ACI Foundation Announces ACI 201 Concrete Durability Scholarship

The ACI Foundation announced that the ACI 201 Concrete Durability Scholarship has been funded by Donald J. Janssen, Professor Emeritus. He served as an Associate Professor of Civil Engineering at the University of Washington for over 30 years, leading the field in concrete durability, materials, and performance research. Janssen is a member of ACI Committees S803, Faculty Network, and 201, Durability of Concrete, and ACI Subcommittee 201-D, Steering Committee. Along with Janssen’s monumental body of research, the new 201 Durability Scholarship will serve as his legacy in the concrete industry, cementing his dedication to assisting the next generation of concrete professionals in achieving success in their field.

The ACI 201 Undergraduate Concrete Durability Scholarship will be awarded to an undergraduate student who is in a degree program during the award term that focuses on concrete construction, design, education, or materials, and demonstrates an interest in durability.

ACI Foundation Fellowship and Scholarship awards are made possible through generous contributions by donors from the concrete community. Together, the Foundation and its supporters are strengthening the concrete industry by supporting students entering a professional career in the field of concrete. The ACI Foundation is leading the way to ensure a sustainable, successful future for the concrete industry through intentional and focused investments in ideas, research, and people. One hundred percent of donations go directly to benefit students.

For more information about each fellowship and scholarship, visit www.acifoundation.org/scholarships.

Seeking Mentors for Students

ACI Foundation Fellowship recipients have the option to be paired with a mentor in their area of study. The ACI Foundation is continuously looking for enthusiastic mentors. By becoming a mentor, you can help guide student engagement within ACI and help contribute to their effectiveness in entering the concrete industry. With your help, students can build a network of support in their journey to become concrete professionals that contribute to the advancement of the industry.

Many mentors report gaining as much from the relationship as the students being mentored. The key is to find common ground with the student and to remember the value being delivered. “Making a positive impact on another person generates amazing energy. It’s a good thing,” said Eric Kaled, President of Genfare and TCI International, Inc.

For more information and to apply, visit www.acifoundation.org/scholarships.aspx.

U.S. Military Veteran Certification Rebate Program

Honorably discharged U.S. military veterans attaining certification through an ACI Certification Sponsoring Group are eligible for a 250 USD rebate from the ACI Foundation as long as funding remains available.

Honorably discharged U.S. military veterans (Army, Navy, Air Force, Marines, Coast Guard, or National Guard), attaining ACI Certification as the result of exams administered on or after June 1, 2018, are eligible to apply.

For more information or to apply, visit www.concrete.org/certification/veteranrebate.

Annual Request for Concrete Research Proposals Now Open

The ACI Foundation’s Concrete Research Council seeks to advance the concrete industry through the funding of concrete research projects that further the knowledge and sustainability of concrete materials, construction, and structures. The annual request for proposals is open now through December 1, 2023.

Proposal and funding parameters include:

- Topics are encouraged from all areas of concrete research;
- Up to 50,000 USD may be approved per project for direct costs;
- The ACI Foundation limits indirect costs to the research organization to 15%; the ACI Foundation will contribute an additional 7500 USD above the 50,000 USD to cover that 15%;
- An ACI Technical Committee must support the research concept and participate in an advisory role to the principal investigator (PI). PIs must contact the committee Chair by September 1, 2023;
- An individual researcher can serve as the PI or co-PI on only one submitted proposal;
- Industry partnering and project cost sharing are strongly encouraged; and
- All proposals must be submitted through the online process by 11:59 pm December 1, 2023.

PIs shall follow the requirements in the published RFP Application Guide. For more information, visit www.acifoundation.org/research.

Impact Through Research

The ACI Foundation funds or co-funds needed concrete research to inform ACI technical committee work and
documents, provides data to close the gap for use of a new
technology, lays the groundwork for potential code change
proposals, and helps develop young researchers as they
produce knowledge for our industry. The following research
reports have been issued in 2023:

- “Behavior and Design of Concrete Structures under
Natural Fires,” PI: Thomas Gernay, Johns Hopkins
University; Co-PI: Patrick Bamonte, Politecnico di Milano;
- “Determination of the Curing Efficiency of Externally and
Internally Cured Concrete Using Neutron Radiography,”
PI: Mehdi Khandadeh-Moradillo, Temple University;
Co-PI: Jason Weiss, Oregon State University;
- “Calibration of Simplified Creep and Shrinkage Models
Developed Using Solidification Theory,” PI: Brock
Hedegaard, University of Minnesota Duluth; Co-PI: Mija
Hubler, University of Colorado Boulder;
- “Effective Characterizations of Recycled Concrete
Aggregate (RCA) for Concrete Applications,” PI: Jiong Hu,
University of Nebraska-Lincoln;
- “Normal and High Strength Continuously Wound Ties
(CWT),” PI: Bahram Shahrooz, Charles Pankow
Foundation;
- “Chloride Desorption Isotherms of Cementitious Systems
Exposed to Low-pH Environments,” PI: Mahmoud
Shakouri, Colorado State University;
- “Deconstruction Monitoring of a Cast-in-Place Segmental
Concrete Box Girder Bridge,” PI: Matthew Yarnold, Texas
A&M University;
- “Interface Bond: Development of Appropriate Horizontal
Shear Provisions for Concrete Repair,” PI: Jeff West, Wiss,
Janney, Elstner Associates, Inc.; and
- “Nonlinear Modeling Parameters and Acceptance Criteria
for Reinforced Concrete Coupling Beams,” PI: Christopher
Motter, Washington State University.

Public reports are available for download at

Join the Concrete Innovation Council at the
2023 Technology Forum
The ACI Foundation’s Concrete Innovation Council (CIC)
focuses on new technology and innovation. The CIC will host
its next Technology Forum on August 29-31, 2023, in
Portland, OR, USA. To view the full schedule and register,
visit www.acifoundation.org/technology.aspx.

This year’s forum offers 15 presentations that highlight
new technologies, advances in research, and new test standards. Current topics include carbon-neutral concrete,
carbon-neutral materials, and artificial intelligence (AI).

Technology Showcases:
- Argyle: A BIM to AR Program for the Field, by Maret
Thatcher, Argyle;
- Carbon Capture of CO₂ from Gas Streams, by Brittany
Zimmerman, Yummet;
- Rebel Sensor System: Measuring Real-Time In-Place
Concrete Strength, by Luna Lu, Purdue and WaveLogix;
and
- Sublime: Decarbonizing Cement and the Co-Production of
Green Hydrogen, Presented by a Sublime Systems
representative.

Presentations:
- How Do Venture Capitalists Evaluate Technologies for
Investment? by Curtis Rogers of Brick & Mortar Ventures;
- Advances for the Use of Basalt Fibers & Rebar, by Alvaro
Ruiz Empananza, University of Miami;
- CCUS and Innovative Materials: The Building Blocks for
Net-Zero Concrete, by Emily Kunkel, Thornton Tomasetti;
- Development of Innovations, by Sean Monkman,
CarbonCure;
- Framework for Characterizing the Performance of High-Early
Strength, High-Volume Fly Ash Concrete Structures, by
Matthew J. Gombeda, Illinois Institute of Technology; and
- Using Machine Learning to Automate Design Tasks, by
Brad Malmsten, Thornton Tomasetti.