



REGISTRATIONS

- Texas, P.E.
- Puerto Rico, P.E.

EDUCATION

Cornell University

Ph.D. Structural Engineering, 1980

Cornell University

M.S. Structural Engineering, 1978

University of Puerto Rico

B.S. Civil Engineering, 1975

SELECT PRACTICE AREAS

- Forensic Investigation
- Concrete Materials & Durability
- Structural Evaluation
- Concrete Construction
- Repair and Remediation
- Training and Education
- Litigation Support

SELECT PROF. AFFILIATIONS

- American Concrete Institute (ACI)
- American Society of Civil Engineers (ASCE)
- American Society of Testing and Materials (ASTM)
- Structural Engineers Association of Texas (SEAoT)
- The American College of Forensic Examiners

EXPERIENCE

Dr. Ramón Carrasquillo is the Founder and President of Carrasquillo Associates (CA). Ramón is recognized worldwide for his expertise in concrete materials, construction, and structural engineering. He has completed over 500 consulting assignments ranging from product developments, materials, and production of concrete to durability, specifications, construction practices, failure analyses, and repair and rehabilitation of existing structures.

Ramón was a professor and researcher at The University of Texas at Austin for 22 years. From 1992 to 1996, Ramón was the Associate Director of the International Center for Aggregates Research. In addition, Ramón was the Founder and President of Rainbow Materials, Inc., a ready mix concrete company which operated in the Central Texas market from 1994 until 2004. Ramón has published over 100 academic publications and reports and given over 400 technical presentations.

SELECT TECHNICAL COMMITTEES

- ACI Committee 201 – Durability of Concrete
- ACI Committee 211 – Proportioning Concrete Mixtures
- ACI Committee 232 – Fly Ash and Natural Pozzolans in Concrete
- ACI Committee 301 – Specifications for Concrete
- ASTM Committee C09 – Concrete and Concrete Aggregates

SELECTED PROJECTS

Construction Materials and Durability

- Mass Concrete Development and Placement for UT Health Sciences Center: Houston, TX
- Concrete Development and Placement for San Roque Dam and Reservoir: Manila, Philippines
- Architectural Concrete Development and Placement for Modern Art Museum of Fort Worth: Fort Worth, TX
- Development of Coal Combustion Byproduct for Use as Fill and Concrete Aggregate: San Juan, PR

Forensics / Repair & Remediation

- Evaluation and Repair of Valdez Marine Terminal: Valdez, AK
- Evaluating Cause and Preventing Cracks in Precast, Post-Tensioned Concrete Bridge Girders: San Juan, PR
- Structural Evaluation, Monitoring, and Repair of 18,500 Seat Arena: San Juan, PR
- Structural Evaluation and Remediation of Power Plant Mass Concrete Foundation: La Grange, TX
- Structural Evaluation and Repair of Bioreactor: Doha, Qatar
- Evaluation and Retrofit of Reinforced Concrete Cantilever: Austin, TX
- Structural Evaluation, Service Life Cost Analysis, & Repair Recommendations of Dos Hermanos Bridge: San Juan, PR
- Condition Assessment and Repair Recommendations of ABIA Structures: Austin, TX

CONTACT INFO

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TEACHING EXPERIENCE

Graduate and undergraduate courses on plain and reinforced concrete, construction materials, repair, and advanced topics in concrete, taught at the structural engineering and construction materials departments of The University of Texas at Austin.

RESEARCH EXPERIENCE

- Conduct research in the area of concrete materials, including repair and rehabilitation of concrete structures, fiber reinforced concrete, fly ash use in concrete, durability of concrete, and development of new technology in concrete materials
- Work with the Texas Department of Transportation on implementing research results into the field through visits to job sites and discussions with field engineers.
- Dr. Carrasquillo has worked on 49 different research projects to date investigating numerous characteristics, qualities, behavior, performance, and other properties of construction materials.

SELECT PROFESSIONAL EXPERIENCE

- Carrasquillo Associates, Ltd.
 - 1980 – Present: Founder & President
- Sustainable Earth Technologies, Inc.
 - 2010 – Present: Co-Founder & Sr. Vice President, CTO
- Rainbow Materials, Inc. – Ready Mix Concrete Company
 - 1994 – 2004: Founder & President
- CTS, Inc. – Aggregate Supply & Trucking Company
 - 1997 – 2003: Founder & President
- CFX, Inc. – Engineering Design and Consulting Firm
 - 1996 – 2000: President
- International Center for Aggregates Research
 - 1992 – 1996: Associate Director
- The University of Texas at Austin
 - 1980 – 2002: Professor & Researcher

SELECT HONORS AND AWARDS

- National Academies of Sciences, Engineering, and Medicine: Member of the Analysis of Cause(s) of Failure and Collapse of 305 – Meter Telescope at the Arecibo Observatory, 2021-2022
- Member of the Puerto Rico Academy of Engineering, 2021 - present
- Member, The Littlefield Society, The University of Texas at Austin, August 2014
- Henry C. Turner Medal presented by the American Concrete Institute, March 2014
- Instituto de Ingenieros Civiles de PR, Dedicatoria Trigésim Séptima Asamblea General, 15 de mayo de 2009
- Miembro Honorario, Asociacion de Productores de Concreto de Puerto Rico, 2000
- Best of Session Sustainable Paper, Fall 2008 Meeting, American Society of Civil Engineers, Texas Section, Dallas, TX
- 1999 Top Ten Research Findings and Innovations Award presented by the Texas Department of Transportation
- Austin City Council Proclamation, "Ramon Carrasquillo Day," December 14, 1995
- The Lockheed Fort Worth Company Award for Excellence in Engineering Teaching, 1995
- Elected Fellow of the American Concrete Institute, 1993
- Elected Member of the Board of Directors of the American Concrete Institute, 2007
- T.Y. Lin Award, (ACI, ASCE, PCI), 1990
- Faculty Excellence Award, University of Texas, Fall 1988
- Leland Barclay Fellowship in Engineering, University of Texas, 1988-91
- Selected to present at the ACI Commemorative Lecture Series honoring Katherine & Bryant Mather during the Fall 2014 ACI Convention

SELECT AREAS OF EXPERTISE

- Materials – concrete materials, cementitious alternatives, steel, wood, masonry, fiber composites, recycled materials, concrete durability, product development, architectural concrete, testing, high performance, by-products utilization
- Environmental – use of recycled materials, permeable construction, materials stabilization
- Construction – specification development, construction practices, contract review, work force analysis, local material availability, new technologies, architectural concrete, quality control, massive construction
- Structural and Foundation Engineering – field evaluation of existing conditions, code compliance, design, field testing, performance, troubleshooting
- Value Engineering – service life prediction, performance monitoring of existing structures, evaluation of aggressive environments
- Failure Analysis – cause of damage, troubleshooting existing structures, durability issues, non-destructive testing, materials sampling and testing, envelope issues, materials, workmanship and equipment issue
- Repair and Rehabilitation – state of the art technology, equipment and materials, composite and polymer repair materials, design, installation, repair procedures, testing
- Ready Mix Concrete Operations – Founder and President of a ready mix concrete batching company which operated four plants during 10 years in the Greater Austin market in Central Texas, responsible for development, operations, quality, and compliance with regulatory agencies including particulate emissions compliance including application, permitting, monitoring, public hearings, and verification of compliance; air permit application and concerns regarding contamination due to particulate matter emissions from concrete batching operations
- Education – training, technical presentations, lectures, seminars
- Sustainability – energy efficient construction, sustainable development and construction, LEED compliance, materials development
- Research and Development – cementitious materials, recycling, product development, durability, HPC, production, corrosion, quality control, design, NDT, repair, mix proportioning, by-products utilization, structural performance, design, specifications, technology transfer
- Expert Witness and Dispute Resolution – forensic engineering, mediation, arbitration, trial testimony

REPORTS AND PUBLICATIONS

- (with Peterman, M.B.), *Production of High Strength Concrete*, Noyes Publications (ISBN 0-8155-1057-8), New Jersey, 1986, 278 pp.
- Touma, W.E., Fowler, D.W., Carrasquillo, R.L., Folliard K.J., and Nelson, N.R. "Characterizing Alkali-Silica Reactivity of Aggregates Using ASTM C 1293, ASTM C 1260, and Their Modifications." *Transportation Research Record, Journal of the Transportation Research Board*, No. 1757, Geomaterials 2001, Soils, Geology, and Foundations, pp. 157-165.
- Myers, J.J. and Carrasquillo, R.L.. "Influence of Hydration Temperature on Durability and Mechanical Property Performance of Pre-stressed and Pre-cast High-Performance Concrete Beams." *Transportation Research Record, Journal of the Transportation Research Board*, No. 1696, Vol. 1, Proceedings of the Fifth International Bridge Engineering Conference, Tampa, Florida, April 3-5, 2000, 131-142.
- Lawrence, B.L., Moody, E.D., Guillemette, R.N., and Carrasquillo, R.L.. "Evaluation and Mitigating Measures for Premature Concrete Distress in Texas Department of Transportation Concrete Elements." *Cement, Concrete and Aggregates Journal*, Vol. 21, No. 1, June 1999, pp. 73-81.
- Myers, J.J. and Carrasquillo, R.L.. "Mixture Proportioning for High-Strength High-Performance Concrete Bridge Beams." *High-Performance Concrete*, SP 189, Detroit: American Concrete institute, 1999. (Paper was finalist for ACI Construction Practice Award.)

- Lawrence, B.L., Myers, J.J. and Carrasquillo, R.L.. "Premature Concrete Deterioration in Texas Department of Transportation Pre-cast Elements." *Etringite, the Sometimes Host of Destruction*, ACI SP-177, ed. Bernard Erlin, Detroit: American Concrete Institute, 1999.
- Cetin, A. and Carrasquillo, R.L.. "High Performance Concrete: Influence of Coarse Aggregates on Mechanical Properties." *Materials Journal*, American Concrete Institute, Vol. 95, No. 3, May-June 1998, pp. 252-261.
- Civjan, S.A., Jirsa, J.O., Carrasquillo, R.L., and Fowler, D.W. "Instrument to Evaluate Remaining Pre-stress in Damaged Pre-stressed Concrete Bridge Girders." *PCI Journal*, vol. 43, no. 2, March-April 1998.
- Carrasquillo, R.L. and Myers, J.J. "Quality Control and Quality Assurance Program for Pre-cast Plant Produced High Performance Concrete U-Beams." In *Advanced Concrete Solutions for Bridges and Transportation Structures*, Proceedings of the PCI 43rd Annual Convention and Exhibition and the PCI/FHWA International Symposium on High Performance Concrete—High Performance Pre-cast Concrete, The Solution of Choice, New Orleans, LA, October 19-22, 1997, pp. 368-382.
- Myers, J. J., Touma, W.E., and Carrasquillo, R.L.. "Permeability of High Performance Concrete: Rapid Chloride Ion Test Versus Chloride Ponging Test." In *Advanced Concrete Solutions for Bridges and Transportation Structures*, Proceedings of the PCI 43rd Annual Convention and Exhibition and the PCI/FHWA International Symposium on High Performance Concrete—High Performance Pre-cast Concrete, The Solution of Choice, New Orleans, LA, October 19-22, 1997.
- Ralls, M.L. and Carrasquillo, R.L.. "Texas High Performance Concrete Bridges—Implementation Status." In *Advanced Concrete Solutions for Bridges and Transportation Structures*, Proceedings of the PCI 43rd Annual Convention and Exhibition and the PCI/FHWA International Symposium on High Performance Concrete—High Performance Pre-cast Concrete, The Solution of Choice, New Orleans, LA, October 19-22, 1997, pp. 691-704.
- Ralls, M.L., Carrasquillo, R.L. and Burns, N.H., "Texas High Performance Concrete Bridges," *Proceedings of the Fourth International Symposium on Utilization of High Strength/High Performance Concrete*, BHP 96, Vol. 3, Paper No. 325, Paris, France, May 29-31, 1996, pp. 1475-1482.
- Salt, B.K., Garner, A.G., Fowler, D.W., Loehr, R.C., and Carrasquillo, R.L., "Recycling Contaminated Spent Blasting Abrasives in Portland Cement Mortars Using Solidification/Stabilization Technology," *Stabilization and Solidification of Hazardous, Radioactive, and Mixed Wastes*, 3rd Volume, T. M. Gilliam and C. C. Wiles, editors, STP 1240, pp. 514-527, American Society of Testing and Materials, 1996.
- Anderson, S. M. and Carrasquillo, R. L. "Effects of Withholding Mixing Water and Retempering on Properties of Concrete." *Materials Journal*, American Concrete Institute, Vol. 92, No. 5, September-October 1995, pp. 497-506.
- Freeman, R.B. and Carrasquillo, R.L. "Adjustments in Gypsum Content for the Production of Sulfate-Resistant Blended Cements Containing High-Calcium Fly Ash." *Materials Journal*, American Concrete Institute, Vol. 92, No. 4, July-August 1995, pp. 411-418.
- Freeman, R.B. and Carrasquillo, R.L., "Production of Sulfate-Resistant Concrete Containing High-Calcium Fly Ash and Sodium Sulfate Admixture," *Proceedings of CANMET/ACI Fifth International Conference on Fly Ash, Silica Fume, Slag, and Natural Pozzolans in Concrete*, Vol. 1, SP-153, pp. 153-176, American Concrete Institute, Detroit, 1995.
- Prusinski, J. R. and Carrasquillo, R.L.. "Using Medium- to High-Volume Fly Ash Blended Cements to Improve the Sulfate Resistance of High-Lime Fly Ash Concrete." *Proceedings of CANMET/ACI Fifth International Conference on Fly Ash, Silica Fume, Slag, and Natural Pozzolans in Concrete*, Vol. 1, SP-153, Detroit: American Concrete Institute, 1995, pp. 43-66.
- Borger, J., Carrasquillo, R.L., and Fowler, D.W., "Use of Recycled Wash Water and Returned Plastic Concrete in the Production of Fresh Concrete," *Advanced Cement Based Materials*, Vol. 1, No. 6, pp. 267-274, November 1994.
- (with American Concrete Institute Committee 232) "Use of Natural Pozzolans in Concrete," *ACI Materials Journal*, July-August 1994, pp. 410-426.
- (with Kahhaleh, K.Z., Jirsa, J.O. and Wheat, H.G.) "Macrocell Corrosion Study of Fabricated Epoxy-Coated Reinforcement," *Proceedings of International Conference on Corrosion and Corrosion Protection of Steel in Concrete*, Sheffield, England, July 24-29, 1994, accepted.

- Sennour, M. L., Wheat, H.G. and Carrasquillo, R.L., "The Role of Concrete Mix Design in the Corrosion of Steel in Reinforced Concrete," *Proceedings of the Philip D. Cady International Symposium*, SP 151, Detroit: American Concrete Institute, 1994.
- Tikalsky, P.J. and Carrasquillo, R.L.. "Fly Ash Evaluation and Selection for Use in Sulfate-Resistant Concrete." *Materials Journal*, American Concrete Institute, 90, no. 6 (November-December 1993): 545-551.
- (with Salt, B.K., Garner, A.G., Fowler, D.W. and Loehr, R.C.) "Recycling Contaminated Spent Blasting Abrasives in Portland Cement Mortars," FHWA and EPA Symposium Proceedings: Recovery and Effective Reuse of Discarded Materials and By-Products for Construction of Highway Facilities, Denver, Colorado, October 19-22, 1993.
- "Pozzolans in Concrete: Durability Aspects," Proceedings of Concrete International Seminar—Durability, Monterrey, Mexico, October 5-8, 1993.
- Garner, A.G., Carrasquillo, R.L. and Fowler, D.W. "Stabilization/Solidification of Contaminated Spent Blasting Media in Portland Cement Mortars." In *Ceramic Transactions, Cement Based Materials, Present, Future, and Environmental Aspects*, Proceedings of the 95th Annual Meeting and Exposition of the American Ceramic Society, edited by Mosongo Moukwa, Vol. 37, October-November, 183-196. Westerville, OH: TACS, 1993.
- American Concrete Institute Committee 211, Carrasquillo, R.L., Member. "Guide for Selecting Proportions for High-Strength Concrete with Portland Cement and Fly Ash," *ACI Materials Journal* 90, no. 3 (May-June 1993).
- Sennour, M.L., H. Zhang, Wheat H.G. and Carrasquillo, R.L.. "Corrosion Susceptibility of Concrete Made with Chemical and Mineral Admixtures." Paper 337 in the Proceedings of the National Association of Corrosion Engineers Conference—Corrosion '93, New Orleans, Louisiana, March 7-12, 1993.
- (with Zhang, H., Wheat, H.G., and Sennour, M.L.) "Corrosion of Steel Bars in Concrete Containing Different Chemical and Mineral Admixtures," *Materials Performance*, Volume 31, Number 12, December 1992.
- Freeman, R.B. and Carrasquillo, R.L. "Effects of Intergrinding Fly Ash on the Sulfate Resistance of Fly Ash Concrete." *Conference Proceedings of the Fourth CANMET/ACI International Conference on Fly Ash, Silica Fume, Slag and Natural Pozzolans in Concrete*, SP 132, Detroit: American Concrete Institute, 1992, pp. 281-297.
- Sennour, M.L., Zhang, H., Wheat H.G. and Carrasquillo, R.L.. "Corrosion of Steel Bars in Concrete Containing Different Chemical and Mineral Admixtures." Paper #92199 in Proceedings of Corrosion '92, The National Association of Corrosion Engineers Annual Conference and Corrosion Show, Nashville, Tennessee, April 27-May 1, 1992.
- Tikalsky, P.J. and Carrasquillo, R.L.. "Influence of Fly Ash on the Sulfate Resistance of Concrete." *Materials Journal*, American Concrete Institute, Vol. 89, No. 1, January-February 1992, pp. 69-75.
- Tikalsky, P.J., Carrasquillo, R.L., and Snow, P.G.. "Sulfate Resistance of Concrete Containing Fly Ash." *Durability of Concrete*, G.M. Idorn International Symposium, SP 131, ed. Jens Holm and Mette Geiker, Detroit: American Concrete Institute, 1992, pp. 255-265.
- (with Freeman, R.B.), "Influence of the Method of Fly Ash Incorporation on the Sulfate Resistance of Fly Ash Concrete," Proceedings of the International Conference on Blended Cements in Construction, Sheffield, England, September 9-13, 1991.
- ACI Committee 201 (Carrasquillo, R.L., member). "Proposed revision of: Guide to Durable Concrete." *ACI Materials Journal* 88, no. 5, (September-October 1991): 544-582.
- Freeman, R.B. and Carrasquillo, R.L.. "Influence of the Method of Fly Ash Incorporation on the Sulfate Resistance of Fly Ash Concrete." *Cement and Concrete Composites Journal* 13, no. 3 (1991): 209-217.
- ACI Committee 211 (Carrasquillo, R.L., member). "Standard Practice for Selecting Proportions for Structural Lightweight Concrete," *ACI Materials Journal*, November-December 1990.
- (with Tikalsky, P.J. and Freeman, R.B.), "Recommendations for the Use of Fly Ash in Sulfate-Resistant Concrete," Proceedings of the International Workshop on Fly Ash in Concrete, Calgary, Alberta, Canada, October 3-5, 1990.
- (with Tikalsky, P.J.), "Permeability Effects on the Sulfate Resistance of Concrete, in Proceedings, First Materials Engineering Congress, Serviceability and Durability of Construction Materials, American Society of Civil Engineers, Volume 2, 1990, pp. 698-704.

- Zakka, Z., Carrasquillo, R.L., and Farbiarz, J.. "Variables Affecting the Plastic and Hardened Properties of Superplasticized Concrete." In Proceedings of the Third CANMET/ACI International Conference on Superplasticizers and Other Chemical Admixtures in Concrete, Ottawa, Canada, October 4-6, 1990.
- Poston, R.W., Breen, J.E., and Carrasquillo, R.L.. "Design of Transversely Pre-stressed Concrete Bridge Decks." Pre-cast Pre-stressed Concrete Institute Journal, September-October 1989.
- Bass, R.A., Carrasquillo, R.L., and Jirsa, J.O.. "Shear Transfer Across New and Existing Concrete Interfaces." *Structural Journal*, American Concrete Institute, Vol. 86, No. 4, July-August 1989, pp. 383-393.
- (with McCarthy, G.J., Tikalsky, P.J., Manz, O.E., and Thedchanamoorthy, A.), "Factors Affecting Ability of a Fly Ash to Contribute to the Sulfate Resistance of Fly Ash Concrete," Fly Ash and Coal Conversion By-Products: Characterization, Utilization and Disposal, Materials Research Society, Vol. 136, July 1989, pp. 273-274.
- (with Farbiarz, J. and Snow, P.), "Effect of Intergrinding Versus Separate Batching of Fly Ash on Alkali-Aggregate Reaction in Concrete," Supplementary Paper, Proceedings, Third International Conference on Fly Ash, Silica Fume, Slag and Natural Pozzolans in Concrete, Trondheim, Norway, June 18-23, 1989.
- (with Tikalsky, P.J.), "Sulfate Attack on Concrete Containing Fly Ash," Structural Materials, Proceedings of the American Society of Civil Engineers Structures Congress, San Francisco, California, May 1-5, 1989, pp. 123-137.
- (with Villanueva, H.), "The Effect of Fly Ash on Temperature Rise and Hydration of Portland Cement Concrete," Proceedings, Tenth International Conference on Cement Microscopy, New Orleans, Louisiana, April 10-13, 1989.
- (with Barrow, R.S., Hadchiti, K.M., and Carrasquillo, P.M.), "Temperature Rise and Durability of Concrete Containing Fly Ash," Special Publication ACI-114, Fly Ash, Silica Fume, Slag and Natural Pozzolans in Concrete, American Concrete Institute, Vol. 1, 1989, pp. 331-347.
- (with Farbiarz, J., Schuman, D., and Snow, P.), "Alkali-Aggregate Reaction in Concrete," Proceedings, Eighth International Conference on Alkali-Aggregate Reaction, Kyoto, Japan, 1989, pp. 241-246.
- (with Tikalsky, P.J.), "Sulfate Attack on Concrete Containing Fly Ash," Structural Materials, Proceedings of Structures Congress '89, pp. 123-137.
- Tikalsky, P.J., Carrasquillo P.M., and Carrasquillo, R.L.. "Strength and Durability Considerations Affecting Mix Proportioning of Concrete Containing Fly Ash." *Materials Journal*, American Concrete Institute, Vol. 85, No. 6, November-December 1988, 505-511.
- Nelson, E.L., Carrasquillo, R.L., and Fowler, D.W. "Behavior and Failure of High Strength Concrete Subjected to Biaxial-Cyclic Compression Loading." *Materials Journal*, American Concrete Institute, 85, no. 4 (July-August 1988): 248-253.
- Carrasquillo, P.M. and Carrasquillo, R.L.. "Effect of Using Un-bonded Capping Systems on the Compressive Strength of Concrete Cylinders." *Materials Journal*, American Concrete Institute, Vol. 85, No. 3, May-June 1988, pp. 141-148.
- Tikalsky, P.J. and Carrasquillo, R.L.. "The Effect of Fly Ash on the Sulfate Resistance of Concrete," *Proceedings, Tenth International Conference on Cement Microscopy*, San Antonio, Texas, April 11-14, 1988, pp. 250-264.
- Poston, R.W., Phipps, A.R., Almustafa, R., Breen, J.E., and Carrasquillo, R.L.. "Effects of Transverse Pre-stressing in Bridge Decks." *ASCE Journal of Structural Engineering*, 114, no. 4 (April 1988): 743-764. (Won T.Y. Lin Award.)
- Carrasquillo, P.M. and Carrasquillo, R.L.. "Evaluation of the Use of Current Concrete Practice in the Production of High Strength Concrete." *Materials Journal*, American Concrete Institute, Vol. 85, No. 1, (January-February 1988): 49-54.
- ACI Committee 363 (Carrasquillo, R.L., member). "Research Needs for High-Strength Concrete," *Materials Journal*, American Concrete Institute, Vol. 84, No. 6, November-December 1987, pp. 559-561.
- "Production and Utilization of Scrubber Sludge," Eighth International Coal Ash Symposium Proceedings, Washington, D.C., October 1987.
- ACI Committee 226 (Carrasquillo, R.L., member). "Fly Ash in Concrete," *Materials Journal*, American Concrete Institute, Vol. 84, No. 5, September-October 1987, pp. 381-409.
- ACI Committee 226 (Carrasquillo, R.L., member). "Granulated Blast-Furnace Slag as a Concrete Constituent," *Materials Journal*, American Concrete Institute, Vol. 84, No. 4, July-August 1987, pp. 327-342.

- Carrasquillo, R. L. and Snow, P.G.. "Effect of Fly Ash on Alkali-Aggregate Reaction in Concrete." *Materials Journal*, American Concrete Institute Vol. 84, No. 4, July-August, 1987.
- Poston, R., Carrasquillo, R.L., and Breen, J.E.. "Durability of Post-Tensioned Bridge Decks." *Materials Journal*, American Concrete Institute, 84, no. 4 (July-August, 1987): 315-326.
- (with Farbiarz, J.), "Alkali-Aggregate Reaction in Concrete Containing Fly Ash," Proceedings, Ninth International Conference on Cement Microscopy, Reno, Nevada, April 7-9, 1987, pp. 172-181.
- "Recommendations for Using Fly Ash to Improve the Durability of Concrete," Proceedings of the Katharine and Bryant Mather International Conference on Concrete Durability, April 1987.
- ACI Committee 226 (Carrasquillo, R.L., member). "Silica Fume in Concrete." *Materials Journal*, American Concrete Institute, Vol. 84, No. 2, March-April 1987, pp. 158-166.
- Breen, J.E., Jirsa, J.O., Carrasquillo, R.L., Poston R.W., and Treece, R.A.. "Durability and Development of Epoxy-Coated Reinforcement." International Association for Bridge and Structural Engineering Symposium Report, Concrete Structures for the Future, Paris, France, 1987.
- Farbiarz, J. and Carrasquillo, R.L.. "Alkali-Aggregate Reaction in Concrete Containing Fly Ash." *Katharine and Bryant Mather International Conference on Concrete Durability*, Volume II, ed. J. M. Scanlon, ACI SP100, Detroit, 1987, pp. 1787-1808.
- (with Farbiarz, J. and Snow, P.), "Alkali-Aggregate Reaction in Concrete Containing Fly Ash," *Concrete Alkali-Aggregate Reactions*, edited by Patrick E. Grattan Bellow, Noyes Publications, New Jersey, 1987.
- (with Nelson, E. and Fowler, D.), "Fatigue of High Strength Concrete Subjected to Biaxial Cyclic Compression," Proceedings, Utilization of High Strength Concrete Symposium, Norway, 1987, pp. 307-318.
- (with Snow, P. and Farbiarz, J.), "Use of Fly Ash to Control Alkali-Aggregate Reaction in Concrete," Proceedings, 7th International Conference on Alkali-Aggregate Reaction in Concrete, Ottawa, Canada, August 1986.
- Chen, R.C., Carrasquillo, R.L., and Fowler, D.W. "Behavior of High Strength Concrete Under Uniaxial and Biaxial Compression." *High Strength Concrete*, SP-87, Detroit: American Concrete Institute, 1985, pp. 251-274.
- (with Nilson, A.H. and Slate, F.O.), "Propiedades del Hormigón de Alta Resistencia," *Journal of the Mexican Institute of Cement and Concrete*, September 1985.
- (with Nilson, A.H. and Slate, F.O.), "Microgrietas y Comportamiento del Hormigón de Alta Resistencia," *Journal of the Mexican Institute of Cement and Concrete*, Summer 1985.
- (with Yi, Frank L.), "Study of the Thermal Behavior of Brick Under Service Conditions," *Masonry-Research, Application and Problems*, American Society For Testing and Materials, STP 871, April 1985, pp. 101-113.
- "Production of High Strength Pastes Mortars, and Concretes," *Materials Research Society Proceedings, Very-High Strength Cement-Based Materials*, Vol. 42, February 1985, pp. 151-168.
- (with Dial, S. and Breen, J.), "Corrosion Induced Deformation Behavior of Brick Masonry Wall Panels," *ASTM-STP89 Laboratory Corrosion Tests and Standards*, 1985.
- "Cracking and Failure Mechanism of Concrete Under Biaxial State of Stress," Proceedings, Sixth International Conference on Cement Microscopy, Albuquerque, New Mexico, 1984, pp. 112-128.
- (with Yi, Li-Shing), "A Study of the Thermal Behavior of Brick Under Service Conditions in a Structure," Proceedings, ASTM Symposium on Masonry: Research, Applications and Problems, Bal Harbour, Florida, December 6, 1983.
- (with Slate, F.O.), "Microcracking and Definition of Failure of High- and Normal-Strength Concretes," *Cement, Concrete, and Aggregates*, CCAGDP, Vol. 5, No. 1, Summer 1983, pp. 54-61.
- (with Castro, P., Tassoulas, J.L. and Fowler, D.W.), "Analysis of a Model of High-Strength Concrete in Biaxial Compression," *Journal of Engineering Mechanics*, American Society of Civil Engineers, 1983.
- "Microcracking and Definition of Failure of High and Normal-Strength Concrete," *Cement, Concrete and Aggregates Journal*, American Society of Testing and Materials, CCAGDP, Vol. 5, No. 1, Summer 1982.

- (with Nilson, A.H. and Slate, F.O.), "Propiedades del Concreto de Alta Resistencia, Sujeto a Cargas de Corta Duración," Revista del Instituto Mexicano del Cemento y del Concreto, Vol. 19, No. 126, Octubre 31, 1981, pp. 23-34.
- Carrasquillo, R. L., Nilson, A.H., and Slate, F.O.. "Properties of High Strength Concrete Subject to Short-Term Loads." *American Concrete Institute Journal Proceedings*, Vol. 78, no. 3 (May-June 1981): 171-178.
- Carrasquillo, R. L., Nilson, A.H., and Slate, F.O.. "Microcracking and Behavior of High Strength Concrete Subject to Short-Term Loading," *American Concrete Institute Journal Proceedings*, Vol. 78, No. 3, May-June, 1981, pp. 179-187.
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- Salt, B.K., Garner A.G., Carrasquillo R.L., and Fowler, D.W.. "Recycling Contaminated Spent Blasting Abrasives in Portland Cement Mortars." Transportation Research Board Record, accepted.
- ACI Committee 363 (Carrasquillo R.L., member). Chapter 10 "Annotated Bibliography," State of the Art Report on High Strength Concrete, in press.
- (with Barrow, R.S.) "Temperature Rise in Mortars Containing Fly Ash and Thermal Gradients in Concrete," ACI Materials Journal, in review.
- (with Borger, J. and Fowler, D.W.) "Use of Recycled Wash Water and Returned Plastic Concrete in the Production of Fresh Concrete," Advanced Cement Based Materials, accepted.
- (with Cameron, J. and Fowler, D.W.), "Size Effect Considerations in Thin Steel Fiber Reinforced Concrete Flexural Members," Journal of American Concrete Institute, 1987, in press.
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