

Adel ElSafty, PhD, PE, P.Eng.

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RESEARCH INTERESTS

Bridge Engineering, Fiber Reinforced Polymer "FRP" applications, Nondestructive Testing and Evaluation of Structures, Durability of Concrete, Structural Rehabilitation and Strengthening

EDUCATION AND PROFESSIONAL REGISTRATION

- > Ph.D. in Civil Engineering, North Carolina State University (NCSU), Raleigh, NC, 1994
- > M.S. in Structural Engineering, *Cairo University*, Cairo, Egypt, 1988
- > **B.S.** in Civil Engineering, *Cairo University*, Cairo, Egypt, 1984
- > **P.E.** Licensed/Registered Professional Engineer in the State of Florida
- > P. Eng. Licensed Engineer/Registration in Ontario Canada
- > OSHA Authorized Construction Trainer for 10 & 30 hours construction courses
- > *ABET* Program Evaluator (PEV)

ACADEMIC & PROFESSIONAL EXPERIENCE

I am a tenured "*Professor*" in the College of Computing, Engineering and Construction at the University of North Florida (UNF) where I helped establishing the new civil engineering graduate program and advancing the undergraduate program. Prior to joining UNF, I was a *founding faculty* of the Civil Engineering Department at Florida State University, Panama City campus from 2003 to 2005. I earned my PhD in 1994 from *North Carolina State University (NCSU)* in Raleigh. I have had extensive teaching & research experiences at several universities [*North Carolina State University* "NCSU" (PhD & postdoctoral research), *Cairo University* (Master), *Sherbrooke University*-Canada (postdoctoral research), *University of Central Florida* "UCF" (Visiting faculty), *Florida State University* "FSU-PC" (founding faculty), and *United Arab Emirates University* "UAEU" (Fulbright US Scholar), *University of North Florida* "UNF" (Professor)].

I received a *National Award* by the PCI in 2015 "<u>THE EDUCATOR OF THE YEAR AWARD</u>", in addition to other awards (national, local, and state) in Teaching, Research, Leadership, and Service. I've been a "<u>FULBRIGHT</u> <u>U.S. SCHOLAR</u>" conducting research at UAE and have also been selected as a "Fulbright Specialist". I have secured \$2.5 million project funds (state, national and Federal) and have led several faculty research teams from 8 universities (FSU, NCSU, Sherbrooke, Northern Ohio, LSU, Embry Riddle, UNF, and Drexel). I have managed the activities of a national grant to establish the 1st PCI-Foundation engineering Design Studio in the US (2009-2015). I have led student teams to win regional and national competitions and have led student groups on Study-Abroad to Ghana & Morocco. I've led faculty groups on international academic visits to Turkey, Morocco & Egypt to establish and maintain research initiatives & exchange programs. I was a guest lecturer at Cologne University of Applied Science (Germany) and initiated collaboration in Japan and Italy to establish joint research & exchange program. I am an ABET Program Evaluator (PEV). I've been a member of the college strategic committee, resource management committee, and engineering school team to develop & implement the vision for 2025. I have had an extensive industrial experience working as a Structural Engineer at a Bridge design firm (Lochner) in Florida and a Specifications Manager at a British Construction Chemical Company (Fosroc - Burmah Castrol). I am a Licensed/Registered Professional Engineer "PE" in the State of Florida and in Ontario, Canada.

COURSES TAUGHT

Graduate Courses

CES 5105	Advanced Mechanics of Materials	UNF
CES 5326	Bridge Engineering	UNF
CES 6144	Matrix Structural Analysis	UNF
CES 6715	Prestressed Concrete	UNF
CES 5706	Advanced Reinforced Concrete	UNF
CES 6116	Finite Element	UNF
EML 6933	Finite Element Analysis for ME	
CIS 6900	Sp. Topics: Advanced Mechanics of Materials	UNF

Undergraduate Courses

and Staddard Courses		
CES 4711	Prestressed Concrete	UNF
CES 4321	Introduction to Bridge Engineering	UNF
CES 4702	Concrete Design	UNF & FSU
CES 3605/CES 4605	Steel Design	UNF & FSU
CES 4102	Matrix Structural Analysis	UNF
EML 4507	Finite Element Model & Analysis	UNF
CES 3100	Structural Analysis	UNF & FSU
CGN3930	Junior Design Structures	UNF
EGN 3331/ CES 3104	Strength/Mechanics of Materials & lab	UNF,UCF, FSU
EGM 3512/EGN3310	Statics/Eng Mechanics (Statics & Dynamics)	UNF,UCF, FSU
CGN 3501c	Civil Engineering Materials	UNF
CGN 4905	Independent Studies on FRP Applications & Repair	UNF
EGN 2212	Engineering Statistics and Computations	FSU
CGN 4800 & CGN 4802	Pre Senior Design & Professional Issues & Senior Design Project	FSU

FUNDED RESEARCH:

External Funds (~\$2.5 million)

- 1. PI, Florida Department of Transportation (FDOT), "Degradation mechanisms and service life estimation of fiber reinforced polymer (FRP) concrete reinforcements", \$396,510, 36 months, (2015-2018), Ongoing.
- 2. PI, Florida Department of Transportation (FDOT), "Testing, Evaluation, and Specification for Polymeric Materials (SMO-13-09)", FDOT BDV34 TWO 977-02, \$402,000, 48 months, (2014-2018), ongoing
- Co-PI, Florida Department of Transportation (FDOT), "Development of Experiential Setup and Testing of Bridge Deck Panel Specimens Using Heavy Vehicle Simulator", FDOT BDV3I TWO 977-60, \$134,246 (07/16-12/30/16), Ongoing
- Project Collaborator/Partner, NSF-FMM project, "Field Monitoring and Measurements Education: A Model for Civil and Environmental Engineering", PI: Dr. Vijaya Gopu, (LTRC), Co-PIs: Dr. Ayman Okeil & Dr. Roger Seals (LSU), Project Officer: Gul Kremer (DUE-Division of Undergraduate Education), \$337,312, (2017-2019).
- 5. Co-PI, Florida Department of Transportation (FDOT), "Reinforced Concrete Foundation Remote Monitoring", \$107,113, (03/30/16-11/30/17), Ongoing
- Co-PI, Florida Department of Transportation (FDOT), "Analysis, Comparison, and Contrast of Two Primary Maintenance Contracting Techniques used by the Florida Department of Transportation", \$85,125, 12 months, (April 2015 – September 2016), completed
- 7. PI, Florida Department of Transportation (FDOT), "Empirical Deck for Phased Construction and Widening", FDOT BDV34 TWO 977-01, \$175,000, 42 months, (March 2013 September 2016), completed.
- 8. PI, International Concrete Repair Institute (ICRI), "Concrete Repair Research", \$2,000 & \$1,500 (2014, 15).
- 9. PI, Precast/Prestressed Concrete (PCI)-Foundation Grant, "Engineering Professor Design Studio", \$125,000 (August 2009 March 2015), Completed.
- 10. PI, Florida Department of Transportation, "Degradation Assessment of Internal Continuous Fiber Reinforcement in Concrete Environment", FDOT -TWO#BDK82 977-05, \$200,000, (2011-2014), Completed.
- PI, Florida Department of Transportation (FDOT), "The Repair of Damaged Bridge Girders with Carbon Fiber Reinforced Polymer CFRP Laminates", FDOT Contract-TWO #BDK82 977-03, \$150,000, 18 months, (May 2010 - September 2012), Completed.
- 12. PI, *Florida Department of Transportation (FDOT)*, **"Sealing of Cracks on Florida Bridge Decks with Steel Girders"**, FDOT BDK82 977-02, \$120,000, 24 months, (January 2010 August 2012), Completed.
- 13. Co-PI, Florida Department of Transportation (FDOT), "Alternative Methods for Coatings and Materials Used on FDOT Signage and Lighting Structures", \$50,000, 4 months, (Jan 2012 April 2012), Completed.
- 14. PI *PCI Project PCI Student Design Award Competition -* PCI Big Beam Contest. Award \$100 in 2008 and Award \$750 in 2009, compteted.
- 15. PI Industry Research Project "Condition Assessment of Defected Drilled Shafts"- Saliba Engineering, \$500 (2009), Completed.
- 16. PI, *Industrial Firm Sponsor*, CFRP Materials Donated for Research on *Concrete Repair*, Air Logistics Corporation, FACS[™] Group Azusa, CA, \$1,944, Completed.
- 17. PI, *Industrial Firm Sponsor*, Research Materials Donated for *Concrete Beam Research*, Fyfe Co. LLC, California, USA, \$600, Completed.

Internal Funds

- 18. PI, UNF Recipient of: Academic Affairs faculty Development Research Grant, \$7,500, Summer 2012
- 19. PI, UNF-TLO, UNF Collaboration with Engineering Firms, \$10,700, (2010)
- 20. PI, UNF, *How Does Teaching Structural Failures & Repair Enhance Students' Authentic Learning Experience?*, \$7,500, (Summer 2010)
- 21. PI, UNF (Summer 2009), Undergraduate Research/Scholarship Grant funding for research projects on: *Flexural Strengthening of Damaged Concrete Beams*, \$500
- 22. PI, UNF, Faculty International TLO / Faculty International Co-Curricular Activity / international Study Abroad Development Proposal, (July 2008 & Feb 2009), Development of Course materials on: *Preservation of Historic Buildings and Restoration and Study of Historic Buildings & Bridges*, \$2500
- 23. Co-PI, UNF (2009). TLO on: United States Transit Field Study, \$9000
- 24. PI, UNF (2007), Summer 2007 Proposal Development grant Jan 2007-Sept 2007 Proposal Title: *The use of cementitious composite link slab in bridge repair*, \$7500
- 25. PI (2006-2008), Foundation Board Repair of Bridges through Elimination of deck joints, \$10,000
- 26. PI, UNF (2006), Division of Sponsored Research & Training (DSRT) funding for a student's project: *Hydrogen Peroxide Rockets* - student Kelvin LeBeaux- (June 19 – August 25, 2006), \$1000
- 27. PI, UNF-(Summer 2007), Division of Sponsored Research & Training (DSRT)-research project on *repair of girders and slabs with Carbon Fiber Reinforced Plastics* (2006 2008), \$1000
- 28. PI, UNF: Course Redesign for Effective Learning (CREL) (2007), Office of Faculty Enhancement, \$1000
- 29. PI, UNF (SoE) (2006), Laboratory Improvements for Brittle Material Characterization, \$8,715.63

AWARDS:

SELECTED AWARDS:

- ✓ UNF: "*Distinguished Professor Award Runner-Up*", (2016)
- ✓ National Award: "*The Educator Of The Year Award*" PCI (2015)
- ✓ National Award: "*Fulbright U.S. Scholar*", (2015-2016)
- ✓ National Award: "*PCI-Foundation" Award* to establish the 1st US "<u>Engineering Professor Design Studio</u> <u>RESEARCH AWARDS</u>
- 1. National Award: "The Educator Of The Year Award" PCI (2015)
- National Award: "<u>Fulbright U.S. Scholar</u>" Grant (2015-2016)), The J. William Foreign Fulbright Scholarship Board (FFSB), the U.S. Department of State's Bureau of Education and Cultural Affairs (ECA), and the Council for International Exchange of Scholars (CIES), Washington, D.C., conduct research at the United Arab Emirates University (UAEU), UAE
- 3. National Research & Teaching Award: "<u>Precast/Prestressed Concrete Foundation Award</u>" to establish the 1st "Engineering Professor Design Studio" in the US (2009-2014)
- 4. International Award: <u>International Scholarship and Journal Paper Award</u>, International Journal of Concrete Structures and Materials (IJCSM) award for journal publication (March 2013)
- 5. UNF: "UNF Award of Research Excellence" (2013-14 Office of Research & Sponsored Programs)
- 6. UNF Award: "Principal Investigator with 5 Years of Continuous Funding" Award, (2014)
- 7. UNF Award: "*Outstanding Faculty Scholarship Award*", UNF (2013)
- 8. UNF Award: "University Researcher of the Month" Award, UNF (2012)
- <u>TEACHING AWARDS</u>
- 9. National Award: "The Educator Of The Year Award" (2015), same as 1
- 10. National Award: "*Fulbright Specialist*" Candidate (2013-2018) in Engineering Education.
- National Teaching & Research Award: "<u>Precast/Prestressed Concrete Foundation Award</u>" to establish the 1st US "<u>Engineering Professor Design Studio</u>", \$125,000 (2009-2014), same as 3
- 12. State Award: "Florida Prestressed Concrete Association (FPCA) Education Foundation Award": FPCA Recognition for Outstanding Achievement, Big beam 2012 award, (1st place-Southeast region)
- 13. State Award: "*FPCA Education Foundation Award*": FPCA Recognition for Outstanding Achievement Big beam 2010 award (2nd place in Southeast region), \$1,000
- 14. UNF Award: "Outstanding Undergraduate Teaching Award" (2010)
- 15. UNF Awards (2009-2013): 5 awards to establish teaching exchange programs for students and faculty with Universities in Japan, Germany, Istanbul, Cairo, Morocco, and Italy.
- 16. Academic Award: Cairo University honor student (undergraduate student award)

- "<u>National Team Advisor Award</u>": Precast/Prestressed Concrete Institute "<u>Award for Excellence</u>", (2013) -Advisor - National Champion of Big Beam Engineering Design Competition, 1st and 2nd places in Southeast region and 6th place nationally (2013)
- "<u>National Team Advisor Award</u>": Precast/Prestressed Concrete Institute "<u>Award for Excellence</u>", (2012) -Advisor - National Champion of Big Beam Engineering Design Competition, 1st place Regionally & 4th place nationally (2012)
- 19. National: "<u>PCI Award for Excellence</u>", Advisor National Champion of Big Beam Engineering Design Competition, Second Place in South-East region (2010)
- 20. State: *Train-the-Trainer Instructor:* Selected by the *Florida Engineering Society (FES)* to offer PE Review *Train-the-Trainer* Sessions for engineers. Offered review sessions twice/year (2006, 07, 08)
- 21. UNF Leadership Award: "Outstanding International Leadership Award" (2013)
- 22. UNF Award: "UNF Disability Resource Center Professor Empowerment Award" (2012)
- 23. UNF Faculty Advisor: 1st International TLO Service Project for Eng. students to Ghana (2009)
- 24. UNF Co-Leader: "International Program Development" leading 10 faculty in the Middle East (2012)

PUBLICATION RECORD

TECHNICAL/REASEARCH REPORTS OR BOOKS

- 1. Adel ElSafty, (2017), STATICS INTERACTIVE WORKBOOK, Kendall Hunt Publishing.
- Adel ElSafty, K. Tawfiq, A. Okeil, (September 2016), "Empirical Deck for Phased Construction and Widening", Technical Report, FDOT Contract No. BDV34 TWO 977-01, FDOT, State Research Office, Tallahassee, FL.
- 3. Adel ElSafty, Brahim Benmokrane, Sami Rizkalla, Hamdy Mohamed, and Mohamed Hassan, (July 2014), "Degradation Assessment of Internal Continuous Fiber Reinforcement in Concrete Environment", Technical Report, FDOT Contract No. BDK82-977-05, FDOT, State Research Office, Tallahassee, FL.
- 4. ElSafty, Adel, (May 2012), "Sealing of Cracks on Florida Bridge Decks with Steel Girders," Final Report, FDOT Contract #BDK82-977-06, Technical Report, FDOT, State Research Office, Tallahassee, FL.
- 5. ElSafty, Adel, (June 2012), "The Repair of Damaged Bridge Girders with Carbon Fiber Reinforced Polymer "CFRP" Laminates," Technical Report, FDOT Contract# BDK82-977-03, FDOT, State Research Office, Tallahassee, FL.
- 6. Jackson, N.M. and **ElSafty, Adel**, (April 2012), **"Alternative Materials for FDOT Sign Structures Phase I,"** Technical Report, FDOT Contract #BDK82-977-06, FDOT, State Research Office, Tallahassee, FL.
- 7. Paul Zia, Alp Caner, and Adel K. El-Safty, (September 1995), "Jointless Bridge Decks," Technical Report, FHWA/NC/95-006, North Carolina Department of Transportation (NCDOT).

JOURNAL PUBLICATIONS

- 1. Amr El-Nemr, Ehab A. Ahmed, Adel El-Safty, and Brahim Benmokrane, (2016), "Experimental Testing of Concrete Beams Reinforced with GFRP Bars of Different Grades and Surface Configurations", Elsevier Journal of Composites Part B: Engineering, (under review)
- 2. Brahim Benmokrane, Ahmed Ali, Hamdy Mohamed, Adel El-Safty, Allan Manalo, (2016), "Laboratory Assessment and Durability Performance of Vinyl-Ester, Polyester, and Epoxy Glass-FRP Bars", Elsevier Journal of Composites Part B: Engineering, (under review)
- Adel ElSafty, Matthew K. Graeff, Georges El-Gharib, Ahmed Abdel-Mohti, and N. Mike Jackson, (May 2016), "Analysis, Prediction, and Case studies of Early-Age Cracking in Bridge Decks", International Journal of Advanced Structural Engineering, ISSN 2008-3556, DOI 10.1007/s40091-016-0123-z
- 4. Mohamed Hassan, Brahim Benmokrane, Adel ElSafty, and Amir Fam, (December 2016), "Bond Durability of Basalt Fiber-Reinforced-Polymer (BFRP) Bars Embedded in Concrete in Aggressive Environments", Elsevier Journal of Composites Part B: Engineering, Volume 106, pp. 262–272.
- 5. Benmokrane, B., Ali, A., Mohamed, H., Robert, M., and **ElSafty, A**., (February 2016), "Durability Performance and Service Life of CFCC Tendons Exposed to Elevated Temperature and Alkaline Environment", *ASCE Journal of Composites for Construction*, DOI: 10.1061/(ASCE)CC.1943-5614.0000606, 04015043, Volume 20, Issue 1.
- 6. Cory High, Hatem M. Seliem, Adel El-Safty, Sami H. Rizkalla, (2015), "Use of basalt fibers for concrete structures", *Journal of Construction and Building Materials* 96, (2015), pp. 37–46.
- Adel ElSafty, Matthew Graeff, and Sam Fallaha, (March 2014), "Behavior of Laterally Damaged Prestressed Concrete Bridge Girders Repaired with CFRP Laminates under Static and Fatigue Loading", *International Journal of Concrete Structures and Materials, IJCSM*, Vol.8, No.1, pp.43–59, March 2014, DOI: 10.1007/s40069-013-0053-0, ISSN 1976-0485 / eISSN 2234-1315

- 8. Adel ELSAFTY, Michael Zinszer, and George Morcous, (April 2014), "Bridge Platform Failure Due to Errors in Design and Construction Practice", *AIC Journal., Journal of The American Professional Constructor*, The American Institute of Constructors, Volume 38, Number 01, pp. 32-40.
- 9. A. ElSafty, M. K. Graeff, and S. Fallaha, (2013), "Assessment of CFRP Repair for Laterally Damaged Prestressed Concrete Girders", *ASTM Journal of Advances in Civil Engineering Materials, ACEM-*2013-0083.Advances in Civil Engineering Materials, Vol. 2, No. 1, 2013, pp. 506-521.
- J. Rafols, K. Lau, I. Lasa, M. Paredes and A. ElSafty, (2013), "Approach to Determine Corrosion Propensity in Post-Tensioned Tendons with Deficient Grout," Open Journal of Civil Engineering, Vol. 3 No. 3, 2013, pp. 182-187. doi: 10.4236/ojce.2013.33022.
- 11. Adel ElSafty, Ahmed Abdel-Mohti, Mike Jackson, Ivan Lasa, and Mario Paredes, (August 2013), "Limiting Early-Age Cracking in Concrete Bridge Decks," *Journal of Advances in Civil Engineering Materials*, Vol. 2, No. 1, Paper ID ACEM-2013-0073.
- 12. A. ElSafty, A. Gamal, P. Kreidl and G. Merckel, (May 2013), "Structural Health Monitoring: Alarming System," *Wireless Sensor Network*, Vol. 5 No. 5, 2013, pp. 105-115. doi: 10.4236/wsn.2013.55013.
- 13. Adel ElSafty and Ahmed Abdel Mohti, (March 2013), "Investigation of Likelihood of Cracking in Reinforced Concrete Bridge Decks", *International Journal of Concrete Structures and Materials (IJCSM)*, March 2013, Volume 7, <u>Issue 1</u>, pp 79-93.
- 14. Adel ElSafty and Matthew K. Graeff, (2013), "Optimum CFRP Configuration to Efficiently Repair Laterally Damaged Simply Supported Rectangular Reinforced Concrete Beams", *ASCE Journal, ASCE Practice Periodical on Structural Design and Construction*, Vol. 18, No. 3, ISSN 1084-0680, August 2013, pp. 165-176.
- 15. Adel ElSafty, (April 2013), "BRIDGE PRESERVATION: Getting clearance", *Roads & Bridges magazine*, <u>http://www.roadsbridges.com/archive?issue=April%202013</u>
- 16. A. Gamal, A. ElSafty, and G. Merckel, (March 2013), "New System of Structural Health Monitoring," *Open Journal of Civil Engineering, OJCE*, Vol. 3 No. 1, 2013, pp. 19-28. doi: 10.4236/ojce.2013.31004.
- 17. Adel ElSafty, Maged Malek, and Matthew Graeff, (October 2012), 'Research of Concrete Containing Scrap-Tire Rubber for Pavement Construction', *Journal of The American Professional Constructor*, The American Institute of Constructors. Vol. 36, Number 2, PP. 11-17, http://issuu.com/AIC-CCC/docs/aic_journal_1012/11.
- Paredes, Mario, Jackson, N. Mike, El Safty, Adel, Dryden, John, Joson, Joseph, Lerma, Hugo, and Hersey, Jeremiah, (2012), "Precision Statements for the Surface Resistivity of Water Cured Concrete Cylinders in the Laboratory," Journal of *Advances in Civil Engineering Materials*, Vol. 9, Issue 4, 2012, pp. 1–23, doi:10.1520/ACEM104268. ISSN 2165-3984
- 19. Amal El Safty, Adel El Safty, and Maged Malek, (September 2012), "Construction Safety and Occupational Health Education in Egypt, the EU, and US Firms", *Open Journal of Civil Engineering (OJCE)*, Vol.2, No.3, PP.174-182.
- 20. G. Morcous, Y. Cho, A. El-Safty, and G. Chen, (2010), Structural Behavior of Fiber-Reinforced Polymer Sandwich Panels for Bridge Decks, *Korean Journal of Civil Engineers (KSCE Journal of Civil Engineering)*,14(6):879-888, DOI: 10.1007/s12205-010-1025-4, http://www.springerlink.com/content/w18606423077648u/
- 21. Maged Malek, Adel El-Safty, Amal El-Safty, and James Sores, (2010), The Correlation between Safety Practices in Construction and Occupational Health, *MANAGEMENT SCIENCE AND ENGINEERING Journal*, Vol. 4, No. 3, 2010, pp. 01-09, http://cscanada.net/index.php/mse/article/viewFile/1433/1627.
- 22. Jiang, A., Malek, M., and **El-Safty, A.**, (Jan. 2011), Business Strategy and Capital Allocation Optimization Model for Practitioners, *ASCE Journal of Management in Engineering*, Volume 27, Issue 1, pp. 58–63.
- 23. Adel ElSafty, and Ayman M. Okeil, (November 2008), Extending the Service Life of Bridges Using Continuous Decks, *PCI Journal* Precast/Prestressed Concrete Institute, PCI, Vol. 53, No. 6, pp. 96-111.
- 24. A. El-Safty, (2006), The Behaviour of Bridges with Jointless Decks Subjected to Time-Dependent Effects, B.H.V. Topping, G. Montero, R. Montenegro, (Editors), CCP: 83 - Proceedings of the 8th International Conference on Computational Structures Technology, Civil-Comp Press, Stirlingshire, UK, Paper 140, 2006. doi:10.4203/ccp.83.140. <u>http://www.ctresources.info/ccp/paper.html?id=3920</u>, *Civil- Comp Proceedings* ISSN 1759-3433
- 25. Ayman M. Okeil and Adel El-Safty, (Nov. 2005), Partial Continuity in Bridge Girders with Jointless Decks, *Practice Periodical on Structural Design and Construction, ASCE Journal*, Vol. 10, No. 4, pp 229-238, doi:10.1061/(ASCE)1084-0680(2005)10:4(229).
- 26. Benmokrane, B., Rahman, H., Mukhopadhaya, P., Masmoudi, R., Chekired, M., Nicole, J-F., and **El-Safty, A.**, (October 2000), Use of FRP reinforcement integrated with fibre optic sensors for concrete bridge deck slab

construction, Published in the *Canadian Journal of Civil Engineering*, *Canadian J. Civ. Eng.*, Volume 27, No 5, pp 928-940.

B. Zhang, B. Benmokrane, A. Chennouf, P. Mukhopadhyaya, and A. El-Safty, (May 2001), <u>Tensile Behavior of Grouted FRP Tendons for Prestressed Ground Anchors</u>, ASCE Journal of Composites for Construction, American Society of Civil Engineering, pp 85-93.
IOURNAL PUBLICATIONS Submitted & Under Preview.

JOURNAL PUBLICATIONS Submitted & Under Review

- Ahmed Gamal, Adel ElSafty, Gerald Merckel, and Patrick Kreidl, STRUCTURAL SAFETY: Wireless Structural Health Monitoring, to be submitted.
- Adel ElSafty, Matthew Graeff, and Sam Fallaha, "Fatigue and Static Testing of Laterally Damaged Full-Scale AASHTO Type II Prestressed Concrete Bridge Girders Repaired With CFRP", to be submitted
- Adel ElSafty, (2014), "Sealing of Cracks in Florida Bridge Decks", *Roads & Bridges magazine*, accepted.
- Aiyin Jiang and Adel ElSafty, (2016), "Effects of Global Climate Change on Building Energy Consumption and Its Implications on Building Energy Codes and Policies in Florida", submitted.
- Bahira Abdulsalam, Ahmed Sabry Farghaly, Richard Gagne, and Brahim Benmokrane, (2016), "Tension Stiffening and Cracking of Concrete Ties Reinforced with Deformed and Sand Coated GFRP bars", submitted

REFEREED CONFERENCE PROCEEDINGS

- 28. Adel ElSafty, Andrea Toro, Ayman Okeil, and James Fletcher, (January 2017), "Effect of Lateral Stiffness of Wide-flanged Prestressed Concrete Beams on Arching Action in Bridge Decks", Transportation Research Board (TRB), Washington DC.
- 29. M. Hassan, B. Benmokrane, A. ElSafty, and A. Fam, (December 2016), "Bond Strength Durability of BFRP Bars in Concrete Subjected to Elevated Temperature and Alkaline Environment", 8th International Conference on Fiber-Reinforced Polymer (FRP) Composites in Civil Engineering (CICE 2016), Hong Kong, China
- 30. Amr ElNemr, Adel ElSafty, and Brahim Benmokrane, (December 2015), "FLEXURAL BEHAVIOR OF CONCRETE BEAMS REINFORCED WITH GFRP BARS OF DIFFERENT GRADES", The Fourteenth International Conference on Structural and Geotechnical Engineering (ICSGE 14), Cairo, Egypt.
- 31. Ahmed Ali, Hamdy M. Mohamed, **Adel Elsafty**, and Brahim Benmokrane, (2015), "Long-Term Durability Testing Of Tokyo Rope Carbon Cables", ICCM20, Copenhagen, 19-24 July 2015.
- 32. Mohamed Hassan, Hamdy M. Mohamed, Brahim Benmokrane, and Adel ElSafty, (2015), "Durability Characterization Of Basalt FRP Bars", SMAR 2015 Antalya, SMAR 2015 Third Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures, September 2015, Antalya, Turkey.
- 33. Mathieu Robert, Hamdy M. Mohamed, Ahmed H. Ali, **Adel ElSafty**, and Brahim Benmokrane, (2015), "Tensile Strength Prediction Of Conditioned Carbon FRP Cable", SMAR 2015 Antalya, SMAR 2015 Third Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures, September 2015, Antalya, Turkey.
- Benmokrane, B. Ali, A., Mohamed, H.M., ElSafty, A. (2014) "Long Term Tensile Properties of Carbon FRP Cable" European Bridge Conference & Exhibition at Structural Faults and Repairs 8th 10th July 2014, Imperial College, University of London, Kensington, London, 8th 10th July 2014, 8p.
- 35. Hatem Seliem, Adel El-Safty, and Sami Rizkalla, (August 2014), "Use Of BFRP Bars as Flexural Reinforcement", CICE 2014 The 7th International Conference on FRP Composites in Civil Engineering, International Institute for FRP in Construction, Vancouver, Canada.
- 36. Benmokrane, B. Ali, A., Mohamed, H.M., ElSafty, A. (2014) "Durability of Tokyo Rope Carbon Cables in Alkaline Environment" CICE 2014, The 7th International Conference on FRP Composites in Civil Engineering, International Institute for FRP in Construction, Vancouver, B.C, Canada, August 20-22, 6p.
- 37. Adel ElSafty and Sam Fallaha, (2013), "Behavior Of Laterally Damaged Bridge Girders Repaired with CFRP Laminates under Fatigue and Static Loading", Transportation Research Board (TRB), Washington DC.
- 38. Ahmed Gamal, Adel ElSafty, Maged Malek, and Gerald Merckel, (December 2012), "Health Monitoring Systems for Infrastructure", Egyptian-American Scientists Association, EASA 2012 Conference.
- 39. Adel ElSafty and Ahmed Abdel Mohti, 2013, "Evaluation Of Bridge Deck Early-Age Cracking", Transportation Research Board (TRB), Washington D.C.
- 40. Adel ElSafty and N. Mike Jackson, 2012, "Full-Scale Flexural and Fatigue Testing Of Laterally Damaged AASHTO Type II Bridge Girders Repaired Using Nonprestressed CFRP Fabric Laminates", The 2012 PCI Convention and National Bridge Conference.
- 41. Adel ElSafty and Matthew K. Graeff, 2012, "Fatigue Testing of Half-Scaled and Full-Scaled AASHTO Type II Bridge Girders Laterally Damaged and Repaired Using CFRP Laminates", The 2012 PCI Convention and National Bridge Conference.
- 42. Adel ElSafty, Ayman Okeil, Samer Attalah, and Juan Rafols, 2012, "The CFRP repair performance in precracked Reinforced concrete Beams", The 2012 PCI Convention and National Bridge Conference.

- A. Abdel-Mohti and A. ElSafty, "A Parametric Study of the Development of Transverse Deck Cracking", in B.H.V. Topping, (Editor), "Proceedings of the Eleventh International Conference on Computational Structures Technology", Civil-Comp Press, Stirlingshire, UK, Paper 157, 2012. doi:10.4203/ccp.99.157
- 44. Fady Barsoum, Adel El Safty, and Lenny Phillip, (2012), Using Finite Element Analysis to Evaluate the Performance of Cracked Bridge Decks, 2012 Structures Congress March 29 -31, 2012 -Chicago, IL.
- 45. A. ElSafty, V. Vargas, N.M. Jackson, F. Barsoum, and A. Abdel-Mohti, (2011), "Investigating the Problem of Transverse Cracking of Bridge Decks", in B.H.V. Topping, Y. Tsompanakis, (Editors), "Proceedings of the Thirteenth International Conference on Civil, Structural and Environmental Engineering Computing", Civil-Comp Press, Stirlingshire, UK, Paper 187, 2011. doi:10.4203/ccp.96.187, <u>http://dx.doi.org/10.4203/ccp.96.187</u>
- 46. Adel ElSafty and Matthew Graeff, (2011), "Investigating the Most Effective CFRP Configuration in Repairing Damaged Concrete Beams Due To Collision", The Thirteenth International Conference on Civil, Structural and Environmental Engineering Computing, CC2011/2011, Crete, Greece.
- 47. Adel ElSafty and Matthew Graeff, (2011), "Optimum CFRP Repair Configuration For Damaged Prestressed Concrete Bridge Beams Due To Vehicle Collision Impact", 2011 PCI Annual Convention and National Bridge Conference, Salt Lake City, Oct 22-26, 2011.
- 48. Adel ElSafty, Matthew Graeff, and Tim Morgan, (April 2010), The Effectiveness Of Repairing Prestressed Concrete Girders With Both Epoxy Injection And Carbon Fiber Reinforced Polymer, 2010 FHWA Bridge Engineering Conference: Highways for LIFE and Accelerated Bridge Construction in Orlando, Florida.
- 49. Adel ElSafty, Matthew Graeff, and Adam Brennan, (April 2010), Repair Of Damaged Steel Beams Composite With Concrete Deck Using Carbon Fiber Reinforced Polymers (CFRP), 2010 FHWA Bridge Engineering Conference: Highways for LIFE and Accelerated Bridge Construction in Orlando, Florida.
- 50. Robert Bennett and Adel El-Safty, "Evaluation and Analysis of the repair of a post-tensioned, precast concrete, segmental bridge", "OPEN PAPERS SESSION", ACI Spring 2010 Convention, Chicago.
- 51. Adel ElSafty, Adam Brennan, Angela Johnson, Brandon Burch, Michael Rivera, Christopher Price, Kaloyan Denev, and Matthew Graeff, (Feb 2010), Repair Of Damaged Concrete Beams Due To Collision Using Carbon Fiber Reinforced Polymers (CFRP), 2010 Concrete Bridge Conference: Achieving Safe, Smart, and Sustainable Bridges (CBC 2010), Arizona.
- 52. Adel ElSafty, Khalid Yousri, and Hosam Seleem, (September 2009), Concrete Repair and Cathodic Protection of Corroded Reinforced Concrete Structure, The 2009 PCI Convention and National Bridge Conference, San Antonio, Texas.
- 53. Adel ELSAFTY, Ayman M. OKEIL, (July 2009), Repair of Pre-Cracked RC Beams Using CFRP Laminates. The 9th International Symposium on Fiber Reinforced Polymer Reinforcement for Concrete Structures (FRPRCS-9), Sydney, Australia.
- 54. Adel ElSafty and Upul Attanayake, (January 2009), The effectiveness of CFRP laminates in strengthening reinforced concrete girders, Transportation Research Board (TRB), Washington DC.
- 55. Adel ElSafty, Russell Coby, Upul Attanayake, and Khalid Yousri, (October 2008), Shear Strengthening of Reinforced Concrete Bridge Girders with FRP Laminates, Precast/Prestressed Concrete Institute Federal Highway Administration, PCI-FHWA National Bridge Conference, Orlando, Florida.
- 56. **A. El-Safty**, (June 2008), Behavior of RC bridge girders strengthened with CFRP laminates, First International Symposium on Life-Cycle Civil Engineering (IALCCE08), Varenna, Italy.
- 57. Adel El-Safty, (June 2008), Behaviour of RC bridge deck slabs and girders strengthened with CFRP laminates, STRUCTURAL FAULTS & REPAIR-2008, Edinburgh, United Kingdom
- 58. Adel El-Safty, (June 2008), Shear strengthening of reinforced concrete beams using CFRP laminates, STRUCTURAL FAULTS & REPAIR-2008, Edinburgh, United Kingdom
- 59. Adel ELSAFTY, Michael Zinszer, and George Morcous, (April 2008), Forensic Investigation of a Bridge Construction Scaffolding Collapse, Crossing Boarders- 2008 Structures Congress, Vancouver, Canada
- 60. Adel ELSAFTY, (April 2008), Extending the Service Life of Bridges Using FRP Repaired Beams and Continuous Decks, Crossing Boarders 2008 STRUCTURES CONGRESS, Vancouver, Canada.
- 61. Adel ElSafty, (September 2007), Retrofit Of Bridge Decks Supported By Steel Girders, The 1st International Conference of European Asian Civil Engineering Forum (EACEF), Indonesia.
- 62. Adel El-Safty and Ayman M. Okeil, (October 2007), EXTENDING THE SERVICE LIFE OF BRIDGES USING CONTINUOUS DECKS, 2007 PCI National Bridge Conference, October 22-24, Phoenix, Arizona
- A. El-Safty, "The Behaviour of Bridges with Jointless Decks Subjected to Time-Dependent Effects", in B.H.V. Topping, G. Montero, R. Montenegro, (Editors), "Proceedings of the Eighth International Conference on Computational Structures Technology", Civil-Comp Press, Stirlingshire, UK, Paper 140, 2006. doi:10.4203/ccp.83.140, <u>http://dx.doi.org/10.4203/ccp.83.140</u>

- 64. **A. El-Safty**, (Sept. 2006), The Behaviour of Bridges with Jointless Decks Subjected to Time-Dependent Effects, CST2006 The 8th International Conference on Computational Structures Technology, Spain.
- 65. Adel K. El-Safty, S. Abdel-Baky, (Oct 24-26, 1998), The Use of a Sealer and a Top Coat to Protect Concrete Against Salt Attack and Influencing Factors, 23rd international conference, our world in concrete & structures, Singapore.
- 66. S. AbdelBaky, Adel K. El-Safty, (Oct 27-29, 1997), Protective Coating for Concrete Against Aggressive Environmental Attack, 5th International Conference, Deterioration and Repair of Reinforced Concrete in the Arabian Gulf, pp 585-594, Bahrain.
- 67. Bahnsawy, H.H., **Adel K. El-Safty**, (Oct 27-29, 1997), Evaluation of the Use of Polyester Resin Grout in Anchoring Steel Bars into Concrete, 5th International Conference, Deterioration and Repair of Reinforced Concrete in the Arabian Gulf, pp 573-584, Bahrain.
- 68. Adel El-Safty, (Dec. 1996), Deterioration of reinforced concrete structures subjected to salts attack, poor workmanship, and aggressive environment, Civil Engineering Department Magazine, Al-Azhar University.
- 69. M.M. Kamal, Adel K. El-Safty, H.H. Shaheen, (June 89), Strengthening Reinforced Concrete Beams in Flexure with Steel Plate. Proceedings, International Conference of Structural Faults & Repair (pp149-156), Edinburgh.
- H. H. Shaheen, A. Abdel Rahman, M. M. Kamal, and Adel K. El-Safty, (March 89), Strengthening Reinforced Concrete Beams in Flexure with Steel Bars, Proceedings 3rd Arab Structural Engineering Conference, pp 527-547, UAE.

OTHER ARTICLES

- 1. Adel ElSafty, "The Effectiveness of Repairing Damaged Prestressed Concrete Girders with CFRP", Engineering the First Coast, Engineers Week 2011, February 2011.
- 2. El-Safty, Adel, The Safety of Bridges in Jacksonville, WJXT Ask The Expert Program, Aug 07.
- 3. El-Safty, Adel, Repair of Concrete Structures, *The Jacksonville Mensa Chapter*, April 2008.

THESIS AND DISSERTATIONS

- 4. **El-Safty, Adel K**., (May 1994), Behavior of Jointless Bridge Decks, Ph.D. Dissertation, Department of Civil Engineering, North Carolina State University, Raleigh, U.S.A.
- 5. **El-Safty, Adel**, (June 1988), Repair and Strengthening of Reinforced Concrete Beams in Flexure, M.Sc. Thesis, Structural Engineering Department, Cairo University, Cairo, Egypt.

PhD EXAMINER & MASTER CHAIR OR COMMITTEE MEMBER: PhD Committee Member & PhD External Examiner:

- 1. PhD Committee Member & Examiner for the *PhD defense* of Doctoral degree Candidate (*Khaled Mohamed*, Dept. of Civil Engineering University of Sherbrooke), *Canada* (August, 2015)
- 2. PhD Committee Member & Examiner for the *PhD defense* of Doctoral degree Candidate (*Bahira Abdul-Salam*, Dept. of Civil Engineering University of Sherbrooke), *Canada* (Feb. 2014)
- 3. PhD Committee Member & Examiner for the *PhD defense* of Doctoral degree Candidate (*Amr EL-NEMR*, Dept. of Civil Engineering University of Sherbrooke) in *Canada* (Jan. 2013)
- 4. External Examiner for a *Predoc Exam/Candidate* Doctoral degree Candidate (*Ahmed Salama*, Civil Engineering University of Sherbrooke) in *Canada* (August 2016)
- 5. External Examiner for a *Predoc Exam/Candidate* Doctoral degree Candidate (*Mohamed Eladawy*, Civil Engineering University of Sherbrooke) in *Canada* (August 2016)
- 6. External Examiner for a *Predoc Exam/Candidate* Doctoral degree Candidate (*Alireza Asadianardakani*, Civil Engineering University of Sherbrooke) in *Canada* (July 2016)
- External Examiner for a *Predoc Exam/Candidate* Doctoral degree Candidate (*Salaheldin Mousa*, Civil Engineering University of Sherbrooke) in *Canada* (March 2016)
- 8. External Examiner for a *Predoc Exam/Candidate* Doctoral degree Candidate (*Fareed Elgabbas*, Civil Engineering University of Sherbrooke) in *Canada* (July 2013)
- 9. External Examiner for senior design projects at the American University in *Cairo* (Dec 2012) <u>MASTER DEGREE ADVISOR & COMMITTEE CHAIR OR MEMBER</u>
- 10. Advisor/Committee Chair for *Andrea Toro*, July 2015, "Experimental and Analytical Investigation of Empirical Deck Design", Master of Science in Civil Engineering, University Of North Florida.
- 11. Advisor/Committee Chair for *George El-Gharib*, April 2014, "Evaluation of the Empirical Deck Design For Vehicular Bridges", Master of Science in Civil Engineering, University Of North Florida.
- 12. Advisor/Committee Chair for *Matthew Graeff*, May 2012, "The Repair Of Laterally Damaged Concrete Bridge Girders Using Carbon Fiber Reinforcing Polymers", Master of Science in Civil Engineering, University Of North Florida
- 13. Advisor/ Committee Chair for Vidal Vargas, May 2012, "Bridge Deck Cracking Investigation And Repair",

Master of Science in Civil Engineering, University Of North Florida

- 14. Advisor/ Committee Chair for *Nick Alteri*, October 2012, "Repair Of Prestressed Concrete Girders With CFRP", Master of Science in Civil Engineering, University Of North Florida
- 15. Advisor/ Committee Chair for *Juan Rafols*, July 2012, "Corrosion of Post-Tensioned Tendons Repaired with Dissimilar Grout", Master of Science in Civil Engineering, University Of North Florida
- 16. Committee member: *Kayte McAfoose*, 2016, "Close Range Photogrammetry for Analysis of Infrastructure Distress", Master of Science in Civil Engineering, University Of North Florida
- 17. External examiner for a *Predoc Exam/Candidate* Doctoral degree Candidate (*Salaheldin Mousa*, Civil Engineering University of Sherbrooke) in *Canada* (March 2016)
- 18. Committee member: *Taylor Maxwell*, August 2012, "Passive gas-liquid separation Using a hydrophobic porous polymer membrane", Master of Science in Mechanical Engineering, University Of North Florida
- 19. Committee member: *Juan Ortega-Rosales*, Feb 2003, I Served in the Committee for the Master degree of the graduate student, topic: The use of Shape Memory Alloy in Civil Engineering, UCF, FL
- 20. Committee member: *Jessica Alkhub*, March 2003, I served in the Committee for the Master degree of the graduate student, topic: Investigation of Pile Length Variability between Design and Construction, UCF, FL *ADVISOR FOR MASTER STUDENTS AT UNF:*
 - a. Andrea Toro finished her Thesis and earned her Master degree in July 2015
 - b. Georges El-Gharib- finished his Thesis and earned his Master in April 2014
 - c. Matthew Graeff finished his Thesis and earned his Master degree in May 2012
 - d. Vidal Vargas finished his Thesis and earned his Master degree in May 2012
 - e. Juan Rafols finished his Thesis and earned his Master degree in July 2012
 - f. Nick Alteri finished his Thesis and earned his Master degree in Dec. 2012
 - g. Malton Prifiti earned his Master degree (course option) in Dec. 2012
 - h. Samer Attallah earned his Master degree (course option) in Dec. 2012
 - i. Kyle Baker earned his Master degree (course option) in 2015

ADVISOR FOR VISITING INTERNATIONAL STUDENTS/SCHOLARS

- 1. Ahmed Gamal, *Malaysia* Universiti Teknologi PETRONAS- (6 months 2012)
- 2. Wang Dawei, *China* Jilin Provincial Communications Scientific Research Institute-(3 months- 2010)
- 3. Onur Yalciner, *Turkey*, Kahramanmaraş Sütçü İmam University, 3 months, 2013
- 4. Jessica Salomao Lourencao, *Brazil*, Institute of International Education, Brazil Scientific Mobility Program, Academic Training (summer 2014)
- 5. Ana Claudia Da Silva, Institute of International Education, *Brazil*, Brazil Scientific Mobility Program, Academic Training (summer 2014)

INVITED SPEAKER

- 1. Lecturer/Guest Speaker, *Cologne University of Applied Science (CUAS)*, *Germany*, (December 2013), "FRP applications and design".
- 2. Speaker, *International Concrete Repair Institute (ICRI)*, (December 2013), "The Testing and Design of BFRP", Jacksonville, Florida.
- 3. Speaker giving a Florida course No. 00071202 to ACI-Florida First Coast Chapter, (January 23, 2014), "Testing and Evaluation of New Basalt FRP Bars", Jacksonville, Florida.
- 4. TV Interview with First Coast news station, (2013), interview on "The Mathews Bridge".
- 5. TV Interview with First Coast news station, (2014), interview on "Deficient Bridges".
- 6. TV Interview with First Coast news station, (April 2012), on "The Concrete Concerns at New Courthouse".
- 7. *Guest Lecturer, AUC- Egypt:* lecture 2012 to AUC graduate students and examiner for graduation project and examiner for master students.
- 8. Presenter, Tokyo Japan, (2013), present test results of FRP experimental testing.
- 9. Speaker for the ACI meeting in Jacksonville, FL (October 2011), Title: Bridge Deck Cracking.
- 10. **Speaker** for the **ACI** meeting in Jacksonville, FL (Feb 2010), Title: Concrete Engineering at UNF An Update of Current Research and Projects.
- 11. **Instructor/Speaker** for the American Society of Highway Engineers "**ASHE**" at FDOT Jacksonville Training facility, May 2011, Course title: The design & Application of CFRP Repair of Bridge Girders.
- 12. Key note speaker at the Florida Prestressed Precast Concrete Association FPCA- (Jan. 2010), Lake Mary, FL.
- 13. Guest speaker PCI-Foundation on Concrete Research and Testing, Chicago, March 2009.
- 14. **Speaker- UNF -** Office of Faculty Enhancement, Making Learning Meaningful: Integrating Community-Based Learning and the Classroom, September 2009
- 15. PCI-Foundation, Students' Involvement in Research and Authentic Learning, Texas, San Antonio, Sept. 2009

- 16. Teaching **ACI** seminars at the Haskell Company on: The Design of New Concrete Structures Reinforced with Fiber Reinforcement Polymer (FRP) Bars and The Design of FRP Strengthening for Reinforced Concrete Structures with FRP Sheets and Laminates, July 2009.
- 17. Guest Speaker to MENSA on The Repair of Corroded Structures with Electrochemical Technique, 2008
- 18. TV Interview-First Coast news station, (April 2012), interview on "The Concrete Concerns at New Courthouse".
- 19. **TV Interview** with First Coast news station WTLV Channel 12, (Feb 12, 2007), interview about the potentially dangerous problems with the Northbank Riverwalk.
- 20. **TV interview**, (Aug. 28, 2007) UNF in the News, Jacksonville Bridge safety: Civil engineering professor Dr. Adel El-Safty discussed a report about the safety of bridges in Jacksonville on WJXT Channel 4. Go to http://www.unf.edu/ia/pr/media_relations/tv_news_coverage/index.html#BridgeSafety
- 21. **Radio interview** on WJCT 89.9 FM, (December 2007), Media questions about the parking garage collapse in Jacksonville, FL, Civil engineering professor Dr. Adel El-Safty discussed with WJCT 89.9 FM radio what may have led to the recent Berkman Plaza parking garage collapse.
- 22. **Speaker** for the **ACI** meeting- (Feb 2006), Title: What's New at U.N.F. Engineering- a Tour of the new Science and Engineering Building and Structures Labs
- 23. **Speaker** –UNF Community-Based-Transformation-Learning opportunity (CBTL) Presentation on Integrating Community-Based Learning and the Classroom
- 24. TV interviews on Mathews Bridge damage, 2013 and concrete Bridge deck damage on I95, January 2014

PROFESSIONAL AFFILIATION, SERVICES & ACTIVITIES:

- *Editor*, International Journal of Advance in Civil Engineering.
- *Advisor* <u>'Prestressed Concrete Institute' (PCI)</u> Big Beam Competition UNF students' teams help students perform the design, theory understanding, calculations, detailing, field trip to the casting site, testing the beam to compete in the national competition. UNF team won the 1st and 2nd place in Southeast region and 6th nationally in 2013, 1st place regionally & 4th nationally in 2012.
- Advisor for Civil Engineering Students' clubs and competitions (3 clubs): ASCE, PCI, and FSEA
 - Advising & leading **2012** <u>*PCI*</u>-Big Beam competition, students won 1st place regionally & 4th nationally.
 - Advising and leading **2013 PCI-Big Beam competition**, students won 1st and 2nd places regionally & 6th nationally.
 - Advisor <u>FSEA</u> Northeast Chapter Student Chapter of structural engineers in Jacksonville.
 - Advisor student chapter <u>ASCE</u> Advising student competition -winning 2 awards in competition in 2013 (2009-13)
- *Member*, UNF-CCEC representative on the UNF International Council, 2010.
- Leader for the <u>Regional Council</u> (Middle East Council) at UNF.
- *Faculty Advisor* for UNF students travelling to <u>*Ghana*</u> for the 1st International Service Project for the School of Engineering in May 2009. Worked with students to build and repair the Tamale Children's Home, install screening to protect children from mosquitoes, improve sanitary conditions to an orphanage, and build new foundation for the drinking water tanks.
- *Co-Leader*, Led an "International Program Development Trip to the Middle East (Morocco, Egypt, and Turkey), leading a group of 10 UNF faculty members from various disciplines on a familiarization tour of Morocco, Egypt, and Turkey.
- *Co-Leader*, Co-leading a group of 18 UNF students to Morocco in March 2014 and Ghana in 2009.
- Member, ACI, ASCE, PCI, SAME, ISIS-Canada, FES
- Associate member of ACI Committee E706 on Repair Applications Procedures.
- Associate member of ACI-ASCE Committee 343, Concrete Bridge Design.
- Chair: Coordinator/Chair: Statewide Course Numbering System (Florida), 2005-2014.
- *Reviewer* for the Transportation Research Board 'TRB', ASCE, Structural Journal, ACI, Elsevier 'Engineering Structures'
- Member, Chi Epsilon, National Civil Engineering Honor Society, USA
- *Instructor* for PE Review sessions through FES & ASCE,
- **OSHA Authorized Construction Trainer** for 10 and 30 hours construction courses.
- Member in Quality Enhancement Plan (OEP) Development Team at UNF.
- Member: The University Selection Committee for Outstanding Undergraduate Teaching Awards
- Member: The College Screening Committee for the Outstanding Undergraduate Teaching Award
- Member: Outstanding Undergraduate Teaching Committee
- Advisor for students' research in structures: <u>http://www.unf.edu/TwoWings.aspx?id=15032389746</u>
- *Guest* to TV and radio interviews and outreach activities:

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o http://stream.unf.edu:8080/ramgen/MediaRelations/inthenews/BridgeSafety.rm