

AMERICAN CONCRETE INSTITUTE



"progress through knowledge"

1989 ANNUAL AWARDS

presented at
The 1989 Annual Convention
Thursday, February 23
Atlanta Hilton and Towers
Atlanta, Georgia

AWARDS

Honorary Membership

T. Z. Chastain
Robert G. Lee
Stewart C. Watson
Robert E. Wilde

Arthur R. Anderson Award

Surendra P. Shah

Roger H. Corbetta Concrete Constructor Award

Norwegian Contractors

Joe W. Kelly Award

Ronald H. Hall

Henry L. Kennedy Award

Thomas J. Pasko

Alfred E. Lindau Award

Jacob S. Grossman

Henry C. Turner Medal

W. Gene Corley

Charles S. Whitney Medal

The Structural Research Laboratories
Department of Civil Engineering, University of Toronto

Wason Medal for Materials Research

Val R. Sturup
R. Douglas Hooton
Pranab K. Mukherjee
T. Carmichael

Wason Medal for Most Meritorious Paper

Robert F. Ytterberg

Construction Practice Award

Ernest K. Schrader

Raymond C. Reese Structural Research Award

M. J. N. Priestley
Robert Park

Maurice P. van Buren Structural Engineering Award
Mohammad Abul Mansur
P. Paramasivam
Seng-Lip Lee

Chapter Activities Award
I. Leon Glassgold

Delmar L. Bloem Awards for Distinguished Service
Richard O. Albright
John E. Breen
David P. Gustafson
Gary R. Mass

Reinforced Concrete Research Council
Arthur J. Boase Award
Boris Bresler

Portland Cement Association
Concrete Bridge Awards
Ocean County Plaza Bridge, New Jersey
Northwest Lightrail Rapid Transit Bow River Bridge, Canada
I-85/I-285 Interchange, Georgia
Linn Cove Viaduct, North Carolina
Tampico Bridge, Mexico
Ingraham Street Bridge, California

Chapter Awards - Citations of Excellence

1988 Fellows



“progress through knowledge”



HONORARY MEMBERSHIP TO **T. Z. CHASTAIN**

"in recognition of his 34 years of dedicated service to ACI and for his outstanding contributions as president of the Institute, chairman of the Chapter Activities Committee, and as a member of several Board and technical committees."

T. Z. Chastain, past president of the Institute, is currently the principal of Chastain Forensics Corp., Atlanta, and has been involved in engineering and design of reinforced concrete structures for more than 40 years.

Prior to establishing his own firm six years ago, he was chairman of the board of Chastain and Tindel, Inc., for nearly 25 years. A Fellow of ACI, he has been a member since 1954 when he established his own company which, in 1959, merged with another to create Chastain and Tindel.

President of the Institute in 1981, he is currently a member of the Board's Convention and Membership Committees, is a member of Committee 364, Rehabilitation, and a consulting member of Committees 318, Standard Building Code, and 421, Design of Reinforced Concrete Slabs. He has been a member of Committee 318 for more than 30 years.

Chastain is also a past chairman of the Chapter Activities Committee, and a former member of the Technical Activities Committee, the Financial Advisory Committee, International Activities Committee, as well as the Board of Direction and the Executive Committee.

A graduate of Georgia Institute of Technology, Chastain's honors include Engineer of the Year by the Georgia Society of Professional Engineers and Consulting Engineer of the Year by the Consulting Engineers Council of Georgia. He has served as president of both the Georgia Section of the American Society of Civil Engineers and the Consulting Engineers Council of Georgia.

He served with the U. S. Navy during World War II and was associated with the engineering firm of I. E. Morris and Associates, Atlanta, before establishing his own private practice in 1954.

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
ROBERT G. LEE

"for his dedicated service to ACI for 40 years and especially for his contribution to the Singapore chapter of the Institute."

Robert G. Lee is now in private consulting practice in San Francisco, Calif., after more than 33 years with the City and County of San Francisco and about four years as general manager of T. Y. Lin Southeast Asia, Ltd., Singapore.

A Fellow of ACI and a member since 1949, he was the organizing chairman and president of the Singapore chapter. Lee received the Institute's Chapter Activities Award in 1986 for his contributions to the Singapore chapter and to ACI's chapter activities in general.

Prior to joining T. Y. Lin in 1982, he held a number of engineering positions with the City and County of San Francisco, including head of the Structural Division for the Department of Public Works and deputy director of airports for planning and development. During the latter, he was extensively involved in a \$470 million expansion and modernization of San Francisco's International Airport.

In Singapore, he served as manager of the Lin operation and supervised projects in that nation as well as Malaysia, Indonesia, and Brunei. He holds engineering degrees from the University of California, Berkeley, and served with the U. S. Army Corps of Engineers in China during World War II.

He is currently a member of ACI's International Activities Committee and is a former member of the Chapter Activities Committee.

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HONORARY MEMBERSHIP
TO
STEWART C. WATSON

"for unprecedented pursuit of the development and application of bearings, joints, and seals for the enhancement of concrete structures worldwide, and for devotion to sharing such technology and experiences via numerous technical committees."

Stewart C. Watson is the retired chairman and president of Watson Bowman Associates, Inc., East Amherst, N. Y., and is currently president of Kinematics, Inc., and Air Stewart, Inc.

A Fellow of ACI and a member for more than 20 years, he is a former member of the Board of Direction and now serves as chairman of the International Activities Committee. Watson is also a member of Committees 504, Joints; 554, Bearings; 120, History of Concrete; 124, Esthetics; and 362, Parking Structures; he is a past chairman of both 504 and 554.

For more than 40 years, he has been involved in the development, testing, and design of joints, bearings, and sealing systems for highways, bridges, tunnels, airfields, and buildings. For many years, he was with Acme Highway Products Corp. and in 1970 formed Watson Bowman; he later purchased Acme Highway Products, merged it with Watson Bowman, and then retired from the firm.

Watson is also widely known for his involvement in the World Congresses on Joints and Bearings, the first of which was held in 1981 and the second in 1986. He also participated in the formation of an international organization which will sponsor future conferences on joints and bearings.

In 1987, he received ACI's Charles H. Whitney Award for his contributions to joints and bearing technology and in 1984 the Delmar L. Bloem Distinguished Service Award for his efforts on ACI technical committees.

He was a member of the design team which in 1960 developed, field tested, and introduced the first practical and commercially successful pavement and bridge compression seal and has also invented numerous devices for structural bearings and expansion jointing.

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HONORARY MEMBERSHIP TO **ROBERT E. WILDE**

"in recognition of 38 years of conscientious service and outstanding dedication to the Institute as part of top management and as director of the technical publication program and a driving force in ACI's dramatic growth."

Robert E. Wilde retired at the end of 1988 after nearly four decades as an ACI executive and employee. His tenure as an employee of the Institute in its Detroit, Mich., headquarters was the longest in ACI history.

At the time of retirement, he was deputy to the Executive Vice President and publisher of *Concrete International: Design & Construction*. His responsibilities also included supervision of other ACI publications activities and the Institute's membership promotion, marketing, construction development, public relations, and library operations.

A native of Iowa and an engineering graduate of Iowa State University, Wilde joined ACI in early 1949, left in 1950 to work with magazines in Chicago, and then returned permanently in 1952 as managing editor of the ACI JOURNAL. He was named assistant secretary in 1969 and nine years later was appointed deputy to the executive director, a title later changed to deputy to the Executive Vice President.

He also served as secretary to the Publications Committee and the International Activities Committee. A former chairman of the Concrete Improvement Board of Detroit, he was honored with CIB's outstanding achievement award for "dedication to the improvement of concrete quality."

Wilde became publisher of *Concrete International* when it was inaugurated in 1979 and for a period of five years prior to his retirement held the joint position of editor and publisher. He is now serving as a consultant in construction communications.

He wrote the Institute's first "Guide to Chapter Organization and Operation," established an information exchange program with cement and concrete organizations throughout the world, authored *Practical and Decorative Concrete* which was published in 1977, and was a member of several organizations involved in management of societies and technical publishing.

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ARTHUR R. ANDERSON AWARD
TO
SURENDRA P. SHAH

"For effectively transmitting to the profession, the results of his and others' research on the applications of classical fracture mechanics to concrete and fiber reinforced concrete."

Surendra P. Shah is professor of civil engineering and director of the Center for Concrete and Geomaterials, Northwestern University, Evanston, Ill.

He is currently chairman of Committee 544, Fiber Reinforced Concrete, and is past chairman of Committee 215, Fatigue. He also serves on the Concrete Materials Research Council and Committees 363, High Strength Concrete; 446, Fracture Mechanics; 548, Polymers; and 549, Ferrocement.

In teaching and research pertaining to concrete and other building materials, he has been extensively involved with constitutive relationship, failure and fracture of concrete, nonlinear fracture mechanics applied to rock, fiber reinforced concrete, high-strength concrete, impact and impulsive loading, and behavior of structures subjected to seismic excitation.

A Fellow of ACI, he holds engineering degrees from B.V.M. College in India, Lehigh University, and Cornell University. He was on the faculty at the University of Illinois in Chicago before moving to Northwestern.

Shah serves as chairman of the Committee on Fracture of Concrete, International Union of Testing and Research Laboratories for Materials and Structures (RILEM), was a NATO senior visiting scientist to France in 1986, received ASTM's Thompson Medal in 1980, serves on the board of editors of four international journals, and has authored more than 250 technical papers published worldwide.

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
CONCRETE CONSTRUCTOR
AWARD
TO
**NORWEGIAN
CONTRACTORS**

"for outstanding contributions to structural design, slipform construction, towing, and installation of concrete platform structures in offshore oil and gas fields."

Norwegian Contractors, headquartered in Stabekk, Norway, is the world's leading designer and constructor of concrete structures for the offshore industry. Since 1973 the firm has erected and installed 13 major concrete platforms in the North Sea and three other such structures are currently under construction in the yards at Stavager.

Among the firm's honors is the distinguished achievement award by the Offshore Technological Council for its "pioneering offshore application of the slipform method of concrete construction, extending oil and gas production to deeper and more harsh offshore areas."

The company's involvement began in 1973 when it received the contract for the construction of the Beryl A Condeep platform from Mobil North Sea in London. This was the world's first concrete drilling and production platform and was the breakthrough of the Condeep gravity base platform concept.

In Condeep structures, the platform base consists of several cylindrical cells which, in most cases, are used for storage of petroleum. Three or four of these cells extend upwards to form the shafts (or legs) of the platform; the platform base is constructed in drydock and then is towed to a Norwegian fjord where the cells are completed; the base is then towed over the submerged concrete deck, the substructure is elevated to lift the topside off the barges, and the completed structure is towed to its offshore position.

The firm's projects include the Gullfaks C, the world's largest concrete platform, scheduled to go into operation in 1989. Gullfaks C, also a Condeep design, will be installed at a water depth of 216 m, and has a production capacity of 245,000 barrels daily and a storage capacity of 2 million barrels.

In recent years, the firm has diversified into other areas of the offshore industry in order to supply complete subsea installations. An example of a current development is a gravity concrete storage tank, connected to an offshore loading system, a joint venture with Mobil Exploration Norway, Inc.

Norwegian Contractors, which has about 1200 employees, is a wholly-owned subsidiary of the Aker Norcem Group. In Atlanta, the award was scheduled to be presented to Gregers Kure, president of the company.

**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
RONALD H. HALL

"for his resourceful and vigorous approach to the implementation of the educational programs of the American Concrete Institute."

Ronald H. Hall is president of Concrete Solutions, Inc., Salt Lake City, Utah, which he founded about two years ago. At the Houston convention last fall, he stepped down as chairman of ACI Committee E902, Certification, after nearly six years as head of the Institute's certification program.

He is also a member of the Educational Activities Committee and Committee 226, Fly Ash, Other Pozzolans, and Slag. Before establishing his own firm, Hall was associated with Pozzolan Products Co., Salt Lake City, as its vice president.

ACI's Intermountain chapter recently presented its William A. Cordon Award to Hall in recognition of his service to the chapter and to the Institute's certification program. He is a former member of the Chapter Activities Committee and is secretary-treasurer and former president of the Intermountain chapter.

He is also a member of ASTM committees on cement and concrete.

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
THOMAS J. PASKO

"for outstanding initiative and service provided over many years through committee and Board activities to revitalize and provide focus to the American Concrete Institute's convention programs and attendance, thereby maximizing the benefits of those attending as well as ACI's worldwide image."

Thomas J. Pasko is a Fellow of the Institute, a former member of the Board of Direction, and has been an ACI member since 1963.

He is director of the Office of Engineering and Highway Operations Research and Development, Federal Highway Administration, McLean, Va., and has been with that governmental agency for 18 years.

Pasko is currently FHWA's representative on ACI's Concrete Materials Research Council and is a member of Committees 325, Concrete Pavement; 546, Repair of Concrete; and E903, Convention Training.

In addition to serving on the Board of Direction 1984-87, he is a former member of the Technical Activities Committee, Planning Committee, Financial Advisory Committee, and Convention Committee. Pasko is also a member of the Transportation Research Board, American Society of Civil Engineers, and other organizations.

After obtaining his Bachelor's and Master's degrees from Pennsylvania State University, he attended Cornell University before joining the FHWA (then the U. S. Bureau of Public Roads) in 1962.

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
JACOB S. GROSSMAN

"For advancing the design of reinforced concrete tall buildings by incorporating innovative techniques in a highly competitive field."

Jacob S. Grossman, a member of the Institute since 1963 and a former member of the Board of Direction, is vice president of Robert Rosenwasser Associates, consultants of New York, N. Y. He has been with the engineering firm for more than 30 years and heads the company's design and research efforts.

A Fellow of ACI, he is a member of the Concrete Materials Research Council, the Reinforced Concrete Research Council, and ACI Committees 318, Standard Building Code; 340, Strength Design Handbook; 435, Deflection of Structures; and 442, Response to Lateral Forces. Grossman is also a former member of the International Activities Committee.

In 1987, he received the Institute's Maurice P. van Buren Structural Engineering Award for design and authorship of a paper concerning a high rise diagonally braced concrete structure in Manhattan.

While a member of the Board of Direction, Grossman was among those actively involved in the movement to establish the Concrete Materials Research Council, organized in 1984. He holds engineering degrees from the University of Southern California and the University of California at Los Angeles.

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
W. GENE CORLEY

"For outstanding contributions to research related to reinforced concrete structures and leadership in encouraging adoption of improved design concepts in codes and standards."

W. Gene Corley has been involved in the administrative and technical activities of the Institute for more than 25 years and currently serves as chairman of the Planning Committee.

He is a structural engineer with Construction Technology Laboratories, Inc., Skokie, Ill., and has been with CTL and the Portland Cement Association since 1964. Corley, also a Fellow of ACI, is the chairman designee of Committee 318, Standard Building Code, and is scheduled to assume the chairmanship on a permanent basis in late 1989 when the task of preparing the 1995 code will begin.

He is also a member of Committee 343, Bridge Design, and is a former member of Committees 443, Bridge Design; 435, Deflection of Structures; and 545, Railroad Ties.

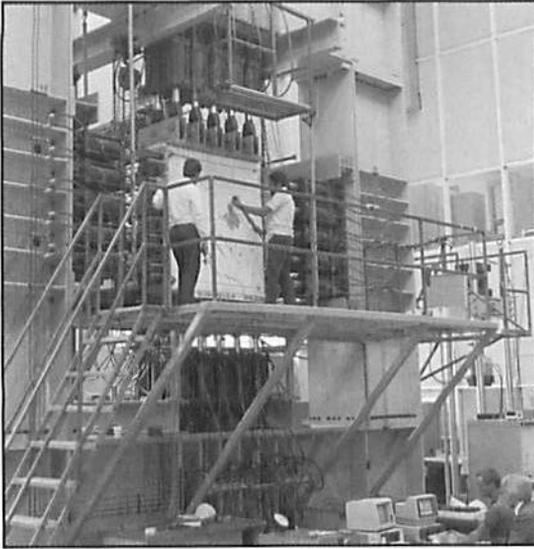
Corley's honors have included ACI's Wason Medal for Materials Research in 1970, the Delmar L. Bloem Distinguished Service Award in 1978, and the Reese Structural Research Award in 1986. The latter honor was the result of co-authorship of a paper on research of web crushing of reinforced concrete walls.

Also in 1986, Corley was presented with the Arthur J. Boase Award of the Reinforced Concrete Research Council for his activities and achievements in the field of reinforced concrete. He is also a former member of the Technical Activities Committee and the International Activities Committee.

Corley holds engineering degrees from the University of Illinois and was with the U. S. Army Corps of Engineers for three years prior to joining PCA in Skokie.

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.



SHELL TESTER - UNIVERSITY OF TORONTO

CHARLES S. WHITNEY MEDAL
TO

**THE STRUCTURAL RESEARCH
LABORATORIES, DEPARTMENT OF
CIVIL ENGINEERING, UNIVERSITY OF
TORONTO**

"for distinguished experimental research and interpretation of the response of structural concrete to load combinations."

The Structural Research Laboratories, Department of Civil Engineering, University of Toronto, Ontario, Canada, rank among the top such research centers in North America.

Research on structural concrete at Toronto dates as far back as the early 1920s when Professors Young, Sagar, and Hughes performed experimental investigations on the behavior of plain and reinforced concrete subjected to torsion. Beginning in the early 1940s, Professor Mark Huggins (a long-time ACI member prior to his death) began a series of research efforts on reinforced concrete, including behavior of flat plates and columns.

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Such experimental studies have continued to the present time and now the laboratories include nine professors, 61 structural engineering graduate students, 10 technicians/engineers, nine summer undergraduate students, and equipment and facilities with an estimated replacement cost of about \$10 million. The laboratories at Toronto include the following:

— The Mark Huggins Laboratory. Named in memory of the late professor, this facility includes a 1200 kip capacity universal testing machine, an electro-hydraulic testing system, a shell element tester, a 10 ton overhead crane, and a variety of additional testing machines and apparatus. The laboratory has a strong floor, 70 ft long by 14 ft wide, which, when combined with a set of steel reaction frames and hydraulic jacks, enables the testing of large structures.

— The Sandford Fleming Laboratory. This laboratory also has a strong floor as well as a 16 ft wide reaction wall. Completed in 1981, this facility includes state-of-the-art equipment for experiments on large structural specimens and a computer controlled 600 kip loading frame for testing under both static and dynamic conditions.

— Auxiliary laboratories, facilities. These include a machine shop, concrete laboratory, wood shop, model test laboratory, and storage facilities.

Since 1984, the laboratories have been administered by a users' committee headed by an academic laboratory manager. A computer engineer, two engineers in charge of instrumentation and equipment, three lab technicians, three craftsmen in the machine shop, and a secretary complete the staff.

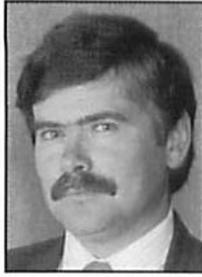
On an average, about 60 percent of the laboratory activities are directed at structural concrete research while research on structural steel and special service contracts account for the remainder. Staff members of the department are actively involved in the American Concrete Institute and numerous other professional and technical associations, especially those involved in the preparation of codes and standards for concrete and other building materials.

At Atlanta, the Whitney Award was scheduled to be presented to S. M. Uzumeri, chairman of the Department of Civil Engineering, a Fellow and a member of ACI for more than 20 years.

CHARLES S. WHITNEY MEDAL

The Charles S. Whitney Medal for Engineering Development was founded in 1961 by Ammann and Whitney to honor the memory of Charles S. Whitney. It may be bestowed once in any year, but not necessarily in each year, for noteworthy engineering development work in concrete design or construction. The recognition may be extended to a firm or agency alone or to an individual.

Any outstanding engineering development work contributing importantly, through development of general engineering practice or through application in specific noteworthy projects, to the advancement of the sciences or arts of concrete design or construction is eligible.



WASON MEDAL FOR MATERIALS RESEARCH
TO

VAL R. STURRUP
R. DOUGLAS HOOTON
PRANAB K. MUKHERJEE
T. CARMICHAEL

"for their paper, ('Evaluation and Prediction of Concrete Durability: Ontario Hydro's Experience'), that covers durability studies using accelerated and long-term exposure testing and structures evaluation, and draws conclusions regarding both important concrete qualities and test methods," published in Concrete Durability, SP-100, 1987, pp. 1121-1154.

Val R. Sturrup, of Toronto, Ontario, retired in 1983 after more than 32 years with the Research Department of Ontario Hydro.

A long-time member of ACI's Ontario chapter, he is a former president of the chapter. He is now a private consultant and has served on several committees of ASTM and the Canadian Standards Association.

At the time of retirement, he was the head of Ontario Hydro's Concrete Research Laboratory.

R. Douglas Hooton is assistant professor of civil engineering, University of Toronto, and has been on the faculty there since 1986. He is on leave from Ontario Hydro's Research Division where he had been employed since 1981.

A former president of ACI's Ontario chapter, Hooton is a new Fellow of ACI, one of 27 scheduled to receive their citations at the Atlanta convention.

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He is a member of Committee 226, Fly Ash, Other Pozzolans, and Slag; 227, Radioactive Waste; and 201, Durability. Hooton is an examiner for ACI's certification program for field testing technicians and also serves on a number of ASTM and CSA committees.

Pranab K. Mukherjee is a senior engineer in the Research Division, Ontario Hydro, and has been with the firm for 11 years.

A past secretary of the Ontario chapter, he is a member of ACI Committee 365, Service Life Prediction. Before joining Ontario Hydro, he was a materials engineer for the Ontario Ministry of Transportation and Communications.

T. Carmichael is a supervising engineer in the Research Division, Ontario Hydro, and has been with the firm for 19 years.

He holds a Master's degree in geology and was an exploration geologist prior to joining Ontario Hydro in 1970. Carmichael is a fellow of the Geological Association of Canada.

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
ROBERT F. YTTERBERG

"for his three-part paper, 'Shrinkage and Curling of Slabs on Grade,' in which a comprehensive treatment of the causes of shrinkage and curling is followed by practical design considerations to minimize those effects," published in Concrete International: Design & Construction, V. 9, April, May, and June, 1987.

Robert F. Ytterberg is chairman and president of Kalman Floor Co., Evergreen, Colo., a nationwide subcontracting firm which specializes in design and installation of exposed concrete floors for commercial and industrial buildings. He has headed the firm for 32 years.

He is a member of ACI Committee 117, Tolerances, and has been extensively involved in the drafting of 117's reports and standards related to floor and deck tolerances. He is also a member of Committee 360, Design of Slabs on Grade, and is a former chairman of that committee.

An ACI member for 30 years, he is a past member of Committee 302, Concrete Floor Construction, and is also a member of ASTM and the American Society of Civil Engineers. Ytterberg holds engineering degrees from Brown University and Massachusetts Institute of Technology.

**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.



CONSTRUCTION PRACTICE AWARD

TO

ERNEST K. SCHRADER

"for his paper, 'Compaction of Roller Compacted Concrete,' which examines the variables affecting the compaction of RCC and describes construction practices to achieve the desired compactibility, published in Consolidation of Concrete, SP-96, 1987, pp. 77-101.

Ernest K. Schrader heads his own consulting firm in Walla Walla, Wash., and is a former engineer with the U. S. Army Corps of Engineers, Walla Walla District.

A Fellow of the Institute, he has been involved in roller compacted concrete design and construction since its early days. In 1984, he received ACI's Wason Medal for authorship of a paper on the first concrete gravity dam constructed by using RCC methods.

He is a member of Committees 224, Cracking; 207, Mass Concrete; 210, Erosion of Concrete in Hydraulic Structures; 506, Shotcrete; 544, Fiber Reinforced Concrete; and 548, Polymers. Schrader is a former member of Committee 223, Expansive Cement Concretes.

An engineering graduate of Clarkson, N. Y., College of Technology, he joined the Corps of Engineers in 1972 and entered private practice about four years ago.

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.



RAYMOND C. REESE
 STRUCTURAL
 RESEARCH AWARD
 TO
M. J. N. PRIESTLEY
ROBERT PARK

"For their paper, 'Strength and Ductility of Concrete Bridge Columns Under Seismic Loading,' which presents a comprehensive study of the flexural strength and ductility of confined reinforced concrete columns of various shapes and proposes a new design method for predicting strength and ductility," published in the ACI Structural Journal, V. 84, No. 1, January-February 1987, pp. 61-76.

M. J. N. Priestley is professor of structural engineering at the University of California, San Diego, and has been on the faculty there for two years.

At the time the paper was written, both he and Robert Park were on the faculty at the Department of Civil Engineering, University of Canterbury, New Zealand. The pair received this same ACI award in 1984 for co-authorship of a paper on stress-strain behavior of concrete confined by overlapping hoops.

Priestley, who was with the New Zealand Ministry of Works and Development before he joined the faculty at Canterbury, is currently chairman of ACI Committee 531, Concrete Masonry, and is a member of Committee 344, Circular Prestressed Tanks.

Robert Park is the head of the Department of Civil Engineering and professor at Canterbury and has been on the faculty there for 28 years.

A Fellow of ACI, he is a member of Committees 352, Joints and Connections in Monolithic Structures, and 441, Reinforced Concrete Columns. He is a former member of Committees 428, Inelastic Behavior, and 442, Response to Lateral Forces.

Park is a former president of the New Zealand Prestressed Concrete Institute and the New Zealand National Society for Earthquake Engineering and has been extensively involved in the development of codes and standards for building materials in that nation.

His honors include both the Moisseiff Award and the T. Y. Lin Award of the American Society of Civil Engineers and the Martin P. Korn Award of the Prestressed Concrete Institute.

RAYMOND C. REESE
STRUCTURAL RESEARCH AWARD

The Raymond C. Reese 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

**MOHAMMAD ABUL MANSUR
P. PARAMASIVAM
SENG-LIP LEE**

"for their paper ('Ferrocement Sunscreens on High-Rise Buildings'), describing an innovative use of ferrocement to fabricate precast sunscreens that were retrofitted to three 11-story apartment blocks in Singapore. The solution proved to be graceful and aesthetically pleasing as well as economical," published in Concrete International: Design & Construction, V. 9, No. 9, September 1987, pp. 19-23.

Mohammad Abul Mansur is a senior lecturer in civil engineering at the National University of Singapore, Republic of Singapore, and has been on the faculty there for 10 years.

A member of ACI and other organizations, he currently serves as a member of the cast-in-place concrete committee of the Council on Tall Buildings and the Urban Habitat. He was a co-recipient of the Award for Excellence in Concrete Research by the Singapore Concrete Institute in 1986.

He has researched and written extensively on topics related to reinforced structural concrete, fiber reinforcement of concrete, and ferrocement. Mansur holds engineering degrees from Bangladesh University of Engineering and Technology, Dhaka, and the University of New South Wales, Australia.

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P. Paramasivam is associate professor of civil engineering at the National University of Singapore and has served on the faculty there since 1971.

A member of ACI, he is an associate member of Committee 549, Ferrocement, a member of the board of directors of the Singapore Concrete Institute, and a fellow of the Institution of Civil Engineers (England) and the Institution of Engineers of both Singapore and India.

He has been extensively involved in research and consultancy work on ferrocement and fiber reinforced concrete for rural and urban applications. Paramasivam holds engineering degrees from Madras University, India, and the Indian Institute of Technology, Kanpur.

Seng-Lip Lee is professor and the head of the Department of Civil Engineering, National University of Singapore. Before joining the faculty at Singapore 14 years ago, he was professor of engineering at Northwestern University, Evanston, Ill.

His honors include the Greensfelder Construction Prize of the American Society of Civil Engineers, the Singapore Public Administration Medal, the Singapore National Science and Technology Award, and Foundation Research Awards of the International Federation of Asian and Western Pacific Contractors Association and the Philippines Contractors Association.

The author or co-author of more than 300 technical papers, he is currently the president of the Southeast Asian Geotechnical Society. Lee is also a fellow of the American Society of Civil Engineers and the Institution of Engineers of both England and Singapore.

He holds engineering degrees from Mapua Institute of Technology in Manila, the University of Michigan, and the University of California, Berkeley.

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 **I. LEON GLASSGOLD**

"in recognition of his untiring effort and leadership in the formation of the ACI Maryland chapter; his commitment to and involvement in the development and promotion of chapter activities; and the concrete industry as a whole."

I. Leon Glassgold, of Baltimore, Md., is the vice president-nominee of the American Concrete Institute and at the Atlanta convention will begin a two-year term in that position.

He is the president of Masonry Resurfacing and Construction Co., Baltimore, and has been associated with that firm for 40 years. He is a former member of the Board of Direction, the Chapter Activities Committee, and the Technical Activities Committee.

A Fellow of the Institute, Glassgold received ACI's Henry C. Turner Medal in 1987 for "contributions to the concrete industry through participation in technical and educational activities and for promoting improvements in construction practice" and a Delmar L. Bloem Distinguished Service Award in 1979 for outstanding technical committee efforts.

He is currently a member of the Planning Committee, Financial Advisory Committee, Publications Committee, Construction Liaison Committee, and is chairman of TAC's Specifications Committee. In addition, he is a member and past chairman of Committee 547, Refractory Concrete, and is a member of Committees 506, Shotcreting, and 546, Repair of Concrete.

An engineering graduate of the University of Pennsylvania, he is a charter member and former president of the Maryland chapter and served as the general chairman of the convention committee for the 1986 fall meeting of the institute in Baltimore.

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

RICHARD O. ALBRIGHT
JOHN E. BREEN
DAVID P. GUSTAFSON
GARY R. MASS

"for major and significant contributions to the knowledge of parking lot construction."

Richard O. Albright, a Fellow of ACI, was recently named Hamilton County engineer, Noblesville, Ind., after serving as engineer/director of the Indiana Concrete Council for more than 16 years.

He advocated the formation of ACI Committee 330, Parking Lots, and served as its organizing chairman and later as its permanent chairman, beginning in 1982. He remains as a member of that committee and also serves on Committee 325, Concrete Pavements.

During his tenure as chairman, Committee 330 produced and published "Guide for Design and Construction of Concrete Parking Lots," ACI 330R-87. He is a fellow of the American Society of Civil Engineers and is a past director and vice president of ASCE and current chairman of its Technical Planning Committee.

Albright was also a member of the organizing committee for ACI's Indiana chapter and now serves as the chapter's secretary-treasurer.

"in recognition of outstanding technical expertise and organizational abilities through many years of ACI service."

John E. Breen, a Fellow of the institute, former chairman of the Technical Activities Committee, and former Board of Direction member, holds the Nasser I. Al-Rashid chair in civil engineering at the University of Texas, Austin, Tex.

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A member of the faculty at Texas since 1959, he is to step down as chairman of ACI Committee 318, Standard Building Code, later this year with the publication of 318-89. He assumed the chairmanship of Committee 318 following publication of the 318-83 edition.

During his term, the committee drafted the 1989 editions of the "Building Code Requirements for Reinforced Concrete," "Building Code Requirements for Structural Plain Concrete," commentaries and metric versions of each, and 1986 supplementary revisions to the 1983 Code and Commentary.

His Institute honors include the Raymond C. Reese Structural Research Award, the Joe W. Kelly Award, the Arthur R. Anderson Award, and the Wason Medal for Most Meritorious Paper. Breen was the Raymond E. Davis Lecturer in 1978.

He is a past chairman of Committee 441, Reinforced Concrete Columns, and is also a former member of Committee 334, Concrete Shell Design. Breen holds engineering degrees from Marquette University, the University of Missouri, and the University of Texas, and was J. J. McKetta Professor of Civil Engineering and director of the Ferguson Structural Laboratory at Austin prior to his appointment to the Al-Rashid chair.

"in recognition of exceptional technical and administrative leadership."

David P. Gustafson, a member of the Institute since 1962 and a Fellow, is technical director of the Concrete Reinforcing Steel Institute, Schaumburg, Ill., and has been with CRSI for nearly 15 years.

He recently concluded six years as chairman of Committee 301, Specifications for Concrete, during which time the committee published periodic revisions to "Specifications for Structural Concrete for Buildings." Also during this period, 301 produced a revision to "Field Reference Manual," SP-15, and continued efforts to recast the committee specifications into Technical Activities Committee approved format.

Gustafson also serves on Committees 318, Standard Building Code, and 439, Steel Reinforcement, is a past chairman of Committee 355, Anchorage to Concrete, and is a former member of Committees 343, Concrete Bridge Design, and E 702, Designing Structures. He is also the current chairman of the Fellows Nominating Committee.

An engineering graduate of Michigan Technological University and Tulane University, he was with Duke Power Co., Charlotte, N. C., an engineering firm in New Orleans, and on the faculty at Michigan Tech before joining CRSI.

continued

"for remarkable service as an ACI technical committee member and chairman, especially in the field of mass concrete."

Gary R. Mass, a member of the Institute for 22 years and a Fellow, is the director of the Concrete Technology Corp., Santa Barbara, Calif.

A senior concrete engineer with Harza Engineering Corp. in Chicago prior to joining the California firm, he currently serves on seven technical committees: 207, 210, 211, 221, 304, 309, and 552. He joined Committee 207, Mass Concrete, in 1975 and recently concluded nearly six years as its chairman.

During Mass' tenure, Committee 207 published "Mass Concrete," ACI 207.1R-87; "Practices for Evaluation of Concrete in Existing Massive Structures for Service Conditions," ACI 207.3R-79 (Revised 1985), and "Cooling and Insulating Systems for Mass Concrete," ACI 207.4R-80 (Revised 1986). Also during his chairmanship, the committee sponsored or cosponsored three technical sessions and a forum at Institute conventions.

With Harza, he was involved in the preparation of concrete specifications and materials testing for a number of major projects in the United States, including the Bath County Pumped Storage Project in Virginia and the Strontia Springs Dam in Colorado, as well as in other nations.

A graduate of South Dakota School of Mines and Technology, Mass was with Kaiser Cement Corp. and the California Department of Water Resources prior to joining Harza.

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.



REINFORCED CONCRETE
RESEARCH COUNCIL
ARTHUR J. BOASE AWARD
TO
BORIS BRESLER

"For outstanding contributions in research and education, and for excellence in the transfer of knowledge to private practice."

Boris Bresler is an affiliated consultant with Wiss, Janney, Elstner Associates, Inc., Emeryville, Calif., and has been involved in teaching, research, and consulting in structural engineering and concrete technology for more than 40 years.

Professor of engineering at the University of California, Berkeley, prior to joining WJE about 12 years ago, he was accorded Honorary Membership in ACI last year "for outstanding applied concrete research that has resulted in the furtherance of structural engineering."

Other ACI awards include the Wason Medal for Materials Research in 1960, the Joe W. Kelly Award in 1978, and the Arthur R. Anderson Award in 1986. A Fellow of the Institute, he has been a member for nearly 40 years.

Bresler holds engineering degrees from the University at Berkeley and California Institute of Technology and headed WJE's Emeryville operations until being named an affiliated consultant in 1987.

An award of the Reinforced Concrete Research Council, the Boase honor recognizes outstanding activities and achievements in reinforced concrete. It is given in memory of a Portland Cement Association executive who was one of the founders of the council.

ARTHUR J. BOASE AWARD

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

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

PORTLAND CEMENT ASSOCIATION CONCRETE BRIDGE AWARDS

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

The six structures, four in the United States and one each in Canada and Mexico, were the winners of PCA's first biennial bridge awards competition.

The presentations are scheduled to be made by Anthony E. Fiorato, PCA vice president for research and development, and Charles G. Lewis, director of preconstruction, Georgia Department of Transportation, Atlanta, Ga.

Lewis was one of a three member jury which judged the entries on the basis of creativity and imagination in the structural, functional, esthetic, and economic design. Since concrete can be used in so many different ways, there were no categories for the competition and all six awards are of equal merit.

The other two judges for the contest were Robert L. Nickerson, chief, Bridge Review and Inspection Branch, Federal Highway Administration, Washington, D. C., and Harold R. Sandberg, chairman of the board, Alfred Benesch & Co., Chicago, Ill.

Eligible structures for the 1988 program must have been essentially completed between October 1985 and October 1988 and located within the three countries. All types of bridges — highway, railway, and pedestrian — with concrete as the basic structural system were eligible.

Photos and jury comments on the six projects:

Ocean County Plaza, Toms River, New Jersey

This box culvert bridge was installed in only 1½ days. It meets the criteria of rapid construction, economy, and low maintenance, which are becoming dominant factors in bridge replacement. It shows that with proper selection of materials and construction types, bridge replacement times can be a matter of days instead of months.



Bow River Bridge, Calgary, Alberta

This innovative design satisfies two transportation needs — light rail and pedestrian — with one structure. By suspending the pedestrian bridge from the heavier light-rail bridge, the top structure acts as an umbrella to protect pedestrians below. The piers are designed so that the pedestrian bridge passes through them, which enhances the structure's overall appearance.

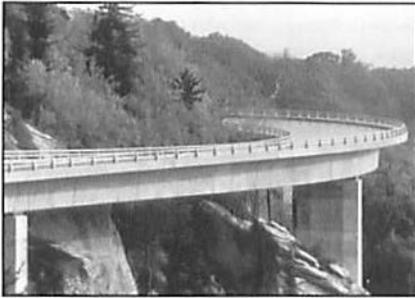


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I-85/I-285 Interchange, Doraville, Georgia

What could be more complex than building an urban interstate-to-interstate connection under traffic? This network of 19 bridges and several miles of ramp was built to relieve traffic tie-ups on an obsolete cloverleaf. Traffic of nearly 290,000 vehicles per day was maintained during construction. The new interchange is both attractive and functional.



Linn Cove Viaduct, Grandfather Mountain, North Carolina

The key to this bridge's success is the ability of the engineer, owner, and contractor to build a complex structural system through a sensitive environment with minimal impact. To eliminate construction roads, the bridge was built from the top down. Even the substructure was built using completed sections of the superstructure as a working platform. The result is a beautiful bridge that "floats" above the surrounding park land.



Tampico Bridge, Tampico, Mexico

Cable-stayed bridges are dominating long-span bridge construction world-wide. It is the ultimate in balanced use of materials: concrete for compression and cables for tension. This bridge exemplifies good long-span design. The piers are located on the banks to avoid damage from ships. Along with the long-span characteristics, the design brings out the beauty of the engineered structure — an important quality in itself.



Ingraham Street Bridge Over Mission Bay, San Diego, California

The clean, simple lines of this bridge in its park-like surroundings is an elegant solution. The design is both attractive and unobtrusive. Lighting effectively enhances the appearance at night. The bridge is also attractive when viewed from the park below. It fits the environment.

continued

PROJECT CREDITS

Ocean County Plaza — Owner: Kaplan Organization; engineer: Fellows, Read, & Associates; contractor: Kosen Brothers; concrete supplier/prefabricator: Rotondo/Penn-Cast.

NW LRT Bow River Bridge — Owner: City of Calgary; engineers: Campbell Woodall & Associates Consulting Engineers, Ltd., Walter Dilger Consulting Engineers, Speco Engineering, Ltd.; contractor: W. A. Stephenson Construction (Western), Ltd.; concrete suppliers/prefabricators: Con-Force Structures, Ltd., Post-Tensioning Division, Burnco Rock Products, Ltd.

I-85/I-285 Interchange — Owner: Georgia Department of Transportation; engineer: Howard Needles Tammen Bergendoff and T. Y. Lin International; contractor: Jasper Construction Co.; concrete suppliers/prefabricators: Jasper Construction Co., Williams Brothers Concrete.

Linn Cove Viaduct — Owner: Federal Highway Administration, National Park Service; engineer: Figg & Muller Engineers, Inc.; contractor/concrete supplier/prefabricator: Jasper Construction Co.

Tampico Bridge — Owner and engineer: Ministry of Communications and Transportation; contractors/concrete suppliers/prefabricators: Constructora y Edificadora Mexicana, S.A., Ingenieros Civiles Asociados, S.A., Proyectos y Construcciones, S.A., and Freyssinet de Mexico, S.A.

Ingraham Street Bridge — Owner: City of San Diego; engineer: McDaniel Engineering Co., Inc.; contractor: Kasler Corp.; concrete supplier: Nelson & Sloan; girder prefabricator: Sapper Construction Co.

CHAPTER AWARDS CITATIONS OF EXCELLENCE

At the 1987 fall convention in Seattle, Washington, ACI's Board of Direction approved an Annual Awards Program for Chapters that have achieved excellence in chapter activities and have significantly contributed to ACI. These awards will be presented for the second time in Atlanta.

Information submitted on Annual Reports by ACI chapters is used to determine if the chapter meets the criteria for an award. 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.

1988 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 1988 Fellows of the American Concrete Institute:

John M. Albinger

Arthur J. Mullkoff

Charles M. Ayers

Tarun R. Naik

Kenneth C. Clear

Ira W. Pearce

Sidney Diamond

William R. Phillips

Richard E. Galer

Sara D. Ramsdell

Odd E. Gjorv

John A. Richards

Clifford Gordon

Owen Richards

Terence C. Holland

Kenneth L. Saucier

R. Douglas Hooton

Donald L. Schlegel

Shoji Ikeda

Luke M. Snell

Martin B. Mittelacher

David C. Stark

William C. Moore

Paul R. Stodola

Jaime Moreno

J. Francis Young

Jon I. Mullarky

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1989

AWARDEES



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