



WSS

American Concrete Institute

1991 Annual Awards

Presented at
1991 Spring Convention

*March 17 - 21, 1991
Sheraton Boston Hotel & Towers
Boston, Massachusetts*

progress through knowledge

AWARDS

Honorary Membership

Charles J. Pankow

Bengt F. Friberg

Arthur R. Anderson Award

Thomas T. C. Hsu

Roger H. Corbetta Concrete Constructor Award

Sam Kurtz

Joe W. Kelly Award

Alan H. Mattock

Henry L. Kennedy Award

William R. Tolley

Alfred E. Lindau Award

Edward S. Hoffman

Henry C. Turner Medal

Daniel P. Jenny

Wason Medal for Materials Research

Mary J. Sansalone

Nicholas J. Carino

Wason Medal for Most Meritorious Paper

Shrinivas B. Bhide

Michael P. Collins

ACI Construction Practice Award

Terence C. Holland

ACI Structural Research Award

Neil M. Hawkins

Aibin Bao

Jun Yamazaki

Maurice P. van Buren Structural Engineering Award
Bill L. Gunnin

Chapter Activities Award
James S. Lai

Delmar L. Bloem Awards for Distinguished Service
Bryant Mather
James K. Wight

Fellows

Chapter Awards - Citations of Excellence

Membership Citations

Reinforced Concrete Research Council
Arthur J. Boase Award
Daniel P. Jenny

Portland Cement Association
Concrete Bridge Awards
Albemarle Sound Bridge - North Carolina
Bennett Bay Centennial Bridge - Idaho
Dame Point Bridge - Florida
Routes 15 and 91 Interchange - California
Sacramento River Trail Pedestrian Bridge - California
Trustin Ranch Golf Club Entry Bridge - California



“progress through knowledge”



HONORARY MEMBERSHIP TO

CHARLES J. PANKOW

"for distinguished services to the concrete industry as Past President, Director, and Technical Activities Committee member, one of the founders of the Southern California chapter, advocate of contractor participation in the affairs of the Institute, innovative engineer and builder, leader in concrete construction."

Charles J. Pankow, ACI past president and a member for more than 35 years, is the founder and principal of Charles Pankow Builders, Ltd., one of the nation's leading construction firms, with headquarters in Altadena, Calif., and branch offices in San Diego, San Francisco, and Honolulu.

A year ago in Toronto, he was the recipient of the Institute's Henry C. Turner Medal for "leadership and achievement in building concrete structures which are attractive, durable, and economical." In 1974, he was presented with the Roger H. Corbetta Concrete Constructor Award for "innovative methods of construction leading to significantly increased efficiency and economy in the use of concrete."

A former member of the Board of Direction and TAC member, he is also a Fellow and a charter member of the Southern California chapter; each year, this chapter presents an award in his name for outstanding concrete construction achievement in the Los Angeles area.

An engineering graduate of Purdue University and a distinguished alumnus of that school, he was associated with the Peter Kiewit Co. before establishing his own construction company in 1963. Pankow is a trustee of ACI's new Concrete Research and Education Foundation (CREF) and a member of the American Society of Civil Engineers, Structural Engineers Association of Southern California, Construction Industry President's Forum, and numerous other professional organizations.

He was the Raymond E. Davis Lecturer at ACI's 1986 fall convention in Baltimore, Md. and has long been recognized as a pioneer in the development of slipforming and precasting methods and cost control techniques for concrete construction.

HONORARY MEMBERSHIP

The Institute recognizes persons of eminence in its field, or those who perform extraordinary meritorious service to the Institute, by conferring on them Honorary Membership (see Bylaws, Article II, Section 2).

HONORARY MEMBERSHIP TO

BENGT F. FRIBERG

“for significant contributions of theory and knowledge on the distribution of forces on dowels in concrete pavements and for the development of the technology used in building economical prestressed concrete pavements.”

Bengt F. Friberg, a member of the American Concrete Institute for more than 60 years, is internationally recognized for his contributions to the technology of highway and airport pavements, especially in the areas of dowels, subgrade friction, and prestressed slabs.

A former consulting engineer in St. Louis, Mo., he now lives in retirement in Sonoma, Calif.

A native of Sweden and an engineering graduate of the Royal Institute of Technology in Stockholm, he came to the United States in 1927 and for several years was a structural engineer for Laclede Steel Co., St. Louis.

Following service with the U. S. Army Corps of Engineers during World War II, he joined Granite City Steel Co. and its subsidiary, Granite Steel Products Co., both in St. Louis, specialists in steel products for concrete construction. Friberg established his own consulting firm in 1953 and remained active until moving to California in 1985.

He joined ACI Committee 325, Concrete Pavements, when it was formed in 1948 and was extensively involved in committee activities for nearly four decades. Several sections of ACI 325.7R-88, “Recommendations for Designing Prestressed Concrete Pavements,” were based on Friberg’s research and the report contains five references to his publications. During his career, he was a frequent consultant to the Federal Highway Administration, the Corps of Engineers, other governmental agencies, and private industries.

He holds more than a dozen U. S. patents for invented products for highway and building concrete construction.

HONORARY MEMBERSHIP

The Institute recognizes persons of eminence in its field, or those who perform extraordinary meritorious service to the Institute, by conferring on them Honorary Membership (see Bylaws, Article II, Section 2).



ARTHUR R. ANDERSON AWARD TO

THOMAS T. C. HSU

"for his significant contributions to the knowledge and understanding of concrete behavior under both static and fatigue loadings, particularly in the post-cracking stage, and for his insight in advancing structural concrete design practice with such knowledge."

Thomas T. C. Hsu is professor of civil engineering and director of the structural laboratories at the University of Houston, Houston, Tex., and has been on the faculty there since 1980.

A Fellow of ACI, he received the Wason Medal for Materials Research in 1965 for coauthorship of a paper on microcracking in concrete. He is a member of Committees 215, Fatigue of Concrete; 343, Concrete Bridges; 348, Concrete Guideways; 445, Shear and Torsion; and the Board's Publications Committee.

Prior to joining the Houston faculty, he was professor and chairman of the engineering department at the University of Miami and was involved in the design of the aerial guideways for the Florida Rapid Transit System in Dade County and Miami. Hsu was a development engineer with the Portland Cement Association, Skokie, Ill., before moving to Miami.

He received his undergraduate degree from Harbin, China, Polytechnic University and then moved to Cornell University where he completed his Master's and PhD studies. He has been an ACI member since 1961.

Hsu is the author of numerous technical papers, many of them based on his investigations into fatigue and shear and torsion of concrete structures, especially bridges.

ARTHUR R. ANDERSON AWARD

The Arthur R. Anderson Award was established in 1972 by the Institute in recognition of Arthur R. Anderson, past president of the Institute, for his imaginative and outstanding leadership and insistence on excellence of concrete quality for engineering works.

The award is given for outstanding contributions to the advancement of knowledge of concrete as a construction material and need not be presented each year. All persons, firms, corporations, or organizations are eligible to receive the award.



ROGER H. CORBETTA
CONSTRUCTOR AWARD
TO

SAM KURTZ

"for outstanding leadership and vision in producing innovative changes in design and construction of concrete parking structures."

Sam Kurtz is president of SyArt Parking Structures, Inc., Gardena, Calif., and has been associated with that firm since 1952.

The firm pioneered in design of continuous, monolithic, cast-in-place, post-tensioned concrete construction for parking facilities in Southern California. Prefabrication of concrete forms, design for seismic forces, factory production methods, and waterproofed concrete decks without use of applied membranes are among the firm's specialities.

In 1989, Kurtz and the firm were honored with the Charles J. Pankow Award of ACI's Southern California chapter for outstanding and innovative construction in concrete in the Los Angeles area.

A graduate of the University of Southern California, he was with the U. S. Army Air Corps and the California Department of Transportation before joining SyArt Parking Structures. During his ten years with CALTRANS, he advanced to associate highway engineer.

ROGER H. CORBETTA

CONCRETE CONSTRUCTOR AWARD

The Roger H. Corbetta Concrete Constructor Award was established in 1972 in recognition of Roger H. Corbetta, past president of the Institute, for his creative leadership and his many outstanding contributions to the use of concrete for construction.

The award is given to an individual or an organization who, or which, as a constructor, has made significant contributions to progress in methods of concrete construction. The award need not be presented each year.



JOE W. KELLY AWARD TO

ALAN H. MATTOCK

"for outstanding service to the concrete industry provided by his leadership in the academic field and his dedicated guidance given to today's students who become tomorrow's engineers and technologists."

Alan H. Mattock retired at the end of 1990, concluding 26 years as professor of civil engineering at the University of Washington, Seattle, Wash.

A Fellow of the Institute, he is a former member of ACI's Board of Direction and is a member and former director of the Washington State chapter. He presented the Phil M. Ferguson Lecture at the 1989 fall convention in San Diego, Calif.

His honors include the Wason Medal for Most Meritorious Paper in 1967 for a manuscript on rotational capacity of hinging regions in reinforced concrete beams and ACI's Alfred E. Lindau Award in 1970 for "many original and significant contributions to the advancement of reinforced concrete design practice."

Mattock is perhaps best known for his involvement with Committee 318 in the development of ACI's Building Code and his research results on the behavior of structural concrete have been extensively incorporated into various editions of the Code. He has been a member of Committee 318 since 1971 and served as chairman of its subcommittee on shear and torsion for two Code cycles.

He is also a member of Committees 423, Prestressed Concrete; 445, Shear and Torsion; 550, Precast Concrete, and is a former chairman of both Committees 423 and 428, Limit Design.

A native of England, he received his Master's and PhD degrees at the University of London, was a lecturer at Imperial College, London, and an engineer at the Fire Research Station in that nation before joining the research and development department at the Portland Cement Association, Skokie, Ill., in 1957. He was with PCA for seven years before moving to the University of Washington.

JOE W. KELLY AWARD

The Joe W. Kelly Award was established in 1974 in recognition of the contributions of Joe W. Kelly, past president of the Institute, to concrete technology, his devotion to teaching, the advancement of his profession, and the use of concrete in construction.

The token of the award (a plaque) is given only for outstanding contributions to education in the broad field of concrete and need not be given each year.



HENRY L. KENNEDY AWARD TO

WILLIAM R. TOLLEY

"for his outstanding administrative leadership in strengthening and expanding the chapter activities of the American Concrete Institute, and for his highly professional and competent administration of the Institute's budget and finances."

William R. Tolley is ACI's senior managing director of operations and services and has been on the Institute staff for more than 15 years.

A resident of Plymouth, Mich., he is also secretary to the Financial Advisory Committee, Chapter Activities Committee, and the Executive Committee for ACI's first International Conference scheduled in Hong Kong later this year. He is also vice president of Association Concepts, ACI's for-profit subsidiary.

As director of ACI's operations and services, his responsibilities include all financial records and reports, membership service and records, publications distribution, computer operations, shipping and receiving, building maintenance, purchasing, and personnel. He also oversees the Institute's chapter, education, certification, and convention programs and activities.

Prior to joining ACI in 1975 as director of administrative services, he was divisional controller for the Servomation Corp. and held management and accounting positions with Ford Motor Credit Corp., Chrysler Credit Corp., and the United Foundation of Detroit. A native of Tennessee, he is an accounting graduate of Walsh Institute.

Tolley is a member of the Council of Engineering and Scientific Society Executives, a past chairman of its financial and administrative committee and was recently elected treasurer of the organization. He is also a member of the American Society of Association Executives, American Management Association, Association Executives of Metropolitan Detroit, and the Detroit Personnel Management Association.

HENRY L. KENNEDY AWARD

The Henry L. Kennedy Award was established in 1958 by the Institute to honor the late Henry L. Kennedy, an extremely active Institute member who was a past president and, at the time of his death, chairman of the Institute's Building Committee.

The award is given only for outstanding technical or administrative service to the Institute and is not mandatory each year. The bases for selection of awardees are outstanding activity or service that has enhanced the Institute's prestige, marked leadership in technical, administrative, or special committee work or other distinguished service to the Institute.

Except under unusual circumstances, honorary members, past presidents, and current officers and directors will not be considered for this award. The award is in the form of a framed scroll.



ALFRED E. LINDAU AWARD TO

EDWARD S. HOFFMAN

"for his many outstanding achievements in reinforced concrete building design practice, especially for his pioneering effort in the use of high strength concrete for high-rise building construction."

Edward S. Hoffman is executive vice president of the Frank Klein Co., consulting engineers of Chicago, Ill., and has been with that firm for 15 years.

A member of ACI for more than 30 years and a Fellow, he is a veteran member of Committee 318, Standard Building Code, and its subcommittee on structural plain concrete. He is also a member of Committees 315, Details of Concrete Reinforcement, and 439, Steel Reinforcement, and a former member of Committee 336, Combined Footings and Pier Foundations.

Hoffman, an engineering graduate of Iowa State University, is perhaps best known for his involvement in strength design methods for ACI's Building Code, preparation of the column load tables used in the Concrete Reinforcing Steel Institute's *Handbook*, and authorship of design criteria for sanitary structures. He has been associated with the University of Illinois at Chicago for a number of years, teaching graduate and undergraduate courses on concrete, strength of materials, and statics.

His honors include the Chicago area chapter's Henry Crown Award in 1986 for outstanding contributions to the concrete industry in that region. He was a partner with the Engineers Collaborative, engineering consultants of Chicago, prior to the formation of Klein and Hoffman, Inc., in 1976.

ALFRED E. LINDAU AWARD

The Alfred E. Lindau Award was founded in 1947 by the Concrete Reinforcing Steel Institute to honor the memory of Alfred E. Lindau, past president of the American Concrete Institute.

The award shall be given only for outstanding contributions to reinforced concrete design practice and is not mandatory each year. Any and all persons, firms, or corporations are eligible to compete for and receive the award.

The token of the award is a bronze plaque bearing a bas-relief portrait of Mr. Lindau.



HENRY C. TURNER MEDAL TO

DANIEL P. JENNY

For a distinguished career-long service to the concrete industry that has advanced the understanding of reinforced and precast, prestressed concrete through his dedication to the highest levels of professional integrity in his work on technical committees and on the publications for which he was responsible."

Daniel P. Jenny retired at the end of 1990 to conclude more than 24 years service with the Precast/Prestressed Concrete Institute, Chicago, Ill. He is a Fellow of ACI and has been a member for more than 25 years.

He is a member and former chairman of ACI Committee 213, Lightweight Aggregates and Lightweight Aggregate Concrete, a member of Committee 318 and chairman of its subcommittee on precast and prestressed concrete, and a member of Committee 423, Prestressed Concrete. Jenny is also a former member of ACI's Board of Direction, Technical Activities Committee, Convention Committee, and several technical committees.

As a member of Committee 318, he served through three Code cycles and was among those instrumental in the inclusion of structural lightweight concrete in the standards document.

Jenny joined PCI in 1966 as technical director, was named research director in 1987, and vice president two years ago. As secretary of PCI's Technical Activities Committee, Jenny initiated and expanded the organization's technical committee structure and was the guiding force in the development of three editions of the widely used *Design Handbook on Precast and Prestressed Concrete* and other documents.

A graduate of Marquette University and the University of Minnesota, he was a structural engineer with the Portland Cement Association in Skokie, Ill., and Washington, D. C., and chief engineer of the Expanded Shale, Clay and Slate Institute, Washington, for six years prior to moving to PCI. He is a former secretary of PCI's Research and Development Committee.

He also serves on several committees of ASTM and is a member of the Building Seismic Safety Council, Reinforced Concrete Research Council, Concrete and Masonry Industry Fire Safety Committee, International Association for Bridge and Structural Engineering, National Codes and Standards Council of the Concrete and Masonry Industries, and other professional organizations.

HENRY C. TURNER MEDAL

The Henry C. Turner Medal was founded in 1927 by Henry C. Turner, past president, American Concrete Institute. It is awarded for notable achievements in, or service to, the concrete industry. In making selections for the Turner Medal the committee is not restricted to members of the Institute nor to the achievements of any particular period. It may be awarded once in any year, but not necessarily in each year.



WASON MEDAL FOR MATERIALS RESEARCH TO

MARY J. SANSALONE NICHOLAS J. CARINO

"for their paper ('Detecting Delaminations in Concrete Slabs With and Without Overlays Using the Impact-Echo Method') which describes the feasibility of the impact-echo method for reliably detecting delaminations in reinforced concrete slabs," published in the ACI Materials Journal, V. 86, No. 2, March-April 1989.

Mary Sansalone is assistant professor of civil engineering at Cornell University, Ithaca, N. Y., and has been on the faculty there since 1987.

She is a member and secretary of ACI Committee 228, Nondestructive Testing, and a former member of Committee 446, Fracture Mechanics.

While a graduate student at Cornell, where she earned her Master's and PhD degrees, she spent a summer working under the direction of Carino at NIST and this sparked her interest in nondestructive testing. Her doctorate thesis was on "Flaw Detection in Concrete Using Transient Stress Waves."

After graduation, she was a research engineer at NIST for one year before returning to Cornell as a faculty member. She and her students at Cornell have continued research into nondestructive testing with funding from grants from the National Science Foundation, Strategic Highway Research Program (SHRP), and a Presidential Young Investigator Award.

At Cornell, she has received several teaching awards, including a Dean's Award for Excellence in Undergraduate Teaching.

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Nicholas J. Carino, a Fellow of ACI and a member for 20 years, is research civil engineer, Structures Division, National Institute of Standards and Technology, Gaithersburg, Md., and has been with that federal agency since 1979.

This is his second Wason Medal for Materials Research and both of the winning papers have concerned nondestructive testing, his research speciality. The first occasion was in 1986 for authorship of "Laboratory Study of Flaw Detection by the Pulse-Echo Method."

He is a member of ACI Committees 228, Nondestructive Testing; 231, Properties of Concrete at Early Ages; 306, Cold Weather Concreting; and 437, Strength Evaluation of Concrete Structures. Carino is currently the chairman of Committee 228 and is scheduled to conclude six years as chairman of Committee 306 at the Boston convention.

After receiving his PhD from Cornell University, he was an assistant professor at the University of Texas before moving to the National Bureau of Standards, now NIST.

Carino notes that the 1989 paper published in the *ACI Materials Journal* was one of many coauthored with Mary Sansalone on various aspects of the impact-echo method of testing and its development; this research was initiated at the National Bureau of Standards in 1983.

WASON MEDAL FOR MATERIALS RESEARCH

The Wason Medal for Materials Research was founded in 1917 by Leonard C. Wason, past president, American Concrete Institute. It may be bestowed once in any year, but not necessarily in each year, on the member or members of the Institute reporting in a paper before the Institute, within the year noteworthy original research work or discovery relating to materials.

Any report of original research work on concrete materials and their uses, or a discovery which advances the state of knowledge of materials used in the concrete industry, is eligible for the Wason Medal for Materials Research. When awarded, it is bestowed for the research discovery judged worthy of special commendation. It is restricted to members of the Institute, but if a paper of multiple authorship has one author an ACI member, all coauthors become eligible for the award.

Prior to the awards for 1971, this medal was awarded to research papers dealing with any phase of Institute interests. The medal is bronze.



WASON MEDAL FOR MOST MERITORIOUS PAPER TO

**SHRINIVAS B. BHIDE
MICHAEL P. COLLINS**

"for their paper ('Influence of Axial Tension on the Shear Capacity of Reinforced Concrete Members') which describes the use of the compression field theory to predict the response of reinforced concrete members subject to combined shear and axial tension," published in the ACI Structural Journal, V. 86, No. 5, September-October 1989.

Shrinivas B. Bhide is a structural engineer with Skidmore, Owings & Merrill, Chicago, Ill., and has been with that firm for about four years.

During the research that resulted in the 1989 paper in the *ACI Structural Journal*, he was a graduate student at the University of Toronto, Toronto, Ontario, Canada. He received both his Master's and PhD degrees at Toronto where he specialized in research on seismic design and combined shear and tension in reinforced concrete members and buildings.

He received a Bachelor's degree from the Indian Institute of Technology, Bombay, India, before moving to Toronto for graduate studies.

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Michael P. Collins, an ACI member for more than 20 years and a Fellow, is professor of engineering at the University of Toronto. A former member of the Institute's Board of Direction, he has been on the faculty there since 1969.

He is a member of the Educational Activities Committee and Committees 358, Concrete Guideways, and 445, Shear and Torsion, and is a past chairman of the latter. He is a former member of several other technical committees, including Committee 318, Standard Building Code.

In 1976, he was a recipient of ACI's Raymond C. Reese Structural Research Award for coauthorship of a paper pertaining to the diagonal compression field theory. He is a member of the Institute's Ontario chapter and is a former director of that chapter.

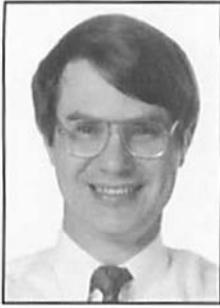
A graduate of the University of Canterbury, New Zealand, and the University of New South Wales, Australia, he was on the faculty at the University of Colorado before moving to Toronto. His other honors include the Martin P. Korn Award of the Precast/Prestressed Concrete Institute and the T. Y. Lin Award of the American Society of Civil Engineers.

Collins notes that the paper published in the *ACI Structural Journal* in 1989 summarizes research that has been underway at the University of Toronto for more than 15 years.

WASON MEDAL FOR MOST MERITORIOUS PAPER

The Wason Medal for The Most Meritorious Paper was founded in 1917 by Leonard C. Wason, past president, American Concrete Institute, and has been awarded continuously since that date. It is awarded each year to the author or authors of the most meritorious paper published by the Institute.

All original papers presented to the Institute by members (or if coauthored at least one author must be an ACI member) and published by the Institute during the volume year for which the medal is awarded are eligible, provided such papers have not previously been published. The medal is bronze.



ACI CONSTRUCTION PRACTICE AWARD TO

TERENCE C. HOLLAND

"for his paper ('Working with Silica Fume in Ready Mixed Concrete — U.S.A. Experience') which reviews the properties of silica fume, its use to enhance the properties of the concrete, and the practical aspects of working with silica fume concrete to properly transport, place, finish, and cure the material," published in ACI Special Publication 114, "Fly Ash, Silica Fume, Slag, Natural Pozzolans in Concrete," 1989.

Terence C. (Terry) Holland, a Fellow of ACI, is director of engineering and marketing for Master Builders, Inc., Cleveland, Ohio, and has been with that firm for three years.

He is chairman of ACI Committee 234, Silica Fume, and a member of Committees 304, Measuring, Mixing, Transporting, and Placing Concrete, and 546, Repair of Concrete. Holland has been involved with silica fume since its introduction into the United States and has authored numerous technical papers about this material as well as repair of concrete structures, concrete and construction techniques, and placement of underwater tremie concrete.

A member of the Institute since his student days at the University of California, Berkeley, he holds engineering degrees from Berkeley and the U. S. Military Academy, West Point, N. Y. He was with the U. S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, Miss., and Elkem Chemicals, Inc., Coraopolis, Pa., prior to joining Master Builders.

He is a member of several other professional organizations and serves on ASTM Committee C-9, Concrete and Concrete Products.

ACI CONSTRUCTION PRACTICE AWARD

The ACI Construction Practice Award was founded in 1944 by the Institute, in the hope that it would help to enrich the literature of that field of work and to honor the construction man — the man whose resourcefulness comes in between the paper conception and the solid fact of a completed structure. It may be given annually, but not necessarily in each year, for a paper of outstanding merit on concrete construction practice published by the American Concrete Institute. It is not restricted to members of the Institute. The token of the award is a plaque of bronze.



ACI STRUCTURAL RESEARCH AWARD TO

NEIL M. HAWKINS
AIBIN BAO
JUN YAMAZAKI

"for their paper ('Moment Transfer from Concrete Slabs to Columns') which describes an experimental study providing new insights into the strength and stiffness of reinforced concrete slab-column connections," published in the ACI Structural Journal, V. 86, No. 6, November-December 1989.

Neil M. Hawkins is associate dean for research, facilities, and external affairs, office of the Dean of Engineering, University of Washington, Seattle, Wash., and in mid-March is scheduled to move to the University of Illinois, Urbana, Ill., as head of the Department of Civil Engineering.

A former member of ACI's Board of Direction, he had been on the faculty at Washington for 22 years. A Fellow of the Institute, Hawkins is a member of Committees 215, Fatigue of Concrete; 408, Bond and Development; 445, Shear and Torsion; 446, Fracture Mechanics; and 550, Precast Concrete Structures, and a former member of the International Activities Committee and other technical committees.

For a number of years, he has been extensively involved in the United States-Japan Research Program on precast seismic structural systems and has participated in a number of conferences and publications resulting from this joint effort by scientists and technologists from the two nations.

His honors include the Wason Medal for Materials Research in 1970 for coauthorship of a paper on shearhead reinforcement for slabs; the Raymond C. Reese Structural Research Award in 1978 for a paper on fatigue design considerations for reinforcement in bridge decks; the Reese Award again in 1981 for coauthorship of a paper on progressive collapse of flat plate structures; and ASCE's T. Y. Lin Award in 1989.

continued

A native of Australia, he holds engineering degrees from Sydney University in that nation and the University of Illinois and taught at Sydney for five years before joining the Portland Cement Association, Skokie, Ill., as a development engineer. He left PCA to move to Washington in 1968.

Hawkins notes that the paper coauthored with Bao and Yamazaki was part of a research project sponsored by the Reinforced Concrete Research Council and the National Science Foundation and was the first phase of a decade-long effort to characterize the response of concrete flat plate structures to seismic loading.

Albin Bao is deputy chief engineer and senior structural engineer, Zhongshan City Construction Committee, Zhongshan City, Guangdong Province, People's Republic of China, and has been in that capacity for six years. Prior to assuming this post, she was a designer for the Beijing Railway Bureau and research engineer for the China Academy of Building Research.

A member of ACI, she is a former liaison member of Committee 318, Standard Building Code, and is extensively involved in code and standardization activities in China. This activity includes the translation of concrete-related codes into the Chinese language and revisions of existing Chinese codes and standards.

She was a visiting scholar at the University of Washington where she studied and worked under the guidance of Professor Hawkins on moment transfer from concrete slabs to columns to compare with the predictions of the 318 Building Code for moment transfer strength and column stiffness. Following her work in Seattle, she was a visiting scholar at Stanford University.

Jun Yamazaki is associate professor, Department of Civil Engineering, Tokyo Metropolitan University, Tokyo, Japan, and has been on the faculty there for 12 years.

At the time the paper was written, he was pursuing a graduate degree at the University of Washington. He notes that the paper was based on experimental and analytical studies that he conducted while studying for his PhD in Seattle.

He is a member of ACI's International Activities Committee and the Japan Concrete Institute.

ACI STRUCTURAL RESEARCH AWARD

The ACI Structural Research Award Medal is awarded not necessarily annually but at least biennially to the author or authors of a paper published by the Institute in the period subsequent to the last award that describes a notable achievement in research related to structural engineering and which indicates how the research can be used.



**MAURICE P. van BUREN
STRUCTURAL
ENGINEERING AWARD
TO**

BILL L. GUNNIN

"for his paper ('Market Tower — Indianapolis, Ind.') which demonstrates how this structure was effectively and efficiently designed given the constraints imposed by the architectural and functional design." published in *Concrete International*, V. 11, No. 1, January 1989.

Bill L. Gunnin is a principal of Gunnin-Campbell Consulting Engineers, Inc., Dallas, Tex., and has been with the firm for 11 years.

A member of the Institute for nearly 20 years, he is a long-time member of the Northeast Texas chapter and former president, vice president, secretary-treasurer, and director of the chapter. He is also a former visiting professor at Southern Methodist University and instructor at the University of Texas, Austin, Tex.

He holds engineering degrees from the University of Texas and Texas Tech University and was associated with the engineering firm of Ellisor and Tanner, Inc., before the establishment of Gunnin-Campbell in 1979. He is a member of the Precast/Prestressed Concrete Institute, Structural Engineers Association of Texas, and the American Society of Civil Engineers and is a former chairman of ASCE's structural group, Texas section.

Gunnin notes that Market Tower also received an Award in Excellence from ACI's Indiana chapter in 1989 and was selected for "Outstanding Concrete Construction" honors by the Indiana Concrete Council that same year.

**MAURICE P. van BUREN
STRUCTURAL ENGINEERING AWARD**

The Maurice P. van Buren Structural Engineering Award was established in 1981. The award is given for an outstanding concrete building project incorporating advanced structural design concepts, advanced structural design techniques, or both, described in a paper published by the Institute. The project must be completed, but not more than three years prior to the award. The award need not be presented each year. Recipients are given a certificate citing the awardee and the project.



CHAPTER ACTIVITIES AWARD TO

JAMES S. LAI

"for his distinguished service to the ACI Southern California chapter as an officer, director, and committee member. Mr. Lai was honored with the chapter's Sam Hobbs Service Award and has contributed to the promotion of design and construction of tilt-up walls in high seismic areas. Mr. Lai's service to the industry and ACI has been, and continues to be, exemplary."

James S. Lai, an ACI member for nearly 30 years, is the principal of James S. Lai Consulting Engineers, La Canada, Calif., established in 1990. Previously, he was vice president of Johnson & Nielsen Associates, Los Angeles, for 17 years.

A Fellow of the Institute, he was president of the Southern California chapter and has held numerous other chapter offices. As noted in the citation, he received the chapter's Hobbs Award in 1987 for "exceptional services" to the concrete industry and the chapter.

Lai is a member of Committees 340, Design Aids; 368, Earthquake Resisting Systems; and 421, Design of Reinforced Slabs, and is a former chairman of the latter. He is also a member of the Structural Engineers Association of Southern California and several years ago served as a member of an ACI-SEASC committee which studied the behavior of thin wall panels subject to combined axial and lateral loads; this research resulted in new Uniform Building Code provisions on the design of tilt-up wall panels.

He is a graduate of California State University at Chico, Calif., and the University of Southern California.

CHAPTER ACTIVITIES AWARD

The Chapter Activities Award was founded in 1975 to recognize outstanding service in the promotion and development of a chapter or chapters by a member of the American Concrete Institute. Nominations are made by the Chapter Activities Committee, and recommendations are approved by the Board.

The token of this award is a plaque. The award need not be presented each year.



DELMAR L. BLOEM AWARDS FOR DISTINGUISHED SERVICE TO

BRYANT MATHER JAMES K. WIGHT

"for his dedication of a very large part of his career to the Institute during a 45 year association with ACI."

Bryant Mather, a past president and Honorary Member of the Institute, is a member or former member of nine ACI technical committees, accumulating 162 years of service on these committees.

Of these 162 years, 17 were as a committee chairman. He has been a member of Committee 212, Admixtures for Concrete, for 39 years and his service on other committees is nearly as long.

In 1985, he became chairman of Committee 116, Terminology and Notation, and this group revised and reapproved "Preparation of Notation for Concrete (ACI 104-71)" and recently completed a massive revision of Special Publication 19, "Cement and Concrete Terminology (ACI 116R-90)."

In 1972, under his chairmanship, Committee 212 produced "Guide for Use of Admixtures in Concrete." For three years in the 1970s, Mather chaired Committee 103, Monographs, during which time this group produced three such documents. In 1977, as chairman of Committee 308, Curing of Concrete, Mather guided the drafting of "Standard Practice for Curing Concrete (ACI 308-81)."

In addition, he has served on Committee 115, Research, now Committee 123, and Committee 226, Fly Ash, Slag, Other Mineral Admixtures, which was subsequently divided into three committees — 232, 233, and 234 — on which he currently serves.

In addition to service on technical committees, he was president of the Institute in 1964, vice president for two years, a member of the Board of Direction and more than ten Board committees, and was on the Technical Activities Committee for nine years, chairing it for three. In 1975, he was presented with ACI's Henry C. Turner Medal for "many years in improving the quality of concrete work" and for his "vigorous personal efforts both inside and outside that assignment."

continued

A native of Baltimore and a graduate of Johns Hopkins University, he has been associated with the Waterways Experiment Station, U. S. Army Corps of Engineers, Vicksburg, Miss., for more than 40 years and is chief of the Structures Laboratory there. He is a former chairman of the board of ASTM and recently received that society's William T. Cavanaugh Memorial Award for "exceptional contributions" to the nation's voluntary consensus standards system.

"for exceptional technical and administrative leadership abilities dedicated to ACI technical activities."

James K. Wight, a Fellow of ACI and a member for more than 20 years, is professor of civil engineering, University of Michigan, Ann Arbor, Mich., and has been on the faculty there for 17 years.

He is scheduled to step down as chairman of ACI-ASCE Committee 352, Joints and Connections in Monolithic Concrete Structures, at the conclusion of the Boston convention. Under his chairmanship, this committee produced "Recommendations for Design of Beam-Column Joints in Monolithic Reinforced Concrete Structures (ACI 352R-85)" and "Recommendations for Design of Slab-Column Connections in Monolithic Reinforced Concrete Structures (ACI 352.1R-89)."

Also during his chairmanship, Committee 352 sponsored convention sessions at the 1988 spring and 1989 fall Institute meetings.

He is also a member of Committees 445, Shear and Torsion; 368, Earthquake Resisting Systems; 318's subcommittee on shear and torsion; and is a former member of 307, Concrete Chimneys. Wight is also a former chairman of ASCE's Committee on Concrete and Masonry Structures.

A past president of ACI's Michigan chapter, Wight has specialized in research to improve earthquake resistant design and, as chairman of Committee 352, developed design recommendations for beam-to-column and slab-to-column connections.

He received his Bachelor's and Master's degrees from Michigan State University and his PhD from the University of Illinois prior to joining the faculty at the University of Michigan.

DELMAR L. BLOEM

DISTINGUISHED SERVICE AWARD

The Institute established a Distinguished Service Award in 1969 to recognize noteworthy work on ACI technical committees. The name of the award was changed to the Delmar L. Bloem Distinguished Service Award in 1972 in honor of the late Delmar Bloem because he had demonstrated, over a period of many years, the characteristics and dedication required for the award. The award is given to a current (or recent) chairman of a technical committee, or under special circumstances, to deserving individuals other than committee chairmen, in recognition of outstanding performance.

Usually one award will be given each year; however, there may be none or more than one in any particular year.

ELECTED FELLOWS

ACI FELLOWS

"A Fellow shall be a person who has made outstanding contributions to the production or use of concrete materials, products, and structures in the areas of education, research, development, design, construction, or management. A Fellow shall have the same rights and privileges as a Member." (see Bylaws, Article II, Section 3.)

The Bylaws provide that Fellows are nominated by a Fellows Nominating Committee and elected by the Board. Nominations to the Fellows Nominating Committee for selection may come from the committee, from chapters, from the International Activities Committee, or by petition by five current ACI members. The final selection takes into account service to ACI or unusual service in the field of concrete.

The following have been elected Fellows
of the American Concrete Institute:



Robert R. Anderson



Arthur C. Avril



Daniel L. Baker



Gordon B. Batson



Muriel Burns



James E. Cook

ELECTED FELLOWS

continued

The following have been elected Fellows
of the American Concrete Institute:



David A. Crocker



Kenneth W. Day



Jack J. Fontana



Luis E. Garcia



Harold W. (Bud) Gilley



Joe Gutierrez



Richard L. Hegle



William G. Hime



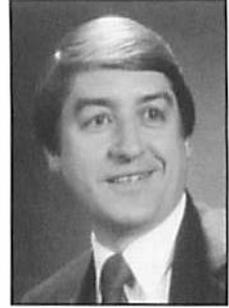
Leonard S. Hobbs



Brad D. Inman



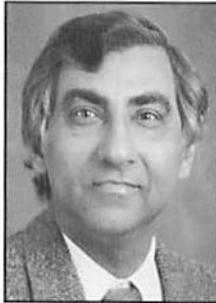
Richard A. Kaden



David R. Lankard



Chester W. Miller



Sher Ali Mirza



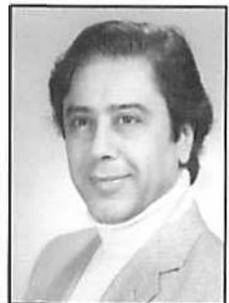
Jack P. Moehle



Myles A. Murray



Terry Patzias



Franz N. Rad



Ramesh N. Raikar



Bruce A. Suprenant



Orville R. Werner II

CHAPTER AWARDS CITATIONS OF EXCELLENCE

These Awards are given to those Chapters that have achieved excellence in chapter activities and have made significant contributions to ACI activities.

Consideration is given in areas of educational and certification activities; membership; meetings; local chapter awards programs; public relations; and newsletters.

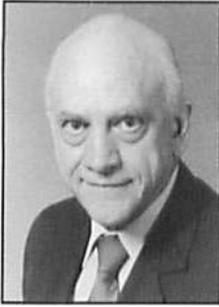
The winners will be announced by the ACI President.

CERTIFICATES OF MEMBERSHIP APPRECIATION

The American Concrete Institute expresses its appreciation to the following Individual and Organizational Members, who have been valued members of the Institute for 50 years. *Your support through the years has contributed to the success of ACI.*

Cement & Concrete Association (Australia)

Charles W. Wilson



REINFORCED CONCRETE RESEARCH COUNCIL ARTHUR J. BOASE AWARD TO

DANIEL P. JENNY

"in recognition of his dedicated leadership in the development of research programs and code provisions advancing the use of lightweight and prestressed concrete."

Daniel P. Jenny retired at the end of 1990 to conclude more than 24 years service with the Precast/Prestressed Concrete Institute, Chicago, Ill. He is a Fellow of ACI and has been a member for more than 25 years.

He is a member and former chairman of ACI Committee 213, Lightweight Aggregates and Lightweight Aggregate Concrete, a member of Committee 318 and chairman of its subcommittee on precast and prestressed concrete, and a member of Committee 423, Prestressed Concrete. Jenny is also a former member of ACI's Board of Direction, Technical Activities Committee, Convention Committee, and several technical committees.

As a member of Committee 318, he served through three Code cycles and was among those instrumental in the inclusion of structural lightweight concrete in the standards document.

Jenny joined PCI in 1966 as technical director, was named research director in 1987, and vice president two years ago. As secretary of PCI's Technical Activities Committee, Jenny initiated and expanded the organization's technical committee structure and was the guiding force in the development of three editions of the widely used Design Handbook on Precast and Prestressed Concrete and other documents.

A graduate of Marquette University and the University of Minnesota, he was a structural engineer with the Portland Cement Association in Skokie, Ill., and Washington, D. C., and chief engineer of the Expanded Shale, Clay and Slate Institute, Washington, for six years prior to moving to PCI. He is a former secretary of PCI's Research and Development Committee.

He also serves on several committees of ASTM and is a member of the Building Seismic Safety Council, Reinforced Concrete Research Council, Concrete and Masonry Industry Fire Safety Committee, International Association for Bridge and Structural Engineering, National Codes and Standards Council of the Concrete and Masonry Industries, and other professional organizations.

ARTHUR J. BOASE AWARD

The Arthur J. Boase Award, presented by the Reinforced Concrete Research Council, was first awarded in 1971 in recognition for outstanding activities and achievements in the reinforced concrete field.

The award consists of a certificate suitably inscribed with the name of the recipient and circumstances of the award.

The Boase Award honors outstanding activities and achievements in structural concrete. It is given in memory of a Portland Cement Association executive who was one of the founders of the Reinforced Concrete Research Council.

PORTLAND CEMENT ASSOCIATION CONCRETE BRIDGE AWARDS

Excellence in design and construction of concrete bridges are to be recognized at the Awards Breakfast with six presentations by the Portland Cement Association.

The six structures were the winners of PCA's second biennial concrete bridge awards competition. The presentations are scheduled to be made by Basile G. Rabbat, PCA's manager of structural codes and coordinator of the competition.

The structures, with lengths from 125 ft to 3.5 miles and with spans from 40 to 1300 ft, were selected on criteria ranging from project economy and environmental considerations to engineering innovation. The six winners were chosen without ranking or categorization; all types — highway, railway, and pedestrian — with concrete as the basic structural system were eligible.

The judges for the 1990 contest were C. Stewart Gloyd, senior supervising engineer, Parsons, Brinckerhoff, Quade & Douglas, Inc., Costa Mesa, Calif.; Gary Kasza, regional director, Portland, Ore., Federal Highway Administration; and Arun Shirole, deputy chief engineer, New York State Department of Transportation, Albany, N. Y.

The prize winning spans:

Albemarle Sound Bridge, Edenton, N. C.

"An innovative and economical bridge solution with artful use of repetitive spans," was the jury's comment about this 3.5 mile structure that includes 2.7 miles of precast concrete flat slabs. A \$22.4 million undertaking, the segmental box girder section spans 224 ft over the Intracoastal Waterway and provides a 65 ft vertical clearance over a navigational channel. Precast I-shaped piers were used to support all spans and were conducive to a rapid construction schedule.



Bennett Bay Centennial Bridge, Coeur d'Alene, Idaho

One of the final links in Interstate 90 between Boston and Seattle, this four-span, 1730 ft structure was sensitively crafted to its Coeur d'Alene National Forest setting. A \$15.8 million project, the structure features cast-in-place segmental concrete box girder construction with longitudinal, transverse, and vertical post-tensioning. The center spans extend 520 ft. and connect on a slender, 240 ft high pier. A "nice, clean, majestic structure...excellence in blending a modern bridge with an outstanding site," the PCA jury said.



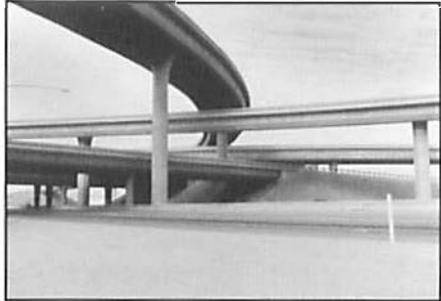
Dame Point Bridge, Jacksonville, Fla.

This 2600 ft cable-stayed structure, the centerpiece of the Jacksonville Transportation Authority's five mile Dame Point Expressway is a "daring display of engineering excellence," according to the PCA jury. The 1300 ft center span and its flanking 650 ft approach spans consist of a cast-in-place roadway slab resting on a system of post-tensioned concrete floor beams and longitudinal edge girders. These girders are supported in part by cable stays from mammoth concrete towers. Navigational clearance is 175 ft.



Routes 15 and 91 Interchange, Riverside County, Calif.

This junction of California freeways "effectively scales four levels with graceful alignment and geometric accentuation," the PCA jury said. Features of the \$15.8 million project include prestressed concrete box girders, vertical and sloping exterior girders and abutments, and conventionally-shaped geometric columns. Many structural forms, angles, and arcs provide the geometry for this four-level interchange.



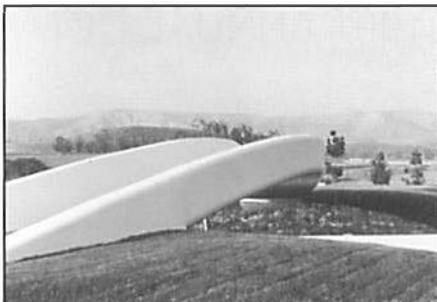
Sacramento River Trail Pedestrian Bridge, Redding, Calif.

Possibly the first installation of its kind in the United States, this 485 ft bridge with a clear span of 418 ft possesses a stressed ribbon construction technology found in Europe. Located in a natural rocky and semi-arid environment, the span has a depth of only 1 1/4 ft and a center sag of 8.5 ft; its precast deck rests on two sets of stressed cable. A second-order static analysis and dynamic analysis to examine live load vibration and wind effects were required. "A well-executed solution to an environmentally sensitive setting...superior use of innovative, but simple design concept to fit the site," the jury said.



Tustin Ranch Golf Club Entry Bridge, Tustin, Calif.

This sculptured, cast-in-place bridge connects two large knolls, separated by a cart path and located at the entrance of the golf club. The bridge curves in both horizontal and vertical planes; the horizontal curve allows golf cart drivers to travel between two concave curves while the vertical counterpart elevates the span for adequate clearance for vehicular traffic on the entry drive. This championship golf course is a part of a master planned community under private development. The jury noted: "Sculptured effect serves as an appropriate gateway, yet in a clean and simple manner...a superb blend of form and function."



PROJECT CREDITS

Albemarle Sound Bridge — North Carolina Department of Transportation, Raleigh, N. C., owner; F. & M. Engineers, Inc., Tallahassee, Fla., engineer; Cianbro Corp. and Williams Brothers, a joint venture, general contractor.

Bennett Bay Centennial Bridge — Idaho Department of Transportation, Boise, Idaho, owner; Howard Needles Tammen & Bergendoff, Bellevue, Wash., engineer; Moseman Construction Co., Salem, Ore., general contractor; Central Pre-Mix Co., Coeur d'Alene, Idaho, concrete supplier; VSL Corp., Campbell, Calif., post-tensioning supplier.

Dame Point Bridge — Jacksonville Transportation Authority, Jacksonville, Fla., owner; Howard Needles Tammen & Bergendoff, New York, N. Y., engineer; Sverdrup Corp., Jacksonville, Fla., general consultant; Pensacola Construction, Kansas City, and Tyger Construction, Spartanburg, S. C., a joint venture, general contractor; Florida Rock Industries, concrete supplier.

Routes 15 and 91 Interchange — California Department of Transportation (CALTRANS), Sacramento, Calif., owner and engineer; Yaeger Construction, general contractor; Owl Rock Products Co., concrete supplier.

Sacramento River Trail Pedestrian Bridge — City of Redding, Calif., owner; Charles Redfield of Mill Valley, Calif., Converse Consultants of San Francisco, Calif., and Jiri Strasky of Czechoslovakia, engineering consultants; Shasta Constructors, Redding, general contractor.

Tustin Ranch Golf Club Entry Bridge — The Irvine Co., Newport Beach, Calif., owner and designer; McLean & Schultz, Fullerton, Calif., engineer; Pentaco, Inc., and A. M. Galbreath, a joint venture, general contractor; United Ready Mix Concrete Co., concrete supplier.

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CONGRATULATIONS
1991
AWARDEES



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