

## CURRICULUM VITAE

### **MICHAEL F. PETROU**

Professor

Department of Civil and Environmental Engineering  
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### **AREAS OF INTEREST**

Civil engineering materials, including self-compacting concrete, high-performance concrete, fiber-reinforced polymer composites, recycling of concrete, ultra-high performance fiber reinforced cementitious composites, and self-curing of concrete.

### **EDUCATION**

1. Ph.D., Civil Engineering, Case Western Reserve University, Cleveland, Ohio, 1993
2. M.S., Civil Engineering, Case Western Reserve University, Cleveland, Ohio, 1991
3. Diploma, Civil Engineering, National Technical University of Athens, Greece, 1987

### **HONORS**

1. ASEE Southeastern Section Outstanding Teaching Award, 2001
2. James M. Robbins Excellence in Teaching Award, Chi Epsilon Southern District, 1999
3. Craig J. Miller Memorial Award, Case Institute of Technology, 1991
4. Hellenic University Club of Northeastern Ohio scholarship, 1990 and 1991
5. Greek National Scholarship Foundation scholarship, 1981-1987

### **AFFILIATIONS**

1. Member and Chair of ERC Advanced Grant Evaluation Panel
2. Member of the Cyprus Scientific and Technical Chamber, 2005-date
3. Member of the Technical Chamber of Greece, 2004-date
4. Faculty Member of Chi Epsilon, National Civil Engineering Honor Society
5. Member of the American Society of Civil Engineers, 1994-date
6. Member of the American Concrete Institute, 1991-date

### **ACADEMIC EXPERIENCE**

1. Professor, Department of Civil and Environmental Engineering, University of Cyprus, 2010-date

2. Chair, Department of Civil and Environmental Engineering, University of Cyprus, 1/1/2009-12/10/2011
3. Associate Chair, Department of Civil and Environmental Engineering, University of Cyprus, 2007-2009, 2013-2015
4. Associate Professor, Department of Civil and Environmental Engineering, University of Cyprus, 2004-2010
5. Associate Professor, Department of Civil Engineering, University of Thessaly, Volos, Greece, 2002-2004
6. Associate Professor, Department of Civil and Environmental Engineering, University of South Carolina, Columbia, South Carolina, U.S.A., 1999-2002
7. Graduate Director, Department of Civil and Environmental Engineering, University of South Carolina, Columbia, South Carolina, U.S.A., 1999-2002.
8. Assistant Professor, Department of Civil Engineering, University of South Carolina, Columbia, South Carolina, U.S.A., August 1993-1999.

## **PUBLICATIONS**

### **A. Refereed Journal Publications**

1. K. Katsiou, G. K. Kontaxopoulos, M. F. Petrou, C. G. Trezos, "Snow Loading in Greece: A statistical Analysis", Technical Chronicles, Athens, Greece, Vol. 9, No. 1, 1989, pp. 37-70.
2. D. A. Gasparini, M. F. Petrou, M. E. Ozer, "Wavelength Content of Concrete Floors and its Significance for Moving Vehicles", ACI Structural Journal, V.87, No. 6, November-December, 1990, pp. 706-715.
3. P. C. Perdikaris and M. F. Petrou, "Code Predictions vs. Small Scale Bridge Deck Model Test Measurements", Transportation Research Record No. 1290, Transportation Research Board, National Research Council, Vol.1, March 1991, pp. 179-187.
4. M. F. Petrou, P. C. Perdikaris, and A. Wang, "Fatigue Behavior of Non-Composite Reinforced Concrete Bridge Deck Models", Transportation Research Record No. 1460, Transportation Research Board, National Research Council, December 1994, pp. 73-80.
5. M.F. Petrou and P.C. Perdikaris, "Punching Shear Failure in Concrete Decks as a Snap-Through Instability", ASCE Structural Journal, Vol. 122, No. 9, September, 1996, pp. 998-1005.
6. M.F. Petrou, P.C. Perdikaris, and M. Duan, "Static Behavior of Non-Composite Concrete Bridge Decks Under Concentrated Loads", ASCE Journal of Bridge Engineering, Vol. 1, No. 4, November, 1996, pp. 143-154.
7. M.F. Petrou, A. Bailey, and B.D. Brown, "Materials Education Without Boundaries", Journal of Materials Education, Vol. 19, No. 4-6, 1997, pp. 1-6.
8. S.N. Popova, B.N. Popov, R.E. White, M.F. Petrou, and D. Morris, "Corrosion Effects of Stabilized Backfill on Steel Reinforcement", ACI Structural Journal, V.95, No. 5, Sept.-Oct. 1998, pp.1-8.
9. M.F. Petrou and P.C. Perdikaris, "Design of Reinforced Concrete Bridge Decks Under Moving Loads", American Society for Testing and Materials STP 1337, ASTM, Nov. 1998, pp. 148-158.

10. B. Vanukuru, J.R.V. Flora, M.F. Petrou, and C.M. Aelion, "Control of pH During Denitrification Using an Encapsulated Phosphate Buffer, Water Research, Vol. 32, No. 9, pp. 2735-2745, 1998.
11. K.A. Harries, M.F. Petrou, and G. Brooks, "Structural Characterization of Built-Up Timber Columns", ASCE Journal of Architectural Engineering, Vol. 6, No. 2, June, 2000, pp. 58-65.
12. M.F. Petrou, K.A. Harries, F. Gadala-Maria, and V. G. Kolli, "A Unique Experimental Method for Monitoring Aggregate Settlement in Concrete", Cement and Concrete Research, V. 30, 2000, pp. 809-816.
13. M.F. Petrou, B. Wan, F. Gadala-Maria, V. G. Kolli, and K.A. Harries, "The Influence of Mortar Rheology on Aggregate Settlement", ACI Materials Journal, V. 97, No.4, Jul.-Aug. 2000, pp.479-485.
14. B.S. Haran, B.N. Popov, M.F. Petrou, and R.E. White, "Studies on Galvanized Carbon Steel in Reinforced Concrete", ACI Materials Journal, V. 97, No. 7, Jul.-Aug. 2000, pp. 425-431.
15. M.F. Petrou, B. Wan, W.S. Joiner, C.G. Trezos, and K.A. Harries "Excessive Strand End Slip in Prestressed Piles", ACI Structural Journal, V. 97, No. 5, Sep.-Oct. 2000. (4/4)
16. M. Ramasubramanian, S. Popova, B.N. Popov, M.F. Petrou, and R.E. White, "Inhibiting Action of Calcium Nitrite on Carbon Steel Rebars", ASCE Journal of Materials in Civil Engineering, Vol.13, No.1, Jan./Feb., 2001.
17. K.A. Harries and M.F. Petrou, "Design and Behavior of Prestressed Pile to Cast-in-Place Pile Cap Connection", PCI Journal, Vol.46, No.4, July/Aug. 2001, pp82-92.
18. C.G. Papakonstantinou, M.F. Petrou, and K.A. Harries, "Fatigue Behavior of Reinforced Concrete Beams Strengthened with GFRP Sheets", ASCE Journal of Composites for Construction Vol. 5, No.4, Nov. 2001, pp246-253.
19. V. Giurgiutiu, J. Lyons, M.F. Petrou, D. Laub, and S. Whitley, "Fracture Mechanics Testing of the Bond Between Composite Overlays and Concrete Substrate", Journal of Adhesion Science and Technology, Vol. 15, No.11, 2001, pp1351-1371.
20. M.F. Petrou, K.A. Harries, and G.E. Schroeder, "Field Investigation of High Performance Concrete Bridge Decks in South Carolina", Journal of Transportation Research, TRR 1770, 2001, pp 12-19.
21. PCI High Performance Concrete Committee, "High Performance Concrete Showcase Bridges", PCI Journal, Vol.46, No.6, Nov./Dec. 2001, pp42-55.
22. B. Wan, M.F. Petrou, K.A. Harries, and A.A. Hussein, "Top Bar Effects in Prestressed Concrete Piles", ACI Structural Journal, V. 99, No.2, March-April, 2002, pp 208-214.
23. C.G. Papakonstantinou, P.N. Balaguru, and M.F. Petrou, "Analysis of Reinforced Concrete Beams Strengthened with Composites Subjected to Fatigue Loading", ACI Journal Special Publication SP-206, April 2002, pp. 42-61.
24. J. Lyons, D. Laub, V. Giurgiutiu, M.F. Petrou, and H. Salem, "Effect of Hydrothermal Aging on the Fracture of Composite Overlays on Concrete", Journal of Reinforced Plastics and Composites , Vol. 21(4), 2002, pp. 293-309.
25. B. Wan, K.A. Harries, and M.F. Petrou, "Transfer Length of Strands in Prestressed Concrete Piles", ACI Structural Journal, V. 99, No. 5, Sep.-Oct. 2002, pp. 577-585.
26. V. Giurgiutiu, K. Harries, M. Petrou, J. Bost, J.B. Quattlebaum, "Disbond Detection with Piezoelectric Wafer Active Sensors in Reinforced Concrete Structures Strengthened with

- FRP Overlays”, Journal of Earthquake Engineering and Engineering Vibration, Vol.2, No.2, 2003, pp1-11.
27. S. Zhou, D.C. Rizos and M.F. Petrou, “Effects of Superstructure Flexibility on Strength of Concrete Bridge Decks”, Computers and Structures, Vol. 82 (1), Jan. 2004, pp. 13-23.
  28. M.K. Turner, K.A. Harries, M.F. Petrou, and D.C. Rizos “In-situ Structural Evaluation of a GFRP Bridge Deck System”, Composite Structures, Vol. 65 (2), Aug. 2004, pp.157-165.
  29. B. Wan, M.A. Sutton, M.F. Petrou, K.A. Kent, and B. Yang, “Investigation of Bond between FRP Concrete Undergoing Global Mixed Mode I/II Loading” ASCE Journal of Engineering Mechanics, Vol. 130 (12), Dec. 2004, pp.1467-1475.
  30. J. Aidoo, K.A. Harries, and M.F. Petrou, “Fatigue of Large-Scale Reinforced Concrete T-Beams Strengthened by FRP Composites”, ASCE Journal of Composites for Construction, Vol. 8, No. 6, Nov.-Dec. 2004, pp. 501-509.
  31. W. Baolin, D.C. Rizos, M.F. Petrou, and K.A. Harries, “Computer Simulations and Parametric Studies of GFRP Bridge Deck Systems”, Composite Structures, Vol. 69 (1), Jun. 2005, pp. 103-115.
  32. K. Coogler, K.A. Harries, B. Wan, D.C. Rizos, and M.F. Petrou, “Critical Evaluation of Strain Measurements in GFRP Bridge Decks”, ASCE Journal of Bridge Engineering, Vol. 10, No.6, Nov. 2005, pp. 704-712.
  33. J.B. Quattlebaum, K.A. Harries, and M.F. Petrou, “Comparison of Three Flexural Retrofit Systems under Monotonic and Fatigue Loads”, ASCE Journal of Bridge Engineering, Vol. 10, No.6, Nov. 2005, pp. 731-740.
  34. B.L. Wan, M.F. Petrou and K.A. Harries, “The Effect of the Presence of Water on the Durability of Bond Between CFRP and Concrete”, Journal of Reinforced Plastics and Composites, Vol. 25(8), 2006, pp. 875-890.
  35. J.Aidoo, K.A. Harries, and M.F. Petrou, “Full-Scale Experimental Investigation of Repair of Reinforced Concrete Interstate Bridge Using CFRP Materials”, ASCE Journal of Bridge Engineering Vol. 11, No.3, May 2006, pp. 350-358.
  36. M.F. Petrou, D. Parler, K.A. Harries, and D.C. Rizos, “Strengthening of Reinforced Concrete Bridge Decks Using Carbon Fiber Reinforced Polymer Composite Materials”, ASCE Journal of Bridge Engineering, Vol. 13, No.5, Sept. 2008, pp. 455-467.
  37. I. Ioannou, M.F. Petrou, R. Fournari, A. Andreou, C. Hadjigeorgiou, B. Tsikouras, and K. Hatzipanagiotou “Crushed limestone as an aggregate in concrete production”, Geological Society, London, Special Publications 331, pp. 127-135, 2010
  38. M.K.A. Neophytou, S. Pourgouri, A.D. Kanellopoulos, M.F. Petrou, I. Ioannou, G. Georgiou, and A. Alexandrou, “Determination of the Rheological Parameters of Self-Compacting Concrete from Slump Flow”, Applied Rheology, 20 (6), pp. 62402:1-12, 2010
  39. A. Kanellopoulos, M.F. Petrou, I. Ioannou, “Durability Performance of Self-Compacting Concrete”, Construction and Building Materials, 37, pp. 320-325, 2012
  40. I.P. Sfikas, A. Kanellopoulos, K.G. Trezos, and M.F. Petrou, “Durability of similar Self-Compacting Concrete batches produced in two different EU Laboratories”, Construction and Building Materials, 40, pp. 207-216, 2013.
  41. I. Ioannou, R. Fournari and M.F. Petrou, “Testing the soundness of aggregates using different methodologies”, Construction and Building Materials, 40, pp. 604-610, 2013.

42. A. Nassif and M.F. Petrou, "Influence of cold weather during casting and curing of concrete on the stiffness and strength of concrete," Construction and Building Materials 44, pp. 161-167, 2013
43. A. Kanellopoulos, D. Nicolaidis, and M.F. Petrou, "Mechanical and durability properties of concretes containing recycled lime powder and recycled aggregates", Construction and Building Materials, 53, pp. 253-259, 2014
44. D. Nicolaidis, A. Kanellopoulos, P. Savva and M. Petrou, "Experimental Field Investigation of Impact and Blast Load Resistance of Ultra High Performance Fibre Reinforced Cementitious Composites (UHPFRCCs)", Construction and Building Materials, 95, pp. 566-574, 2015
45. D. Nicolaidis, A. Kanellopoulos, M. Petrou, A. Mina, and P. Savva, "Development of a new Ultra High Performance Fibre Reinforced Cementitious Composite (UHPFRCC) for impact and blast protection of structures", Construction and Building Materials, 95, pp. 667-674, 2015
46. P.G. Savva, D.C. Nicolaidis, and M.F. Petrou, "High absorptive normal weight aggregates used as internal curing agents to reduce hot weather concreting and curing detrimental effects", Key Engineering Materials, Vol. 711, pp 420-427, 2016
47. G. Dimitriou, P. Savva, and M.F. Petrou, "Enhancing Mechanical and Durability Properties of Recycled Aggregate Concrete", Construction and Building Materials 158, pp.228-235, 2018
48. P. Savva, D. Nicolaidis, and M.F. Petrou, "Internal curing for mitigating high temperature concreting effects", Construction and Building Materials, 179, pp.598-604, 2018.
49. P. Savva and M.F. Petrou, "Highly absorptive normal weight aggregates for internal curing of concrete", Construction and Building Materials, 179, pp80-88, 2018.
50. M. Sophocleous, P. Savva, M.F. Petrou, J.K. Atkinson, and J. Georgiou, "A durable screen-printed sensor for in-situ and real time monitoring of concrete's electrical resistivity suitable for smart building/cities and IoT", IEEE Sensors Letters, Vol. 2, No. 4, Dec. 2018.
51. S. J. Pantazopoulou, M.F. Petrou, V. Spasari, N. Archontas, and C. Christofides, "The Performance of Corroded Lap Splices in R.C. Beams", Corrosion Reviews, 37(1), pp31-44, 2019.
52. S.M. Stylianides and M.F. Petrou, "Study of the flexural behaviour of FRP-strengthened steel-concrete composite beams", Structures, Vol. 22, pp 124-138, Dec. 2019.
53. A. Kanellopoulos, P. Savva, M.F. Petrou, I. Ioannou, and S. Pantazopoulou, "Assessing the quality of concrete – reinforcement interface in Self Compacting Concrete", Construction and Building Materials, 240, Apr. 2020.
54. A.L. Mina, K.G. Trezos and M.F. Petrou, "Mechanical Properties of Ultra High Performance Fiber Reinforced Concrete and Its Response to Impact Loading", Book Chapter, Advanced Materials for Defense, Springer, 2020.
55. A.L. Mina, M.F. Petrou, and K.G. Trezos, "Resistance of an Optimized Ultra-High Performance Fiber Reinforced Concrete to Projectile Impact", Buildings 11 (2), 63, 2021.
56. A.I. Ioannou, S.J. Pantazopoulou, M.F. Petrou and D.C. Charmpis, "Experimental Investigation of ECC Jackets for Repair of Pre-Damaged RC Members under Monotonic Loading", Buildings 11 (5), 180, 2021.

57. P. Savva, S. Ioannou, K. Oikonomopoulou, D. Nicolaides and M.F. Petrou, "A Mechanical Treatment Method for Recycled Aggregates and Its Effect on Recycled Aggregate-Based Concrete", Materials 14 (9), 2186, 2021.
58. Theodosiou, P. Savva, E. Mendoza, M.F. Petrou and K. Kalli, "In-situ relative humidity sensing for ultra-high-performance concrete using polymer fiber Bragg gratings", IEEE Sensors Journal, 2021 (in press).

**B. Refereed Conference Proceedings/Internet Journals**

1. M.F. Petrou and P.C. Perdikaris, "Small-Scale Model Tests: Arching Action in Reinforced Concrete Bridge Decks", Proceedings of the 3<sup>rd</sup> International Conference on Short and Medium Span Bridges, Toronto, Ontario, August 10-17, 1990, pp. 317-326.
2. M. F. Petrou and C. G. Trezos, "Reliability of Reinforced Concrete Columns and Shafts", Proceedings of the First International Offshore and Polar Engineering Conference, Edinburgh, Scotland, August 11-16, 1991.
3. P.C. Perdikaris and M.F. Petrou, "Fatigue Study of R/C Highway Decks Using Physical Models", Proceedings of Engineering Mechanics Conference, Boulder, Colorado, May 22-26, 1995, Vol.1, pp 601-604.
4. M.F. Petrou, W.S. Joiner, Y.J. Chao, J.D. Helm, and M.A. Sutton, "Computer Stereo Vision Method for NDE of Reinforced Concrete Bridge Decks", Proceedings of Structural Materials Technology NDT Conference, San Diego, California, Feb. 20-23, 1996, pp 153-157.
5. B. Vanukuru, J.R.V. Flora, and M.F. Petrou, "pH Control Using Microcapsules", Proceedings of Water Environment Federation, 69th Annual Conference and Exposition, Dallas, Texas, October 5-9, 1996.
6. S.N. Popova, B.N. Popov, R.E. White, M.F. Petrou, and D. Morris, "Corrosion Effects of Cement Stabilized Backfill on Galvanized Steel Reinforcement", ASCE, Proceedings of Fourth Materials Engineering Conference, Washington, D.C., November 10-14, 1996.
7. V. Giurgiutiu, J. Lyons, M.F. Petrou, S. Dutta, and C.A. Rogers, "Strength, Durability and Health Monitoring of Composites Overlays on Civil Engineering Structures", Proceedings of the International Composites Expo ICE-98, Nashville, TN, January 19-21, 1998.
8. J.R.V. Flora, B. Vanukuru, C.M. Aelion, and M.F. Petrou, "pH Control During Denitrification", Proceedings of the First Consumer and Diversified Products Conference, Las Vegas, June 21-24, 1998.
9. K.A. Dunn, M.R. Louthan, N.C. Iyer, V. Giurgiutiu, M.F. Petrou, and D. Laub, "Application of Smart Materials/Technology at the Savannah River Site", Proceedings of SPIE's 6th Annual International Symposium on Smart Structures and Materials, SPIE Vol. 3671, pp.64-75, Newport, California, March 1-6, 1999.
10. V. Giurgiutiu, J. Lyons, M.F. Petrou, D. Laub, and S. Whitley, "Experimental Fracture Mechanics for the Bond between Composite Overlays and Concrete Substrate", Proceedings of International Composites EXPO'99, pp. 4D1-4D6, Cincinnati, May 10-13, 1999.

11. F. Gadala-Maria, M.F. Petrou, and K.A. Harries, "Aggregate Settlement in Concrete", Proceedings of the AIChE Spring 2000 Meeting, Atlanta, March 2000.
12. Vidican, M.F. Petrou, H.-C.zur Loye, and K.A. Harries, "HPC Mix Characterization Using X-Ray Diffraction and Electron Microprobe Analyses", Proceedings of PCI/FHWA/FIB International Symposium on High Performance Concrete, Sep. 24-27, 2000.
13. M.F. Petrou, J. Aidoo, K.A. Harries, and C.G. Papakonstantinou, "Fatigue Behavior of Reinforced Concrete Beams/Slabs Strengthened with GFRP/CFRP Sheets", Proceedings of the Fifth NSF National Workshop on Bridge Research in Progress, Minneapolis, Minnesota, Oct. 8-10, 2001, pp51-54.
14. Sutton, M.A., Wan, B., Petrou, M.F., and Harries, K.A., "Two-Dimensional Computer Vision to Investigate FRP-Concrete Bond Toughness," Advanced Measurement Methods, Volume 1, May 2002, <http://www.sem.org/SEMNanoMat/index.asp>. (Internet Journal)
15. B. Wan, M.F. Petrou, K.A. Harries, M.A. Sutton, and B. Yang, "Experimental Investigation of Bond Between FRP and Concrete", ICC2, San Francisco, California, June 10-13, 2002.
16. J. Aidoo, K.A. Harries, and M.F. Petrou, "Fatigue Behavior of CFRP Strengthened Reinforced Concrete Bridge Girders", ICC2, San Francisco, California, June 10-13, 2002.
17. Wan, B., Harries, K.A., Petrou, M.F. Sutton, M.A. and Li, N. 2003. Experimental Investigation of Bond between FRP and Concrete, Proceedings of 2003 SEM Annual Conference, Charlotte, June 2003. CDROM
18. Turner, K., Harries, K.A. and Petrou, M.F. 2003. In-situ Structural Evaluation of GFRP Bridge Deck System, Proceedings of the 82<sup>nd</sup> Annual Meeting of the Transportation Research Board, Washington DC, January 2003.CDROM
19. J. Aidoo, K.A. Harries, and M.F. Petrou, "Behavior of CFRP Retrofit Reinforced Concrete Bridge Girders Subject to Monotonic and Fatigue Loading ", 4<sup>th</sup> International Conference on Advanced Composite Materials in Bridges and Structures, Calgary, Alberta, July 20-23, 2004
20. J.B. Quattlebaum, K.A. Harries, and M.F. Petrou, "Comparison of Three Flexural Retrofit Systems under Monotonic and Fatigue Loads", 4<sup>th</sup> International Conference on Advanced Composite Materials in Bridges and Structures, Calgary, Alberta, July 20-23, 2004
21. A.D. Kanellopoulos, M. Mathaiou, M.F. Petrou, I. Ioannou, M. Neophytou, "By-product materials in the production of next generation SCC", International fib Symposium 2008: Tailor Made Concrete Structures. New Solutions for Our Society, Amsterdam, The Netherlands, May 19-22, 2008
22. A.D. Kanellopoulos, M. Mathaiou, M.F. Petrou, I. Ioannou, M. Neophytou, "Rheological characteristics of self-compacting concrete", 1<sup>st</sup> Pan-Hellenic Conference on Building Materials and Elements, pp. 1251-1262. Athens, Greece, May 21-23, 2008 [in Greek]
23. A.D. Kanellopoulos, D. Nikolaidis, M.F. Petrou, I. Ioannou, "Ultra-High Performance Concretes", 1<sup>st</sup> Pan-Hellenic Conference on Building Materials and Elements, pp. 1241-1249. Athens, Greece, May 21-23, 2008 [in Greek]
24. R. Fournari, I. Ioannou, M.F. Petrou, S. Vrahimis, C. Hadjigeorgiou, G. Constantinou, and N. Kelepeshis, "A study of the weathering of aggregates aiming at the improvement of the durability of concrete", 1<sup>st</sup> Pan-Hellenic Conference on Building Materials and Elements, CD ROM. Athens, Greece, May 21-23, 2008 [in Greek]

25. A. Kanellopoulos, I. Ioannou, M.F. Petrou, “Towards more sustainable-friendly concretes: the use of silica fume”, 4<sup>th</sup> International Conference on Sustainable Development and Planning, Vol 1, pp. 265-270. Limassol, Cyprus, May 13-15, 2009. [paper also published in WIT Transactions on Ecology and the Environment, Vol. 120]
26. A.D. Kanellopoulos, M.F. Petrou, I. Ioannou and M. Neophytou “Self Compacting Concrete: The Cypriot Experience”, 16<sup>th</sup> Pan-Hellenic Conference on Concrete, CD ROM. Paphos, Cyprus, Oct 21-23, 2009 [in Greek].
27. Kanellopoulos, M.F. Petrou, I. Ioannou, M. Myrianthopoulos, A. Theophanides “Silica fume in the Cyprus construction industry”, 16<sup>th</sup> Pan-Hellenic Concrete Conference, CD ROM. Paphos, Cyprus, Oct 21-23, 2009 [in Greek].
28. A.D. Kanellopoulos, M. F. Petrou and I. Ioannou “Durability indicators of self compacting concrete”, RILEM Conference: Concrete Life 2009 – Haifa, 2009.
29. M. Neophytou, A.D. Kanellopoulos, S. Pourgouri, M. F. Petrou and I. Ioannou “Rheology of SCC and its connection to empirical test measurements”, RILEM Conference: 3<sup>rd</sup> RILEM International Symposium on Rheology of Cement Suspensions like Fresh Concrete, Iceland, August 19-21, pp. 301-309, 2009.
30. A.D. Kanellopoulos, M.F. Petrou and I. Ioannou, “Durability of Self Compacting Concrete”, FIB Conference: Concrete the 21<sup>st</sup> Century Hero – London, June 22-24, 2009.
31. A. Kanellopoulos, M.F. Petrou, and I. Ioannou, “Self-consolidating Concrete and its Bond to Reinforcement”, 3<sup>rd</sup> International fib Congress and Exhibition: Think Globally, Build Locally, CD ROM. Washington, U.S.A., May 29-June 2 (2010).
32. A. Kanellopoulos, M.F. Petrou, I. Ioannou, S. Pantazopoulou, “A Study of the Quality of Interface Between SCC and Steel Reinforcement”, 6<sup>th</sup> International RILEM Symposium on Self-Compacting Concrete, CD ROM. Montreal, Canada, Sep 26-29 (2010)
33. D. Nicolaides, A., Kanellopoulos, and M.F. Petrou “Recycling Construction Waste”, fib Symposium, Concrete Engineering for Excellence and Efficiency, CD ROM, Prague, Czech Republic, June 2011
34. I. Ioannou, R. Fournari, M.F. Petrou, and S. Vrahimis, “On the Soundness and Other Physicomechanical Properties of Crushed Aggregates from Cyprus Used in the Production of Asphalt Concrete”, 5<sup>th</sup> International Conference Bituminous Mixtures and Pavements Thessaloniki, CD ROM, Greece, 1-3 June 2011
35. R. Fournari, I. Ioannou and M.F. Petrou,” On the Soundness of Aggregates and its Effect on Mortar Properties” Salt Weathering on Buildings and Stone Sculptures Conference, CD ROM, Limassol, Cyprus, Oct. 19-22, 2011.
36. I.P. Sfikas, A. Kanellopoulos, K.G. Trezos and M.F. Petrou, “Reproducibility of Self-Compacting Concrete batches between two different EU laboratories”, Concrete Structures for Sustainable Community, fib Symposium, Proceedings p.207-210, Stockholm, Sweden, June 11-14, 2012.
37. D. Nicolaides, P. Savva, A. Kanellopoulos, and M.F. Petrou, “Static Response of UHPFRCC slab specimens”, Concrete Structures for Sustainable Community, fib Symposium, Proceedings p.597-600, Stockholm, Sweden, June 11-14, 2012.
38. D. Nicolaides, A. Kanellopoulos, M.F. Petrou and M. Soutsos, “Mix Design, Mechanical Properties and Impact Resistance of UHPFRCC”, 3<sup>rd</sup> International Conference on Concrete Repair, Rehabilitation and Retrofitting, Proceedings p.181-186, Cape Town, South Africa, 3-5 Sept. 2012



39. D. Nicolaidis, A. Lampropoulos, A. Kanellopoulos, P. Savva, A. Mina, and M.F. Petrou, "Static Response and Modeling of Impact Resistance of UHPFRCC Slab Specimens", fib Symposium 2013, Engineering a Concrete Future: Technology, Modeling and Construction, Tel Aviv, Israel, 22-24 April, 2013.
40. D. Nicolaidis, A. Kanellopoulos, P. Savva, A. Mina, and M. F. Petrou, "Mix Design and Mechanical Properties of Ultra High Performance Fibre Reinforced Cementitious Composites (UHPFRCC)", 7<sup>th</sup> International RILEM Symposium on Self-Compacting Concrete, Paris, France, 2-4 September, 2013.
41. A. Georgiou, S. Pantazopoulou and M. Petrou, "Increasing Ductility of FRCC with Proprietary Coating Agents", 10<sup>th</sup> fib International Ph.D. Symposium in Civil Engineering, Quebec, Canada, July 21-23, 2014
42. G. Dimitriou and M.F. Petrou, "Enhancing Mechanical and Durability Properties of Recycled Aggregate Concrete", 27th Biennial National Conference of the Concrete Institute of Australia in conjunction with the 69th RILEM International Concrete Conference, Melbourne, Australia, 30 August-2 September, 2015
43. P.A. Savva and M.F. Petrou, "A new approach for internal curing of high performance concrete to reduce early-age volume variations", 27th Biennial National Conference of the Concrete Institute of Australia in conjunction with the 69th RILEM International Concrete Conference, Melbourne, Australia, 30 August-2 September, 2015
44. M.F. Petrou and K.G. Trezos and A.L. Mina, "Design of UHPFRC Mixtures for Structures Subjected to Impact Loads", 27th Biennial National Conference of the Concrete Institute of Australia in conjunction with the 69th RILEM International Concrete Conference, Melbourne, Australia, 30 August-2 September, 2015
45. P.A. Savva and M.F. Petrou, "A new approach for internal curing of high performance concrete to reduce early-age volume variations", International Conference on Concrete Repair, Rehabilitation and Retrofitting Leipzig, Germany, 5-10 October, 2015
46. A.L. Mina, M.F. Petrou and K. G. Trezos, "Experimental analysis for the development of an UHPFRC", Concrete Solutions 2016, 6th International Conference on Concrete Repair, Thessaloniki, Greece, 20-23 June, 2016
47. P. Savva, A.Theodosiou, M. Petrou and K. Kalli, "RH monitoring using embedded in concrete mixtures FBG sensors inscribed in multimode CYTOP fibre", 5<sup>th</sup> Workshop on Specialty Optical Fibers and their Applications, Limassol, Cyprus, Oct. 11-13, 2017
48. P. Savva, K. Aivaliotis, D. Nicolaidis and M.F. Petrou "Mitigation of high temperature concreting detrimental effects using internal curing", 18<sup>th</sup> Pan-Hellenic Conference on Concrete, Athens, Greece, March 29-31, 2018 (in Greek).
49. A. Mina, C. Trezos and M. Petrou, "Ultra High Performance Fiber Reinforced Concrete subjected to Impact Loads", 18<sup>th</sup> Pan-Hellenic Conference on Concrete, Athens, Greece, March 29-31, 2018 (in Greek).
50. A.L. Mina, K. Trezos and M.F. Petrou, "Mechanical Properties of Ultra High Performance Fiber Reinforced Concrete and its Response to Impact Loading", AuxDefense, Advanced Materials for Defense, Lisbon, Portugal, 3-4 September, 2018.
51. A.Theodosiou, P. Savva, C. Aivaliotis, C. Erotokritou, H. Partaourides, C. Louca, M.F. Petrou and K. Kalli, "Advanced concrete optical remote sensors: structural health monitoring of concrete buildings using polymer sensors", Proceedings of SPIE, Micro-Structured and Specialty Optical Fibres VI, 11355, 1135503, 2020.

## C. Reports

1. C. G. Trezos, M.F. Petrou, K. Katsiou, and G.K. Kontaxopoulos, "Snow Loading in Greece" (in Greek) Research Report, National Technical University of Athens, Greece, November 1987.
2. P.C. Perdikaris, M.F. Petrou, and A. Wang, "Fatigue Strength and Stiffness of Concrete Bridge Decks", Final Report FHWA-OH-93-016, Case Western Reserve University, Cleveland, Ohio, 1994.
3. M.F. Petrou and W.S. Joiner, "Continuing Investigation of Strand Slippage in 24-Inch Octagonal Prestressed Concrete Piles", Final Report FHWA-SC-96-04, University of South Carolina, Columbia, South Carolina, May, 1996.
4. B.N. Popov, B.S. Haran, S.N. Popova, P. Arora, M. Rama, and M.F. Petrou, "Evaluation of Economical and Efficient Method for Corrosion Protection of Structural Concrete" Final Report FHWA-SC-98-04, University of South Carolina, Columbia, South Carolina, August 1998.
5. M.F. Petrou, J.H. Bradburn, and Z. Feng, "Fatigue Testing of Bridge Aluminum Expansion Joints", Final Report, SCDOT, 1998.
6. M.F. Petrou, K.A. Harries, and C. Papakonstantinou, "Bridge Rehabilitation Using Fiber Reinforced (FRP) Composites", University of South Carolina, Department of Civil and Environmental Engineering Report (final report for SCDOT/FHWA) No. ST 99-01, 74 pp., 1999.
7. K.A. Harries and M.F. Petrou, "Structural Characterization of Built-Up Timber Columns", University of South Carolina, Department of Civil and Environmental Engineering Report (final report for SCDOT/FHWA) No. ST 99-02, 66 pp., 1999.
8. M.F. Petrou and K.A. Harries, "Review of Class-E Concrete Bridge Decks in South Carolina", University of South Carolina, Department of Civil and Environmental Engineering Report (final report for SCDOT/FHWA) No. ST 99-03, 49 pp., 1999.
9. M.F. Petrou and C. Papakonstantinou, "Development and Testing of Fiber Reinforced Composite Overlays", Final report, SCUREF/WSRC/DOE, 105 pp., 1999.
10. K.A. Harries and M.F. Petrou, "Axial Load Tests of Turned Built-up Timber Columns", University of South Carolina, Department of Civil and Environmental Engineering Report (final report for Cox Wood Inc.) No. ST 00-02, 65 pp., 2000.
11. K.A. Harries and M.F. Petrou, "Bridge to the Future – State-of-the-Art Pedestrian Bridge and Gateway to Columbia", University of South Carolina, Department of Civil and Environmental Engineering Report (final report for SCDOT/FHWA) No. ST 00-01, 34 pp., 2000.
12. M.F. Petrou, B.Wan, and K.A. Harries, "Continuing Investigation of Strand End Slippage in Prestressed Concrete Piles-Vol. I: Experimental Investigation of Strand End Slip in Prestressed Concrete Piles", University of South Carolina, Department of Civil and Environmental Engineering Report (final report for SCDOT/FHWA) No. ST 00-04/I, 110 pp., 2000.
13. K.A. Harries and M.F. Petrou, "Continuing Investigation of Strand End Slippage in Prestressed Concrete Piles-Vol. II: Design and Behavior of Prestressed Pile to Cast-in-Place Pile Cap Connections", University of South Carolina, Department of Civil and

- Environmental Engineering Report (final report for SCDOT/FHWA) No. ST 00-04/II, 15 pp., 2000.
14. K.A. Harries and M.F. Petrou, “Bridge to the Future – State-of-the-Art Pedestrian Bridge and Gateway to Columbia”, University of South Carolina, Department of Civil and Environmental Engineering Report No. ST 00-01, 34 pp.
  15. C.E. Pierce, M.F. Petrou, and M.H. Chaudhry, “Aggregate and Concrete QC/QA Certification of Contractors and SCDOT Personnel”, Department of Civil and Environmental Engineering Report (final report for SCDOT/FHWA) No. GT01-03, 51 pp., 2001.
  16. K.A. Harries, M.F. Petrou, and M.H. Chaudhry, University of South Carolina, “Technology Transfer Programs for Concrete QC/QA Certification of Contractors and SCDOT Personnel”, Department of Civil and Environmental Engineering Report No. ST 01-02, Oct. 2001, 40 pp.
  17. M.F. Petrou, K.A. Harries, J. Mustar, and R. Walters, “Review of Class-E Concrete for Bridge Decks in South Carolina-Phase II”, Department of Civil and Environmental Engineering Report (final report for SCDOT/FHWA) No.ST03-01, 145 pp., 2003.
  18. M.F. Petrou, K.A. Harries, R. Walters, and J. Mustar, “Permeability of Portland Cement Concrete (PCC) Structures in South Carolina”, Department of Civil and Environmental Engineering Report (final report for SCDOT/FHWA) Vol. I, No.ST04-01, 100 pp., 2004.
  19. M.F. Petrou, D.C. Rizos, K.A. Harries, and J. Hanson, “Permeability of Portland Cement Concrete (PCC) Structures in South Carolina”, Department of Civil and Environmental Engineering Report (final report for SCDOT/FHWA) Vol. II, No.ST04-02, 90 pp., 2004.
  20. I. Ioannou, M.F. Petrou, R. Fournari, S. Vrahimis, C. Hatzigeorgiou, G. Konstantinou, and N. Kelepeshies, “Study of the Soundness of Aggregates in order to Improve the Durability of Concrete”, final Report, Cyprus Research Promotion Foundation, 2009.
  21. Φ. Παντελή, Δ. Βαττής, Χ. Χατζηγεωργίου, Μ. Πέτρου, Σ. Βραχίμης, “Αδρανή Υλικά, Συνοπτικός Οδηγός Χρήσης Κυπριακών Προτύπων CYS EN”, ΕΤΕΚ, 2009.
  22. D. Nicolaides, M.F. Petrou, et al., “Mix Design, Mechanical Properties And Impact Resistance Of Ultra High Performance Fibre Reinforced Cementitious Composites (UHPFRCCs)”, final Report, Cyprus Research Promotion Foundation, 2014.
  23. D. Nicolaides, A. Kanellopoulos and M. Petrou, “Guidelines for the Production of UHP-CY and Practices for the Most Effective Impact Load Resistance of UHPFRCCs”, Best Practice Guide, Cyprus Research Promotion Foundation, 2014.
  24. Σ. Βραχίμης, Φ. Παντελή, Μ. Πέτρου, Ι. Ιωάννου, Δ. Βαττής, Χ. Χατζηγεωργίου και Μ. Μάρκου, “Συνοπτικός Οδηγός Σκυροδέτησης σε Υψηλή Θερμοκρασία Περιβάλλοντος”, ΕΤΕΚ, 2014.

#### **D. Articles in Magazines/Newspapers**

1. I. Ioannou and M. Petrou, “Research activities in the Laboratory of Building Materials at the University of Cyprus”, *Architects and Engineers*, **78**, 65-67, 2008 [in Greek].
2. M. Petrou and I. Ioannou, “Strength/Durability of Concrete in the 20<sup>th</sup> Century, Lessons for the Future”, *Contractor*, Federation of the Building Contractors Associations of Cyprus, **1**, 24-26, 2009 [in Greek].

3. A.D. Kanellopoulos, I. Ioannou, and M.F. Petrou, “Durability indicators of SCC towards performance-based specifications for the durability of SCC”, Betonwerk und Fertigteil-Technik/Concrete Plant and Precast Technology 76 (5), pp. 22-27, 2010.

## **RESEARCH GRANTS**

1. M.F. Petrou, “Continuing Investigation of Strand Slippage in 24 Inch Octagonal Prestressed Concrete Piles”, South Carolina Department of Transportation (SCDOT) /Federal Highway Administration (FHWA), \$45,529, March 1995-May 1996.
2. M.F. Petrou, “Smart Concrete-Use of Microencapsulation in Civil Engineering Applications”, USC, Carolina Venture Fund, \$16,860, April 1995-Sept. 1996.
3. M.F. Petrou, “Computer Vision Method for Evaluation of Bridge Decks”, Research and Productive Scholarship, \$7,463, April 1995-July, 1996.
4. M.F. Petrou, “Equipment Donation: Marshal Mechanical Compactor and NCAT Asphalt Content Tester”, REA Construction, Inc., \$18,000, 1995.
5. M.F. Petrou (PI) and D.C. Rizos, “Testing of Wood Truss End”, Shaw Components, Inc., \$4,300, 1996.
6. M.F. Petrou, “Civil Engineering Education Without Boundaries”, Department of Energy (DOE)/EPSCoR, \$3,000, May 1996-Aug. 1996.
7. M.F. Petrou, “Continuing Investigation of Strand Slippage in Prestressed Concrete Piles”, SCDOT/FHWA, \$222,551, May 1997-Nov. 1999.
8. M.F. Petrou, “High Performance Concrete”, American Concrete Institute/C Carolinas Chapter, \$2,000, 1998.
9. V. Giurgiutiu, J. Lyons, and M. Petrou (Co-PI), “Structural Repairs Using Fiber Reinforced Polymer (FRP) Composites”, Center for Manufacturing and Technology, SC Research Institute, \$80,000, July 1997-June 1998.
10. M.F. Petrou (PI) and J.H. Bradburn, “Fatigue Testing of Bridge Aluminum Expansion Joints”, SCDOT, \$29,789, Jan. 1998-July 1998.
11. M.F. Petrou (PI) and K.A. Harries, “Bridge Rehabilitation Using Fiber Reinforced Polymer (FRP) Composites-Phase I”, SCDOT/FHWA, \$25,331, Oct. 1998-Feb. 1999.
12. M.F. Petrou (PI) and V. Giurgiutiu, “Development and Testing of Fiber Reinforced Composite Overlays”, DOE/WSRC/SCUREF, \$50,000, Aug. 1998-Sep. 1999.
13. K.A. Harries, M.F. Petrou (Co-PI), “Structural Characterization of Laminated Timber Columns”, Cox Wood Inc., 3/99-3/00, \$40,000
14. M.F. Petrou (PI) and K.A. Harries, “Review of Class E Concrete Mix Used in Bridge Decks in South Carolina, SCDOT/FHWA, \$25,157, Mar. 1999-Mar. 2000.
15. K.A. Harries and M.F. Petrou (Co-PI), “Bridge to the Future: State-of-the-Art Pedestrian Bridge and Gateway to Columbia”, SCDOT/FHWA, \$34,669, June 1999-Feb. 2000.
16. H.M. Chaudhry, C.E. Pierce, K.A. Harries, and M.F. Petrou (Co-PI), “Technology Transfer Programs for Aggregate & Concrete QC/QA Certification of Contractors & SCDOT Personnel”, SCDOT/FHWA, \$34,090, Oct. 1999-Feb. 2000.
17. H.M. Chaudhry, C.E. Pierce, and M.F. Petrou (Co-PI), “Certification of Contractors & SCDOT Personnel-Phase II: Pilot & Implementation for Coarse Aggregate Program”, SCDOT/FHWA, \$117,567, Mar. 2000-Feb. 2001.

18. H.M. Chaudhry, K.A. Harries, and M.F. Petrou (Co-PI), “Technology Transfer Programs for Concrete QC/QA Certification of Contractors and SCDOT Personnel”, SCDOT/FHWA, \$178,336, Apr. 2000-Sep. 2001.
19. M.F. Petrou (PI), and K.A. Harries, “Review of Class E Concrete Mix Used in Bridge Decks in South Carolina-Phase II”, SCDOT/FHWA, \$162,210, May 2000-Jan. 2003.
20. M.F. Petrou (PI), K.A. Harries, V. Giurgiutiu, J.S. Lyons, and T.D. Papathanasiou, “Durability of the Bond Between Concrete and Fiber Reinforced Polymer Composites”, National Science Foundation (NSF), 1/00-12/02, \$210,000, Sept. 2000-Aug. 2004.
21. M.F. Petrou (PI), “Permeability of Portland Cement Concrete Structures in South Carolina”, SCDOT/FHWA, \$89,275, Dec. 2001-Sept. 2003.
22. K.A. Harries, M.F. Petrou (Co-PI), and D.C. Rizos, “Structural Evaluation and Monitoring of Composite FRP Deck and Steel Girder Bridge”, FHWA/United States Department of Transportation (USDOT), \$184,000, Dec. 2001-Nov. 2003.
23. D.C. Rizos, M.F. Petrou (Co-PI), “Structural Evaluation and Monitoring of A709 HPS 70W Steel Bridge”, FHWA/USDOT, \$172,800, Apr. 2003-Mar. 2005.
24. M.F. Petrou (PI), and K.A. Harries, “Bridge Rehabilitation Using FRP Composites-Phase II”, SCDOT/FHWA, \$514,098, Aug. 2000-Apr. 2005.
25. D.C. Rizos, M.F. Petrou (Co-PI) and J.R.V. Flora, “Investigations into the Performance of Corrosion Resistant Reinforcement”, FHWA/USDOT, \$150,000, Dec. 2003-Nov. 2005.
26. M.F. Petrou (PI), I. Ioannou (Co-PI) and N. Kelepeshies, "Study of the Soundness of Aggregate in Order to Improve the Durability of Concrete", Cyprus Research Promotion Foundation, €158,000, 1/2007-6/2009
27. M.F. Petrou (PI), I. Ioannou, M. Neophytou, P. Papanastasiou, G. Georgiou, and A. Alexandrou.“Analytical and Experimental Investigation of Concrete Flow”, University of Cyprus, Large Size Research Project, €230,000, 1/2007-12/2010
28. M. Neophytou (PI), M.F. Petrou et al., “Towards an optimization of urban planning and architectural parameters for energy use minimization in Mediterranean cities”, European Commission (URBAN-NET Projects), €245,620, 2009-2011
29. I. Ioannou (PI), M.F. Petrou, et al., “Establishment of research infrastructure for the characterization and study of the decay and protection of building materials of monuments in Cyprus”, Cyprus Research Promotion Foundation, €799,560, 2009-2013
30. M. Neophytou (PI), M.F. Petrou, et al., “Multidisciplinary centre for energy efficiency in a sustainable built environment”, Cyprus Research Promotion Foundation, €400,000, 2009-2013
31. D. Nicolaides, M.F. Petrou, et al., “Mix Design, Mechanical Properties And Impact Resistance Of Ultra High Performance Fibre Reinforced Cementitious Composites (UHPFRCCs)”, Cyprus Research Promotion Foundation, €180,000, 2011-2013
32. A. Mina, L. Petrou and M.F. Petrou, “ Testing of Polyurethane Insulated Panels”, Cyprus Research Promotion Foundation, €5000, 2016
33. P. Savva (PI), M.F. Petrou, “SCC-CY – Production of Self-Compacting Concrete in the Building Industry of Cyprus”, Cyprus Research Promotion Foundation, €41,665, 2019
34. A.Theodosiou (PI), K. Kalli, M.F. Petrou, P.Savva, “ACORes – Advanced Concrete Optical Remote Sensors”, Cyprus Research Promotion Foundation, €86,898, 2019-2021

35. P. Savva (PI), M.F. Petrou, et al., “RAPCON – Recycled Aggregates for the Production of Concrete”, Cyprus Research Promotion Foundation, €244,975, 2019-2022
36. P. Savva (PI), M.F. Petrou, et al., “DIAVAL – Valorization of diabase mud for the development of innovative building materials”, Cyprus Research Promotion Foundation, €248,748, 2019-2022.
37. M.F. Petrou (PI), “Green Concrete”, University of Cyprus, €51,000, 7/2019-6/2022.
38. D. Nicolaidis (PI), M.F. Petrou, et al., “DEFEAT- Development of an innovative insulation fire resistant facade from the Construction and Demolition Waste”, Cyprus Research Promotion Foundation, €937,971, 2020-2023.

## **GRADUATE/UNDERGRADUATE STUDENTS SUPERVISED**

### **A. Post-Doctoral Associates**

1. Baolin Wan, 2002-2003
2. Antonis Kanellopoulos, 2007-2011
3. Socrates Ioannou, 2019-date

### **B. Ph.D. Students**

1. Aly Hussein, “Investigation of Strand End Slip in Prestressed Concrete Piles”, May 2002
2. Baolin Wan, “Study of the Bond Between Fiber Reinforced Polymer Composites and Concrete”, December 2002
3. Pericles Savva, “Internal Curing of Concrete Using Highly Absorptive Normal Weight Aggregate”, May 2018
4. Anna Mina, “Behavior of Structures under Random Impact Loading”, expected 2021 (co-advisor)
5. Anthos Ioannou, “Experimental Investigation of the Shear Strength of Reinforced Concrete Columns Strengthened with SHFRCC”, expected 2021(co-advisor)
6. Konstantina Oikonomopoulou, “Behavior of Treated Recycled Aggregate Concrete”, expected 2023.

### **C. M.S. and M.Eng. Students**

1. Walter Joiner, “ Strand Slippage in Prestressed Concrete Piles”, M.Sc., August 1996
2. Wendy Rohl, “ The Corrosion of Galvanized Steel in the Presence and Absence of Inhibitors”, M.Sc., May 1998
3. Baolin Wan, “Top Bar Effect as a Rheological Problem”, M.Sc., May 1999
4. Dorothy Laub, ”The Effects of Hygrothermal Aging on the Fracture of a Composite/Concrete Material System”, M.Sc. (co-advisor), December 1999
5. Christos G. Papakonstantinou, “Fatigue Performance of Reinforced Concrete Beams Strengthened with GFRP Composite Sheets”, M.Sc., May 2000
6. Ioana Vidican, “Design of High Performance Concrete Using Chemistry of Cementitious Materials”, M.Sc. (co-advisor), December 2000

7. Jennifer Mustar, "Chloride Permeability of Concrete for Bridge Decks in South Carolina", M.Sc., December 2001
8. Raven B. Walters, "High Performance Concrete for Bridge Decks", December 2002
9. Jean Hanson, "Effect of Coarse Aggregate Properties on the Modulus of Elasticity High Performance Concrete", M.Sc., August, 2003
10. David Parler, "Strengthening of Reinforced Concrete Bridge Decks using FRP Composites", M.Sc., May 2004
11. Rea Fournari, "Soundness of Aggregates and its Effect on Concrete Performance", M.Sc. (co-advisor), Dec. 2009
12. Xenia Konstantinidou, "Use of Super-absorbing Crystals in Mortar and Concrete", M.Eng. (co-advisor), Dec. 2009
13. Maria Hadjidemetriou, "Development of Self Compacting Concrete Using Local Materials", M.Eng., Dec. 2009
14. Stella Pourgouri, "Correlation of Actual Rheological Properties of Self Compacting Concrete with Empirical Tests", M.Sc. (co-advisor), Aug. 2010
15. Eleana Hadjiandreou, "Rheological Properties of SCC using VMA", M.Eng. (co-advisor), Dec. 2010
16. Pericles Savva, "Study of the Interface Between Concrete and Steel Reinforcement in Self Compacting Concrete and Conventionally Vibrated Concrete", M.Sc., May 2011
17. Dora Stylianou, "High Temperature Effect on Concrete", M.Eng. 2012
18. Marilena Georgiadou, "Design and Assessment of Road Concrete Kerbs", M.Eng., 2012
19. Anna Kamasia, "Design and Assessment of Road Concrete Kerbs", M.Eng., 2012
20. Michaela Georgiou, "Methods to Reduce the Temperature of Concrete", M.Eng., 2012
21. George Dimitriou, "Enhancing Mechanical and Durability Properties of Recycled Aggregate Concrete", M.Sc., May 2014
22. Vasiliki Spastri, "Effect of Steel Corrosion on Bond", M.Sc. (co-advisor), 2014
23. Christos Christophides, "Effect of Steel Corrosion on Bond", M.Sc. (co-advisor), 2014
24. Christodoulos Christodoulou, "Self-compacting Concrete with Fibers", M.Eng., 2014
25. Elisavet Nicodimou, "Environmental Effects of Recycled Concrete", M.Eng., 2014
26. Renos Kyprianou, "Effect of Hydrated Lime in Asphalt Concrete", M.Eng., 2014
27. Sophie Elia, "Assessment of Aggregate Roundness in Recycled Concrete Aggregates", M.Eng., 2015
28. Demetra Aristodelous, "Constructional Solid Waste", M.Eng., 2015,
29. Petros Soteriou, "Ring Test", M.Eng., 2015
30. Demetris Stylianides, "Reclaimed Asphalt Pavement Recycled in New Hot Mix Asphalt", M.Eng., 2016
31. Andriana Georgiou, "Ultra High Performance Fiber Reinforced Concrete", M.Eng., 2017
32. Efthimios Anastasi, "Internal Curing of Concrete Using Recycled Aggregates", M.Eng., 2017
33. Stephanos Papandreou, "Bond Strength of UHPFRC to old concrete", M.Eng., 2017.
34. Panayiota Kyriakou, "Ultra High Performance Fiber Self-Compacting Concrete", M.Eng., 2018
35. Andreas Kokkinos, "Controlled Low Strength Concrete Using Recycled Aggregates", M.Eng., 2020

36. Konstantina Oikonomopoulou, “Production of Self-Compacting Concrete Using Local Materials: Performance vs Cost”, M.Sc. 2020
37. Konstantinos Aivaliotis, “Evaluation of Alternate Use of Highly Absorption Normal Weight Aggregates in Concrete”, M.Sc., 2021

**D. Honors College Theses**

1. Brenden Brown, “Advancing the Fiber Reinforced Polymer Composites in Civil Infrastructure”, May 1998
2. Jennifer Mustar, “ Environmental Effects on Fiber Reinforced Concrete Polymer Composites”, expected 2000

**E. Undergraduate Research Assistants**

Joey Jaco, Faycal Elkadiri, Andrew Bailey, Karin Berzins, Joseph Huggins, Jeffrey Franz, Walter Joiner, Wendy Rohl, Andy Gillis, Ryan Hernandez, Brenden Brown, Stanley Young, Donny Alexander, Bryan Thomas, Jennifer Gay, Michael DeFreese, Erin Parnell, Edward Owens, Raven Walters, and Kevin Turner.

**SERVICE**

**A. Department**

1. Chair of the Department, UCY, 1/1/2009-12/10/2011
2. Associate Chairperson of the Department, UCY, 2007-2009, 2013-2015
3. Graduate Director, UCY, 2005-2007
4. Graduate Director, USC, 1998-2002
5. Faculty Search Committee, USC, 1996-1997, 1997-1998, and 2000-2001
6. Chair, Graduate Studies Committee, USC, 1997-2002
7. ABET 2000/ Undergraduate Curriculum Committee, USC, 1997-1998
8. Chair, Search Committee, USC, 1996-1997

**B. College**

1. College of Engineering Council, UCY, 2004-date
2. APOGEE Committee, USC, 2001
3. Dean Search Committee, USC, 1999-2000
4. Faculty Research Advisory Committee, USC, 1997-1998
5. Faculty Advisory Committee, USC, 1998-1999
6. Lower Division Committee, USC, 1995-1996, 1996-1997, 1997-1998

**C. University**

1. Senate, UCY, 2006-2008, 2009-2011



2. Graduate Committee, UCY, 2007-2009
3. Greek Student Organization Faculty Advisor, 1994-1998, 2000-2002

**D. State (South Carolina)**

1. Bridge Design Award Committee, SCDOT, 2000-2002

**E. National (Cyprus)**

1. Cyprus Technology University, member of the Interim University Council, March-Dec. 2008
2. Cyprus International Institute for the Environment and Public Health in association with Harvard School of Public Health (CII), member of the Board of Directors, 2008-2010
3. Cyprus Environmental Stakeholder Forum, Steering Committee, 2007-2011
4. Cyprus Science Council, member, 2010-2014
5. Vice-President, Council of Educational Evaluation Accreditation, 2012-2015
6. President, Construction Research and Technology Platform, 2016-date