevern says ESCS producers already pyroprocess shale, clay and slate, and those geologic materials may contain small amounts of critical materials depending on the source. Some of those materials may become concentrated in lightweight aggregate fines.

“What I would love is to collect fines that represent a broader swath of geology for us to do some characterization of the components that are in there,” Kevern says.

He says the opportunity is still exploratory and would require careful characterization because the materials occur at very small levels. But he also says the question is timely as national attention turns to meeting the growing need to find reliable domestic sources for vital minerals used in batteries, semiconductors and other advanced technologies.

Why the Recognition Matters

The award presentation connected two parts of the lightweight aggregate story. One is the material's established role in concrete performance, including internal curing and structural lightweight concrete. The other is the possibility that ESCS materials, including lightweight aggregate fines, may have a role in future research involving next-generation cement, concrete and critical materials.

That connection is what makes Kevern's recognition significant for ESCSI. His remarks did not present lightweight aggregate as a finished story. They presented it as a proven material with continuing technical relevance and new questions still worth asking.

About the Frank G. Erskine Award

The Frank G. Erskine Award recognizes individuals, companies, associations and other partners outside the expanded shale, clay and slate industry who have demonstrated the value of ESCS lightweight aggregate through design, promotion, research or implementation. Named for ESCSI's first executive director, the award honors contributions that have helped broaden understanding and practical use of ESCS lightweight aggregate across concrete, construction and related technical fields.

About the ESCSI

The Expanded Shale, Clay and Slate Institute (ESCSI) is a technical resource for ESCS lightweight aggregate, supporting engineering practice through research, education and standards development. ESCSI works with producers, engineers, designers, specifiers, researchers and industry partners to advance the understanding and application of expanded shale, clay and slate lightweight aggregate across concrete, geotechnical, masonry, horticultural, stormwater and other uses.