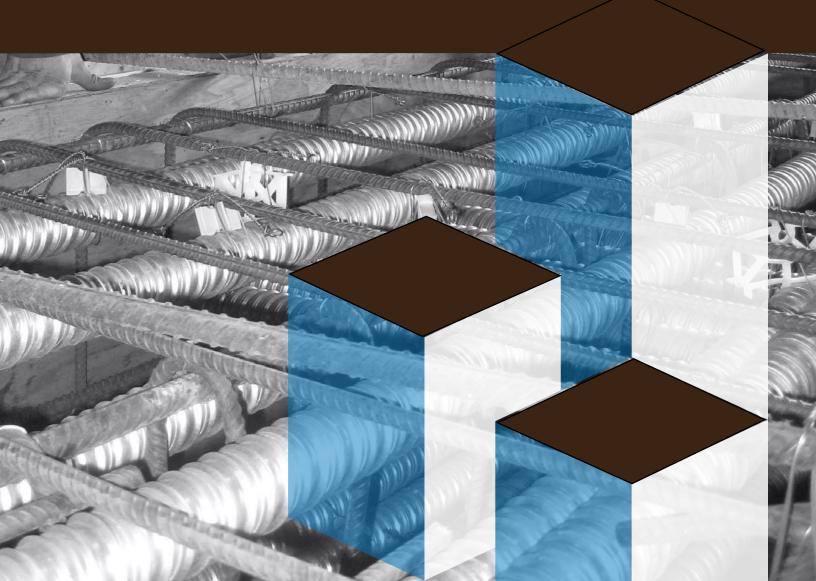


ANNUAL REPORT 2012

The Charles Pankow Foundation exists to advance innovations in building design and construction, so as to provide the public with buildings of improved quality, efficiency, and value.





Richard M. Kunnath, PE, DBIA, *President* Charles Pankow Foundation

Richard M. Kunnath was honored as one of the "Top 25 Newsmakers" by Engineering News-Record, January 28, 2013. "With funds from the late Charles Pankow, Kunnath's idea has grown into an important funding source for building research.... That a research project was 'funded by a grant from the Charles Pankow Foundation' has been written at least 10 times in ENR – twice in 2012."



PHOTO: The University of Notre Dame completed a \$165,000 grant, Hybrid Precast Wall Systems for Seismic Regions, to develop an economical building wall system that can survive a large earthquake with little damage, and prove superior to conventional structural systems in speed, cost and durability.

PRESIDENT'S MESSAGE

In addition to continuing our work in supporting innovation in the building design and construction industry, 2012 was a transition year for the Charles Pankow Foundation. Here are a few highlights:

- Bob Tener, the first Executive Director of the Foundation retired in June of 2012. Mark Perniconi was named Bob's successor and began work in June.
- Since 2006, the Foundation has awarded 38 unique grants totaling \$7.3 million. Grantees include 19 different universities and 11 industry groups.
- In 2012, four new grants were awarded totaling \$755,000, and one grant was completed.
- Research investments to advance BIM (Building Information Modeling) reached \$1.8 million in 2012.
- The CPF Advisory Council helps determine the CPF research agenda and recommends projects for funding and process improvements. This year saw Tom Gunkel, Erleen Hatfield, Mark Sarkesian, David Thorman and Steve Jones complete their terms. Their replacements, Kay Compton, Dave Alexander, Joe Burns, Ed Dean and Mark Konchar, began their terms.
- In 2012, the production of the book *A Better Way to Build: A History of the Pankow Companies* was completed. The book will be formally released at the Book Launch Event at the Purdue University Libraries in January of 2013.
- During the 2012 calendar year, the Foundation Board, Staff and Advisory Council reviewed all of the Foundations completed grants since grantmaking began in 2006. Based on this review, the CPF Board and Staff will meet at the end of 2012 to review the entire research grant program and make whatever adjustments are necessary going forward.
- The Charles Pankow Foundation began the creation of the Digital Archive titled Advancing the Construction Industry through Innovation with the Purdue University Libraries.

We are proud of the accomplishments of the Charles Pankow Foundation since we began the research grant program in 2006. The experiences we have gained in the last seven years are invaluable and we are extremely optimistic about the future of the Foundation. With your help, we will continue to do our best to advance our industry through research.

Best always,

Rik Kunnath





PHOTO: The University of California, San Diego, has a \$250,000 grant to research Precast Concrete Cladding Subsystems—Detailing for Regions of High Seismicity. The purpose is to understand experimentally the effects of dynamic loading on precast concrete cladding façade systems, and to allow a new realistic assessment of the performance of the concrete cladding, its steel connections, and punch-out windows.

THE CHARLES PANKOW FOUNDATION/ DESIGN BUILD INSTITUTE OF AMERICA

Bootstrapping Design-Build Curricula

The Bootstrapping Program is intended to incentivize and enable selected universities to better prepare constructionbound graduates for work in design-build environments by instituting new curriculum content based on DBIA principles and practices. In 2012, CPF granted Bootstrapping awards of \$10,000 each to the following universities:

- Colorado State University
- California State University, Fresno
- University of Florida

RESEARCH GRANTS AWARDED IN 2012

GRANTEE	AWARD AMOUNT	RESEARCH TOPIC
University of Colorado	\$300,000	Owner's Guide to Maximizing Success in Integrated Projects
Georgia Tech	\$63,000	Cast-in-Place Concrete National BIM Standards Phase One: Information Delivery Manual
Northeastern University	\$195,000	Thermal Break Strategies for Cladding Systems in Building Structures
Georgia Tech	\$197,000	National BIM Standards for Precast Concrete, Phase Three

RESEARCH PRODUCTS COMPLETED IN 2012

GRANTEE	PRINCIPAL INVESTIGATOR	PROJECT
Notre Dame	Yahya Kumara & Brian Smith	Hybrid Precast Wall Systems for Seismic Regions

CHARLES PANKOW AWARD FOR INNOVATION

Honoring Innovation and Collaboration in the Design and Construction Industry

The Charles Pankow Award for Innovation was established through the American Society of Civil Engineers (ASCE) in honor of Charles J. Pankow (1924-2004) to celebrate collaboration in innovative design, materials, or construction-related research and development transferred into practice in a sustainable manner. The 2012 award winner was "A New Sustainable Concrete Mix Design," in which as much as 98 percent of the material in the concrete mix is recycled. The product was developed by the American Engineering Testing, Inc. and Cemstone Products Company. After testing, the first major application of this concrete mix was in the re-construction of the Interstate 35WS bridge in Minneapolis that collapsed in August 2007. PHOTO: The University of Cincinnati is researching Continuous Stirrups for Shear and Torsion Reinforcement in Beams, with a \$114,000 grant. This project will evaluate the behavior and capacity of continuous stirrups as shear and torsion reinforcement, as well as confinement steel, and will formulate design and detailing provisions for continuous stirrups.



ASCE CHARLES PANKOW FOUNDATION ANNUAL ARCHITECTURAL ENGINEERING STUDENT COMPETITION

Supporting Tomorrow's Architectural Engineers

The Architectural Engineering Institute (AEI) of the American Society of Civil Engineers (ASCE) held its finals of the annual Charles Pankow Foundation Annual Architectural Engineering Student Competition in Omaha, Nebraska on April 20th, 2012.

The competition project challenged the student teams to address the design issues for a hypothetical new government office building in Omaha, Nebraska. Nine teams from around the country competed for five awards. Winning teams included:

- Kansas State University Building system integration
- University of Nebraska, Lincoln Structural
- University of Nebraska, Lincoln Mechanical
- Drexel University Electrical
- Kansas State University Construction
- Kansas State University Additional special award for innovation

NEW BOOK CHRONICLES DESIGN-BUILD INNOVATOR

A Better Way to Build: A History of the Pankow Companies (ISBN: 978-1-55753-634-1) presents a compelling portrait of Charles Pankow, who pioneered major innovations in concrete construction and is considered a forerunner in developing and refining the designbuild method. It is a history of the Pankow Company—from Charles Pankow's early career to the present day—and a practical study of the civil engineering and construction management decisions that have left their mark on the industry.

Order by calling 1-800-247-6553 in North America or by email (order@bookmasters.com).

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