

RICHARD N. WHITE

James A. Friend Family Distinguished Professor of
Civil and Environmental Engineering, Emeritus
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Personal Data:

Born in Chetek, Wisconsin, 21 December 1933. Married (1957), two children (1959 and 1962).

Education:

B.S. 1956, M.S. 1957, PhD, 1961 -- all in Civil Engineering, University of Wisconsin. Held Wisconsin Alumni Research Foundation Fellowship and Ford Foundation Fellowship in Graduate School .

Engineering Experience:

- 1957: Assistant Post Engineer, Ft. Monroe, VA (Sept-Dec)
- 1958-59: Structural Engineer at John A. Strand, Madison, Wisconsin. Design of Interstate highway bridges, a lock facility, and sanitary engineering facilities.
- 1959-61: Part-time work at John A. Strand.
- 1964: Development Engineer, Outside Plant Laboratory, Bell Telephone Laboratories, Summer, Murray Hill, NJ. Conducted similitude studies for cable-laying equipment.
- 1967-68: Staff Associate, Gulf General Atomic, Inc., San Diego, CA. Prestressed concrete reactor vessels - computer analysis, development work on ASME Code, concrete properties research, model studies on 1100 KW reactor.

Consulting 1962 to Present: Structural analysis, design, and development work; structural investigations, reviews and evaluations; structural research and development oversight; preparation of design aids; editorial development work and consulting.

Oak Ridge National Laboratory, Stone and Webster Engineering Corp., R.C. Mahon, Inc., Severude-Perrone-Sturm-Conlin-Bandel, Unadilla Laminated Products, Metal Building Manufacturer's Association, American LaFrance Corp., Flannery and Associates, Structural Dynamics Research Corporation, Editorial Advisory Board of John Wiley & Sons, Penn Tech Paper Company, H.H. Robertson, Sandia National Laboratory, Bakhtar Associates, Binghamton Precast and Supply, Walcon Corp., Defense Nuclear Agency, SRI International, Ben Gerwick, Agabian Associates, Italian National Committee for Nuclear Energy, Koppers Corporation, Merritt Case Inc., University of Puerto Rico, University of Costa Rica, McMaster's University,

Terra Tek Corporation, National Bureau of Standards, Brookhaven National Laboratory, Korean Atomic Energy Research Institute, Environmental Solutions Inc., Kamtech Inc., Novelli Engineers, and others.

Registered Professional Engineer, New York 1965 - present.

Military Service:

Distinguished Military Graduate, University of Wisconsin ROTC.

1957: 2nd Lt., US Army Corps of Engineers, 6 months active duty. Assistant Post Engineer, Ft. Monroe, VA.

1957-65: Served to 1st Lt., USAR. Served in Engineer, Military Intelligence, and Ordnance Groups.

University Experience:

1958-61: Instructor in Structural Engineering, University of Wisconsin. Taught reinforced concrete, advanced reinforced concrete, steel design, light gage steel design, structural analysis, advanced structural analysis, and graduate level prestressed concrete.

1961 - 1998 School of Civil & Environmental Engineering, Cornell University. Courses taught include : at the undergraduate level -- introduction to civil engineering, statics and mechanics of solids, structural analysis, reinforced concrete, structural steel, project design, structural behavior laboratory, and timber design , and at the graduate level -- advanced reinforced concrete, prestressed concrete, structural model analysis and experimental methods, numerical methods, repair and retrofit of concrete structures, and Master of Engineering project design. Innovations include development of a new structural behavior laboratory, evolution of the undergraduate structures sequence into a series of courses where analysis and design were taught in an integrated fashion, development of design project instruction that involves practicing engineers and real projects, and development of a professional Master of Engineering (Civil) degree program.

Professor of Structural Engineering since July 1, 1972

1974-75: Visiting Professor, Department of Civil Engineering, University of California, Berkeley. Research and teaching in concrete structures and structural analysis.

1978-84: Director, School of Civil and Environmental Engineering, Cornell University. Responsible for civil engineering educational program involving 30 faculty, 150 graduate students, about 100 upperclass undergraduate students, and an extensive physical plant. Annual budget about \$2.5 million. Raised nearly \$1 million in private funds to build new 5000 sq.ft. DeFrees Hydraulics Laboratory, 1983.

1986-87: Special Assistant to the Dean of Engineering for Capital Facilities Planning. Responsible for overseeing planning and decision-making at the College level, and for maintaining liaison between the architects and engineers, the Dean's Office, and faculty.

- 7/1987- 12/1989: Associate Dean for Undergraduate Programs, College of Engineering. Responsible for curriculum and program for 2600 undergraduate engineering students. Oversaw and coordinated the activities of all undergraduate support units, including Admission, Registrar, Advising and Counseling, Minority Programs, Placement, and student organizations. Served as principal advisor to the Dean on educational matters.
- 10/1988: Named James A. Friend Family Distinguished Professor of Engineering
- 3/1982: Visiting Professor, School of Civil Engineering, University of Puerto Rico, Mayaguez. Teaching and research activities in structural engineering.
- 4/1982: Visiting Professor, Civil Engineering Department, Southwestern Jiaotong University, Emei, Sichuan, People's Republic of China. Gave lectures on advanced topics in concrete structures, experimental methods, and engineering education at 8 other institutions in China.
- 9-10/90: Scientific and Engineering Research Council Visiting Professor at Durham University, Durham, England; also gave lectures on reinforced concrete structures research at Imperial College, Bristol University, University of Glasgow, Milano Politecnico, and Univ. of Brescia, and a number of institutes and firms.
- 1/1/1999: Retired from Cornell and named Professor Emeritus

Special Short Courses Taught:

Structural Models, Summer 1969, Cornell University

Prestressed Concrete Reactor Vessels, with P. Gergely, Summer 1969, Cornell University

Inventory Ratings of Bridges, with A. Lichtenstein, Winter 1970, Cornell University

Structural Models, with G. Sabnis and S. Mirza, Mexico City, Summer 1976

Structural Models, University of Puerto Rico, March 1977

Experimental Methods in Design and Evaluation of Structures, University of Puerto Rico, January 1981

Timber Engineering, University of Puerto Rico, March 1982.

Research Interests and Activities:

Research in structural concrete has included small scale modeling techniques, shell structures (cylindrical and hyperbolic paraboloids), frames under severe loading histories, lightly reinforced concrete buildings subjected to moderate seismic loads, behavior of frames with masonry infills, repair and retrofit of concrete structures, prestressed concrete primary containment vessels, secondary containment vessels subjected to seismic loadings and to severe pressurization and concentrated local loads, lap splices in beams and columns for structures in seismic zones, fundamentals of bond behavior under reversing loads,

offshore structures subject to severe ice loadings, rapid evaluation of structures to resist seismic loadings, structural applications of high strength concrete, improved computational capability for implementing strut-and-tie models in design, and shear behavior of precracked concrete, including dowel action and aggregate interlock modes under reversing load histories.

Steel structures research has included connections for tubular structures, residual stresses and fatigue life of cold-formed thick plates, and a number of projects on cold-formed, light gage steel for building systems.

Timber structures research has been conducted on connections and on metal-clad timber farm structures (diaphragm action to resist wind loadings).

Educational methods research in improved use of case studies and new multimedia approaches to teaching design to undergraduate civil engineering students.

Principal investigator on many sponsored projects from the National Science Foundation, the National Center for Earthquake Engineering Research, the Nuclear Regulatory Commission, the National Synthesis Education Coalition, U.S. Steel Corporation, Oak Ridge National Laboratories, Los Alamos Scientific Laboratory, Unadilla Laminated Products, Electric Boat Division of General Dynamics, National Institute for Standards and Technology, and other agencies.

Professional Societies and Councils:

American Society of Civil Engineers (Fellow and Life Member)
American Concrete Institute (Fellow)
Prestressed/Precast Concrete Institute
Earthquake Engineering Research Institute (former Member)
Association for Bridge Construction and Design
American Society for Engineering Education (former Member)

Professional Society Committee Positions and Memberships:

ACI President, 1997-98
ACI Vice President, 1995-1997
ACI Executive Committee, 1995-1999, and Chairman, 1997-98
ACI Board of Directors, 1992-2001
ACI Technical Activities Committee (Member 1986-1991, and Chairman, 1991-94)
ACI Advisory Committee on ISO/TC 71, Concrete Structures, 1996-present
ACI Strategic Plan Overview Committee, 1996-2000
ACI TAC Technology Transfer Committee, 1995-present
ACI Innovative Technology Task Group 2 on Deformed Reinforcement,
Chairman, 1995-present
ACI Commemorative Lecture Series Selection Committee, 1998-present
ACI Paper Awards Committee, 1997-1999 (Chairman 1999)
ACI Personal Awards Committee, 1999-2000 (Chairman 2000)
ACI Honorary Member Selection Committee, 1998-2000 (Chairman 2000)
ACI Standards Board, 1998-present
ACI Honors and Awards Task Committee, Chairman 2000
ACI Distance Learning Task Group, Chairman, 1999-present
ACI International Conference Steering Committee, 1996-present
ACI Nominating Committee, 1998-present

ACI Committee 444, Experimental Analysis (founder and first Chairman)
ASCE EMD Committee on Experimental Analysis and Instrumentation (Chairman twice)
Corresponding Member, National Academy of Sciences Committee on Human Rights

Other previous committee assignments include:

ACI-ASME Committee 359, Concrete Pressure Vessel Components for Nuclear Reactors
ACI Committee 335, Composite and Hybrid Structures (founder and first Chairman)
ACI Committee 369, Seismic Repair and Rehabilitation
ACI Search Committee for new Executive Vice President, 1998
ACI Membership Study Task Force, 1996-98
Organizing Group for ACI ConREF Strategic Development Council
ACI Task Force on ACI Technology Evaluation Service
ACI Convention Committee, 1990-1994.
ACI Construction Liaison Committee, 1992-1994.
ACI International Activities Committee, 1992-1995
Elected to National Nominating Committee of ACI (twice)
PCI Education Committee
Reinforced Concrete Research Council and four RCRC sub-committees
Advisory Group, 1995 ASCE Education Conference
ASCE Committee on Nuclear Structures and Materials
ASCE Committee on Wood
ASCE Task Committee on Tubular Structures
ASCE District 6 Qualifications Committee
ASCE Task Committee on Concrete Nuclear Reactor Containment Structures
ASCE Engineering Mechanics Division Publications Committee and Program Committee
Steering Committee for 1981 ASCE Spec. Conf. on Dynamic Response of Structures
All offices (secretary, treasurer, vice-president, and president) of the Ithaca Section of ASCE
Steering Committee on Council on Low-Rise Buildings and chairman of Council Task Group H
on Design of Connections Between Building Elements
Engineers' Council for Professional Development/Accreditation Teams in Civil Engineering
and in Engineering Mechanics
External review panel for **Concrete Canada** (a Canada Centre of Excellence),
1992-1997.
International Advisory Committee, IABSE Colloquium on Concrete Model Code for Asia
TRB Steering Committee for Fifth International Bridge Engineering Conference, held in
Tampa FL in April 2000

Honors and Awards:

Elected to National Academy of Engineering, 1992
Named James A. Friend Family Distinguished Professor of Engineering, Cornell
University, 1988
Co-recipient of Collingwood Prize of ASCE, 1967
Joe W. Kelly Award, ACI, 1992
Co-recipient of Wason Medal for Most Meritorious Paper, ACI, 1993
Distinguished Service Award, University of Wisconsin, 1993
Co-recipient of ACI Structural Research Award, 1994
Crom Lecturer, University of Florida, Fall 1994

Cornell Society of Engineers Excellence in Teaching Award, 1965
 College of Engineering Dean's Award for Excellence in Teaching, 1996
 Cornell Chi Epsilon Teacher of the Year Award, 1972, 1987, and 1996
 Chi Epsilon Chapter Honor Member, U. Wisconsin, 1995
 Elected Fellow of the American Concrete Institute, 1974
 Named Life Member of American Society of Civil Engineers, 1998
 Member of Honor Societies Sigma Xi, Chi Epsilon, Tau Beta Pi, Phi Kappa Phi, and Phi
 Eta Sigma
 1982 Engineer of the Year Award, Ithaca Section of ASCE

Listed in:

- Who's Who in the World
- Engineer's of Distinction
- American Men of Science
- Who's Who in Technology Today
- 5,000 Personalities of the World
- Dictionary of International Biography
- Who's Who Registry of Global Business Leaders.
- International Directory of Distinguished Leadership
- Who's Who in America
- Who's Who in Engineering
- International Who's Who in Engineering,
- Personalities of America
- Men of Achievement

National and International Appointments and Assignments:

- Appointed by ACI to be the Institute Representative on ANSI N48, Radioactive Waste Management, 1973-1982.
- Selected to serve on National Academy of Science Panel on Engineered Storage of Nuclear Wastes, 1974.
- Invited by NSF to participate in USSR-US Exchange Program on Structures in Seismic Zones, May 1978.
- Invited to be Temporary Member of U.S. Delegation to UJNR meeting in Tokyo, May 1981.
- Invited Introductory Reporter on Applications of Finite Element and Other Advanced Numerical Techniques for Reinforced Concrete, IABSE Colloquium in Delft, June 1981.
- Co-principal Investigator for NSF-Sponsored Technical Exchange Program between Cornell (and other U.S. Universities) and Delft University, 1980-1985.
- Invited Lectures at 8 universities and institutes in People's Republic of China (in Beijing, Xian, Emei, Chongqing and Shanghai), April-May 1982.
- Member of NSF Earthquake Hazards Mitigation Advisory Subcommittee, 1982-1985.
- Co-Director of three NSF Workshops on Evaluation of Seismic Performance of Existing Structures, held under the auspices of UJNR Panel in Japan in May 1983, in Berkeley in July 1984, and in Japan in May 1985.
- Member of DNA National Workshops on Advanced Silo Hardness Technology, 1983-1984.
- Invited member of NSF Exchange Panel with France (seismic engineering), Paris, June 1984.
- External Reviewer of Department of Civil Engineering, McMaster University, January 1985, and of Graduate Programs in Civil Engineering at University of Miami, October 1989.
- Invited panelist, ASCE/NSF Workshop on Research Needs Related to Rehabilitation, Renovation, and Reconstruction of Buildings, February 1985.
- Invited judge for 1985 New York State Engineering Excellence Awards Program, Consulting Engineers Council of New York State.
- Member of NSF Advisory Group for National Information Service for Earthquake Engineering, 1981-1986.
- Member, Visiting Committee at Case Western Reserve University.

- Member, Regional Steering Committee for USGS/NSF/FEMA/NBS 1987 Workshop on "Research Applications of the National Earthquake Hazards Reduction Program in the Eastern United States".
- Chairman of External Review Committee for Program in Structural Engineering, Mechanics, and Materials at University of California, Berkeley, November 1987.
- Advisor to University of Puerto Rico (Research program and establishment of new Ph.D. program)
- National Research Council Reviewer of Advisory Panel Reports on National Earthquake Engineering Experimental Facility Study
- Member of Sandia Laboratories Peer Review Group for Containment Integrity Program, 1981-present.
- Advisor to University of Costa Rica, 1985 to 1990.
- Member, Engineering Advisory Council, Clarkson University, 1992-1996.
- Member, U.S. Planning Group for Phase 5 of UJNR Research Program -- Hybrid and Composite Structures, 1992-1993.
- Member, Site Review Team for Canadian Network of Centres of Excellence for High-Performance Concrete, May 1993.
- External Reviewer, Concrete Canada National Research Program, 1994.
- Corresponding Member, National Academy of Sciences Committee on Human Rights
- Member, USTCC (Technical Coordinating Committee) of US-Japan Composite/Hybrid Structures Joint Research Program, and Chairman, Subcommittee on Composite Column Systems, 1993-1995.
- As part of the ACI International Seminar Series, presented several seminars in Fall 1997 and Fall 1998, at each of the following locations: **Warsaw, Poland** (Polish Academy of Science); **Cairo, Egypt** (Egyptian Society of Engineers); **Amman, Jordan**; **Jeddah, Saudi Arabia** (Ministry of Public Works); **Riyadh, Saudi Arabia**; **Abu Dhabi, U.A.E.**; **Kuwait City, Kuwait** (Kuwait University); **Taipei, Taiwan**; **Buenos Aires, Argentina**; **Lima, Peru**; **Quito, Ecuador**; **Bogota, Columbia**; and **San Jose, Costa Rica**. Seminar topics included: "Nonseismically-Designed Reinforced Concrete Buildings Subject to Seismic Loads (Strategies and Methods for Evaluation and Recent Advances in Rehabilitation and Retrofit)"; "Experimental and Analytical Seismic Behavior of Frames Infilled with Unreinforced Masonry Walls"; "High-Strength Concrete -- Design Issues and Potential Shortcomings in Current Design Codes"; and "Rehabilitation of Bridge Decks Using Precast Composite Elements"

CORNELL COMMITTEES:

University Level:

Cornell University Constituent Assembly, 1969-1970
 President's Commencement Advisory Committee, 1970-1971
 University Review and Procedures Committee, 1971-1974
 Provost's Search Committee for Dean of Engineering, 1978
 University Computing Board, 1979-1982, and Secretary, 1980-1982
 Provost's Committee for Review of Engineering Deanship, 1983
 Provost's Search Committee for Vice President for Research and Advanced Studies, 1983
 Steering Committee for Cornell Laboratory for Environmental Applications of Remote Sensing, 1984-1987
 Associate Dean Working Group, 1987-1989
 Hispanic Studies Program Executive Committee, 1987-1989
 Asian-American Studies Program Executive Committee, 1987-1989
 Academic Records and Registration Committee, 1987-1989
 Subcommittee on Institutional Organization and Governance of the Commission on Undergraduate Education, 1987-1989
 Faculty Council of Representatives, 1990-1993

University Strategic Planning Study Group #3, Student Recruitment and Retention, 1992-1995
University Strategic Planning Faculty Advisory Committee, 1992-1996
Committee on Academic Freedom and Professional Status of the Faculty, 1993-1996

College of Engineering Assignments:

Executive Board of Division of Basic Studies, 1962-1965, and Secretary, 1964
College Committee on Design, 1964
College Continuing Education Advisory Committee, 1966-1968
Faculty Editorial Advisory Committee for Cornell Engineering Quarterly, 1968-1973
College Steering Committee on Pedagogy, 1969-1971
College Ad Hoc Advisory Committee on Undergraduate Counseling and Advising, 1970
Chair, College Liaison Committee on Undergraduate Dynamics Course, 1970-1973
College Committee on Evaluation of Teaching, 1971-1972
College Core Curriculum Committee, 1971-1974
College Graduate Professional Programs Committee, 1976-1978
Chair, Search Committee for Chairman of Theoretical and Applied Mechanics Department, 1976
Co-Chair, College of Engineering Committee on Grading Trends, 1976-1977
Numerous Ad-Hoc Promotion and Tenure Committees
Minority Advisory Committee, 1982-1989
CCGB Subcommittee on Engineering Distribution Courses, 1982-1984
Dean's Advisory Committee on Resource Allocation, 1985-1986
Chair, College United Way Campaign, 1985
Chair, College Engineering Facilities Committee, 1986-1987
Core Curriculum Governing Board, 1987-1989
Chair, Academic Integrity Hearing Board, 1987-1988
Academic Standards, Petitions, and Credit Committee, 1987-1989
Acting Director of Undergraduate Admissions, Fall 1988
International Engineering Committee, 1989-1991
Academic Integrity Hearing Board, 1992-1993
Curriculum Study Group, 1993
CCGB Engineering Distribution Committee, 1993-95

School of Civil and Environmental Engineering Assignments:

Member, CEE School Professional Degree Committee, and Chair, 1975-1977. Responsible for Master of Engineering (Civil) during chairmanship, and on Committee that developed this degree program in early 1970s.

Numerous assignments within the School of Civil and Environmental Engineering, including member of the Civil Engineering Steering Committee, Ad Hoc Goals Committee, Director Search Committee, Advisor to students on Professional Registration, several Faculty Search Committees, Curriculum Committee, Academic Standards and Records Committee, Auditing Committee (Chair), Scholarship Committee, Computing Committee, Word-Processing Committee, Master of Engineering (Management) Oversight Committee, Structures Group Study Committee on Graduate Program, and others in the CEE School and in the Department of Structural Engineering.

Chair, Task Group on Combined CEE-Management Program, 1985-1987.

Advisor to Cornell Student Chapter of American Society of Civil Engineers, 1985-1987.

Faculty Director, George Winter Structural Engineering Laboratory, 1992-1995.

Member, CEE Ad Hoc Committee to Assess Environmental Engineering Options, 1993-94.

Member, CEE Curriculum Committee, 1993-1995.

PUBLICATIONS

BOOKS

1. Building Structural Design Handbook, with C.G. Salmon, John Wiley and Sons, April 1987, 1197 pp.
2. Structural Modeling and Experimental Techniques, with G.M. Sabnis, H.G. Harris and S.M. Mirza, Prentice-Hall, August 1982, 585 pp.
3. Volume 1, Structural Engineering, 2nd Edition, with P. Gergely and R.G. Sexsmith, John Wiley and Sons, March 1976, 316 pp. (Also published in Spanish Edition).
4. Volumes 1 and 2 Combined Edition, Structural Engineering, with P. Gergely and R.G. Sexsmith, John Wiley and Sons, March 1976, 670 pp.
5. Volume 3, Structural Engineering: Behavior of Members and Systems, with P. Gergely and R.G. Sexsmith, John Wiley and Sons, 1974, 583 pp. (Also published in Spanish Edition, 1980).
6. Editor, Models for Concrete Structures, ACI Special Publications SP-24, 1970.

Chapters In Books

1. Chapter 23, "Models for Structural Concrete Design", in Handbook of Structural Concrete, Pitman, 1983.
2. Co-author of Chapter 6, "Connections", in Guidelines for Design of Low-Rise Buildings Subjected to Lateral Forces, ed. by A.K. Gupta and P.J. Moss, CRC Press, 1993.

PROCEEDINGS

1. Seismic Performance of Existing Buildings, Editor (with P. Gergely), Proc. of First Workshop, May 1983, Department of Structural Engineering, Cornell University, April 1985, 370 pp.
2. Seismic Performance of Existing Buildings, Editor (with P. Gergely), Proc. of Second Workshop, July 1984, Department of Structural Engineering, Cornell University, April 1985, 516 pp.
3. Seismic Performance of Existing Buildings, Editor (with P. Gergely), Proc. of Third Workshop, May 1985, Department of Structural Engineering, Cornell University, December 1986, 278 pp.

PUBLISHED PAPERS

A. Structural Models, Shells, Frames, PCRV's

1. "Problems Associated with Small Scale Direct Models of Shell Structures", with H.G. Harris, International Congress of Application of Shells in Architecture, May 1967.

2. "A Gypsum Mortar for Small-Scale Models", with G.M. Sabnis, ACI Journal, November 1967.
3. "Size Effects in Gypsum Mortars", with G.M. Sabnis, ASTM Journal of Materials, March 1968.
4. "Mortar Models of Prestressed Concrete Reactor Vessels", with J.M. Corum and Jack Smith, Journal of the Structural Division, ASCE, February 1969.
5. "Behavior of Reinforced Concrete Frames Under Cyclic Loads Using Small Scale Models", with G.M. Sabnis, ACI Journal, September 1969.
6. "Principles of Model Analysis", with P. Zia and D. VanHorn, Paper SP 24-2, Models for Concrete Structures, ACI SP-24, October 1970.
7. "Reinforcement for Small Scale Direct Models of Concrete Structures", with H.G. Harris and G.M. Sabnis, Paper SP 24-6, ACI SP-24, October 1970.
8. "Materials for Structural Models", with F. Roll and S. Mirza, Proceedings of ACI Models Symposium, Dallas, April 1972.
9. "A Perspective on Structural Modeling", with J. Carpenter, Proceedings of ACI Models Symposium, Dallas, April 1972.
10. "Model Studies on Hyperbolic Paraboloid Shells", Proceedings of First Australian Conference on Structural Models, Sydney, May 1972.
11. "Structural Modeling in Research, Design, and Education", Engineering - Cornell Quarterly, Spring 1982.
12. "Inelastic Behavior of R/C Cylindrical Shells", with H.G. Harris, Journal of the Structural Division, ASCE, July 1972, pp. 1633-1653.
13. "Models in Structural Design", Proceedings of the Symposium on Models in Structural Engineering, ACI Canadian Capital Chapter, Montreal, October 1972, pp. 1-22.
14. "Models of Shells and Folded Plates", Proceedings of the Symposium on Models in Structural Engineering, October 1972, pp. 23-69.
15. "Materials for Direct and Indirect Structural Models", with M.S. Mirza, F. Roll, and B. Batchelor, Structural Concrete Models - A State of the Art Report, Department of Civil Engineering and Applied Mechanics, McGill University, Montreal, October 1972.
16. "Factors Influencing Size Effects in Gypsum Mortars", with George Loh, Proceedings of Fourth Canadian Congress of Applied Mechanics, Montreal, May 1973.
17. "Reliability of Small Scale Models in Predicting Behavior of Concrete Structures Subjected to Multiaxial Stresses", Proceedings of IABSE Seminar on Concrete Structures Subjected to Triaxial Stresses, Bergamo, Italy, May 1974.

18. "Reinforced Concrete Hyperbolic Paraboloid Shells", Journal of the Structural Division, ASCE, September 1975.
19. "Model Tests on Complete Structures", ACI Journal, January 1976.
20. "Materials and Modeling Techniques for Reinforced Concrete Frames", with A.H. Chowdhury, ACI Journal, Proceedings, Vol. 74, No. 11, November 1977, pp. 546-551.
21. "Models of Concrete Structures: State-of-the-Art", with members of Committee 444 of ACI, Concrete International, Vol. 1, No. 1, January 1979.
22. "Use of Ultimate Strength Models to Aid the Design of Concrete Structures", Experimental Methods in Concrete Structures for Practitioners, American Concrete Institute, Washington, DC, October 1979, 16 pp.
23. "Model Study of the Failure of a Steel Bin Structure", Proceedings of ASCE/SESA Exchange Session on Physical Modeling of Shell and Space Structures, pp. 1-22, October 1982.
24. "Small Scale Modeling Techniques for Investigating the Failure of a Bin Structure", Proc. of ISE/BRE Seminar on Design of Concrete Structures: The Use of Model Analysis, Garston, England, November 1984 (Elsevier, NY, pp. 48-58, 1985).
25. "Modeling Punching with Torsional Shear at Penetrations in Reinforced Concrete Slabs", with W. Kim, Proc. of ISE/BRE Seminar on Design of Concrete Structures -- The Use of Model Analysis, Garston, England, November 1984 (Elsevier, NY, pp. 181-191, 1985).

B. Reinforced Concrete Buildings and Components Under Seismic and Other Severe Loadings

1. "Behavior of Multi-Story Reinforced Concrete Frames Subjected to Severe Reversing Loads", with A.H. Chowdhury, Proceedings of IABSE Symposium on Resistance and Ultimate Deformability of Structures Acted on by Well Defined Repeated Loads, Lisbon, September 1973.
2. "Interface Shear Transfer and Dowel Action in Cracked Reinforced Concrete Subject to Cyclic Shear", with R. Jimenez, P. Perdikaris and P. Gergely, Proceedings of the National Structural Engineering Conference - Methods of Structural Analysis, Vol. 1, August 1976, pp. 457-475.
3. "Small Scale Models for Reinforced Concrete Structures", with A.H. Chowdhury and N.R. Scott, Trans. ASAE, Vol. 20, No. 1, January 1977, pp. 132-137, 144.
4. "Small Scale Models of Concrete Structures Subjected to Dynamic Loads", with G. Sabnis, Proceedings of Sixth World Conference on Earthquake Engineering, New Delhi, India, January 1977.
5. "Bond and Dowel Capacities of Reinforced Concrete", with R. Jimenez and P. Gergely, ACI Journal, Proceedings, Vol. 76, No. 1, January 1979.
6. "Bond and Splices in Reinforcing Concrete for Seismic Loading", with F. Fagundo and P. Gergely, Proceedings, Structural Concrete Under Seismic Actions, Rome, May 1979.

7. "Sliding Shear and Dowel Forces in Cracked Reinforced Concrete Subjected to Seismic Loading", with P. Gergely and R. Jimenez, Proceedings, Structural Concrete Under Seismic Actions, Rome, May 1979.
8. "The Performance of Lapped Splices in Reinforced Concrete Under High-Level Repeated Loading", with P. Gergely and F. Fagundo, UJNR Panel on Wind and Seismic Effects, 11th Joint Meeting, September 1979, Japan.
9. "Multistory Reinforced Concrete Frames Under Simulated Seismic Loads", with A.H. Chowdhury, Reinforced Concrete Structures Subjected to Wind and Earthquake Forces, ACI Special Publication SP-63, pp. 275-300, 1980.
10. Summary Report on "Seismic Structural Research at Cornell University", with P. Gergely and A.R. Ingraffea, Proceedings, Sixth National Meeting of the Universities Council for Earthquake Engineering Research, University of Illinois, May 1-2, 1980.
11. "Seismic Design of Lapped Splices in Reinforced Concrete", with P. Gergely, Proceedings 7th World Conference on Earthquake Engineering, Istanbul, Turkey, Vol. 4, September 1980, pp. 281-288.
12. "Seismic Shear Transfer in Reinforced Concrete", Proceedings, 13th UJNR Panel Meeting, Tsukuba, Japan, May 1981.
13. "Cyclic Shear and Dowel Action Models in Reinforced Concrete", with R. Jimenez and P. Gergely, Structural Division Journal, ASCE, Vol. 108, No. ST5, May 1982, pp. 1106-1123.
14. "Behavior of R/C Lapped Splices for Inelastic Cyclic Loading", with K. Lukose and P. Gergely, ACI Journal, No. 5, Proc. Vol. 79, September-October, 1982, pp. 355-365.
15. "Suggestions for the Design of R/C Lapped Splices for Seismic Loading", with B. Sivakumar and P. Gergely, Concrete International, Feb. 1983, Vol. 5, no. 2, pp. 46-50.
16. "Design of Lapped Splices in R/C Beams, Columns and Flat Elements", with P. Gergely, Proc. of 8th World Conference of Earthquake Engineering, Vol. 5, July 1984, pp. 893-900.
17. "Seismic Resistance of the Beam-Column Connection Region in Lightly-Reinforced Concrete Frame Structures", with S. Pessiki, C. Conley, and P. Gergely, Proc. of Conference on Rescue of America's Infrastructure Building Restoration, Mayaguez, Puerto Rico, July 1989.
18. Expanded version of above paper #17 published in Studi e Recherche, Vol. 11, Milano Italy, 1989, pp. 437-465.
19. "Punching Shear Behavior of Lightweight Concrete Slabs and Shells", with D. McLean, L. Phan, and H.S. Lew, ACI Structural Journal, July-August 1990, pp.386-392.
20. "Seismic Behavior of the Beam-Column Connection Region in Lightly-Reinforced Concrete Frame Structures", with S. Pessiki, C. Conley, and P. Gergely, Proc. 4th U.S. National Conference on Earthquake Engineering, Palm Springs, California, May 1990.

21. "Shake Table Tests of a 1/6 Scale 2-Story Lightly-Reinforced Concrete Building", with A. El-Attar, P. Gergely, and C. Conley, Proc. 4th U.S. National Conference on Earthquake Engineering, Palm Springs, California, May 1990, pp. 767-776.
22. "Lightly Reinforced Concrete Buildings Subjected to Earthquake Loads -- Shake Table Tests of 1/8 and 1/3 Scale Building Models", with A. El-Attar, P. Gergely, A. Reinhorn, J. Mander, and S. Kunnath, 1991 EERI Annual Meeting Poster Session Paper, Salt Lake City, Utah, Feb. 1991.
23. "Initiation of Shear Cracking in Reinforced Concrete Beams", with W. Kim, ACI Structural Journal, May-June 1991, pp. 301-308.
24. "Seismic Performance of Existing Reinforced Concrete Frames Designed Primarily for Gravity Loads", with A. A. Beres, S. Pessiki, and P. Gergely, Proceedings, 6th Canadian Conference on Earthquake Engineering, Toronto, June 1991.
25. "Shake Table Test of a 1/8 Scale Three-Story Reinforced Concrete Frame Building Designed Primarily for Gravity Loads", with E. El-Attar, P. Gergely, and T.K. Bond, Proceedings, 6th Canadian Conference on Earthquake Engineering, Toronto, June 1991, pp. 639-646.
26. "Behavior of Existing Reinforced Concrete Frames Designed Primarily for Gravity Loads", with A. A. Beres, S. Pessiki, and P. Gergely, Proceedings, International Meeting on Earthquake Protection of Buildings, Ancona, Italy, June 1991, pp. 75-86.
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