Adel ElSafty, PhD, PE, P.Eng., MBA

Distinguished Professor (Fulbright US Scholar & Fulbright Specialist) 2023-Distinguished Educator - PCI

University of North Florida,

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RESEARCH INTERESTS

Bridge Engineering, Prestressed Concrete, Fiber Reinforced Polymers, Structural Rehabilitation/Strengthening

EDUCATION AND PROFESSIONAL REGISTRATION

- > Ph.D., Civil Engineering, North Carolina State University (NCSU), Raleigh, NC
- ➤ MBA, University of North Florida (UNF)
- > M.S. in Structural Engineering, Cairo University, Cairo, Egypt
- > **B.S.** in Civil Engineering, *Cairo University*, Cairo, Egypt
- > 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- and 30-hours construction courses
- ➤ *ABET* Program Evaluator (*PEV*)
- > Certified *Online Instructor and Course Developer* (UNF)

ACADEMIC & PROFESSIONAL EXPERIENCE

- ➤ Professor, 2014-now & 2018-UNF Distinguished Professor
- > Coordinator, Civil Engineering Program, University of North Florida (UNF), 2021-2022
- ➤ *Professor*, *Associate Professor* & *Assistant Professor*, 2005-now. Helped advancing the undergraduate program and establishing the civil engineering graduate program.
- > Chair of the "Academic Council" for the "Precast/Prestressed Concrete Institute (PCI)-Foundation" and a member of its "Board of Trustees". 2018-now
- ➤ Recipient of "2023-Distinguished Educator" & "2015-Educator of The Year" national awards by "Precast/Prestressed Concrete Institute" PCI.
- Founding faculty of the Civil Engineering Department at Florida State Univ., Panama City campus (2003-2005).
- Extensive teaching & research experiences at several universities, 1985-now [Cairo University (Master 1985-1988), North Carolina State University (PhD & postdoctoral research 1990-1994), Sherbrooke University-Canada (postdoctoral research 1999-2000 & Fulbright Specialist 2017), University of Central Florida (Visiting faculty 2002-2003), Florida State University, FSU-PC (founding faculty 2003-2005), United Arab Emirates University (Fulbright US Scholar 2015-2016), and University of North Florida "UNF" (Professor 2005-now)].
- Industrial experience as a *Structural Engineer* at the Bridge design firm (Lochner) in Florida (2000-2003) and a *Specifications Manager* at the British Construction Chemical Company, Fosroc Burmah Castrol (1996-1999).
- Licensed Professional Engineer "PE" in Florida and "P.Eng." in Ontario, Canada.
- Fulbright U.S. Scholar, UAE, (2015-2016)
- Fulbright Specialist, Canada, (2017)
- Recipient of national, local, and state awards in teaching, research, leadership, and services.
- > Secured more than \$2.6 million project funds (PI & Co-PI) and led several research teams of faculty from 8 universities (LSU, NCSU, Drexel, FSU, Sherbrooke, Northern Ohio, Embry Riddle & UNF), 2005-now
- Published a textbook, technical reports, book chapters and more than 104 journal and conference papers.
- Awarded *PCI-Foundation* national grant to establish the *1st Engineering Design Studio in the US* (2009-2015).
- ➤ Partner (not PI or Co-PI) with *LTRC & LSU* on an NSF project, 2017-2019.
- Led student teams to win regional and national competitions, 2005-now
- Led student groups on *Study-Abroad* to Ghana, Morocco, Italy, and Germany.
- Led faculty groups on *international academic visits* to Turkey, Morocco & Egypt to establish and maintain research initiatives & exchange programs, 2013
- ➤ Guest lecturer at Technische Hochschule Köln (THK), Cologne, Germany. I initiated collaboration in Japan and Italy to establish joint research & exchange program, 2016, 2017, and 2019.
- > ABET Program Evaluator (PEV).

COURSES TAUGHT: *Graduate Courses*

CES 5105 & CIS 6900	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 / EML 6933	Finite Element / Finite Element Analysis for ME	UNF

COURSES TAUGHT: Undergraduate 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
CGN 4990	Restoration of Historic Structures (experiential & service learning)	UNF with Italy
CGN 4931	Special Topics in Civil Engineering: Repair of Structures	UNF
CES 3100	Structural Analysis	UNF & FSU
CGN3930	Junior Design Structures	UNF
EGN 3331/ CES 3104	Strength/Mechanics of Materials & lab	UNF, UCF, FSU
EGN3311/EGM 3512	Statics/Eng Mechanics (Statics & Dynamics)	UNF, UCF, FSU
CGN 3501c	Civil Engineering Materials	UNF
CGN 4931	Special Topics: Repair of Structures	UNF
CGN4800 & CGN4802	Pre-Senior Design & Professional Issues & Senior Design Project	FSU

FUNDED RESEARCH

External Funds (~ \$2.6 million)

- 1. PI, Florida Department of Transportation (FDOT), "Evaluation of Retroreflective Sign Sheeting Materials by Accelerated Laboratory Weathering", \$248,893, (8/2023-1/2025).
- 2. PI, Florida Department of Transportation (FDOT), "Instrumentation and Monitoring of FRP bars in Bridge Deck Link-Slab for FPID:435390-1-52-01", BVD 34-986-02, \$14,592, (1/2019-9/2021), completed
- 3. PI, Florida Department of Transportation (FDOT), "Bridge Deck with Link Slab for FPID: 435390-1-52-01: US 41 from Midway Blvd to Enterprise", BVD 34-986-02, \$20,000, (01/2019 09/2021), completed
- 4. PI, Florida Department of Transportation (FDOT), "Bridge Deck with Link Slab for FPID: 435390-1-52-01: US 41 from Midway Blvd to Enterprise"- instrumentation of bridge link slab, BVD 34-986-01, \$7,068, (01/2019 09/2021), completed
- 5. PI, Florida Department of Transportation (FDOT), "Accelerated Weathering of Traffic Control Materials by Laboratory Testing", BE717, \$80,000, (02/27/2019 02/27/2020), completed
- 6. 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), completed.
- 7. PI, Florida Department of Transportation, "Degradation mechanisms and service life estimation of fiber reinforced polymer (FRP) concrete reinforcements", BDV34 TWO 977-02, \$396,510, (2015-2018).
- 8. 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), completed.
- 9. Co-PI, Florida Department of Transportation (FDOT), "Reinforced Concrete Foundation Remote Monitoring", \$107,113, (2016-2018), completed.
- 10. PI, Florida Department of Transportation (FDOT), "Empirical Deck for Phased Construction and Widening", FDOT BDV34 TWO 977-01, \$175,000, (March 2013 April 2017), completed.
- 11. 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
- 12. PI, International Concrete Repair Institute (ICRI), "Concrete Repair Research", \$2,000 & \$1,500 (2014, 15).
- 13. PI, Precast/Prestressed Concrete (PCI)-Foundation Grant, "Engineering Professor Design Studio", \$125,000 (August 2009 March 2015), completed.
- 14. 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.
- 15. 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.

- 16. 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.
- 17. 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.
- 18. PI *PCI Project PCI Student Design Award Competition -* PCI Big Beam Contest. Award \$100 in 2008 and Award \$750 in 2009, completed.
- 19. PI *Industry* Research *Project* "Condition Assessment of Defected Drilled Shafts"- Saliba Engineering, \$500 (2009), completed.
- 20. PI, *Industrial Firm Sponsor*, CFRP Materials Donated for Research on *Concrete Repair*, Air Logistics Corporation, FACSTM Group Azusa, CA, \$1,944, completed.
- 21. PI, *Industrial Firm Sponsor*, Research Materials Donated for *Concrete Beam Research*, Fyfe Co. LLC, California, USA, \$600, completed.

Internal Funds

- 22. Co-PI, UNF- *Leveraging the local: quantifying and communicating wetland climate resilience at UNF*, \$10,000, UNF Institute of Environmental Research and Education, (2023)
- 23. Co-PI, UNF "Development of a Network Model to Identify the Relationship between Deflection, Cracking, and Vibration of a Concrete Girder under Fatigue Loading.", Undergraduate Research, \$4,042, (2023)
- 24. PI, UNF Recipient of: *Academic Affairs faculty Development Research Grant*, \$7,500, (Summer 2012)
- 25. PI, UNF-TLO, UNF Collaboration with Engineering Firms, \$10,700, (2010)
- 26. PI, UNF, How Does Teaching Structural Failures & Repair Enhance Students' Authentic Learning Experience? \$7,500, (Summer 2010)
- 27. Sando, T and El-Safty, A. "Mass Transit Field Study: Washington, D.C. Subway System." Funded by the UNF Academic Affairs, "Transformational Learning Opportunity" Program. July 2009 to June 2010. \$9,000.
- 28. PI, UNF (Summer 2009), Undergraduate Research/Scholarship Grant funding for research projects on: *Flexural Strengthening of Damaged Concrete Beams*, \$500
- 29. 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
- 30. Co-PI, UNF (2009). TLO on: United States Transit Field Study, \$9000
- 31. 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
- 32. PI (2006-2008), Foundation Board Repair of Bridges through Elimination of deck joints, \$10,000
- 33. 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
- 34. 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
- 35. PI, UNF: Course Redesign for Effective Learning (CREL) (2007), Office of Faculty Enhancement, \$1000
- 36. PI, UNF (SoE) (2006), Laboratory Improvements for Brittle Material Characterization, \$8,715.63

AWARDS

SELECTED AWARDS:

- ✓ National Award: "*The 2023 Distinguished Educator Award*", Precast/Prestressed Concrete Institute PCI
- ✓ National Award: "The Educator Of The Year Award"-Precast/Prestressed Concrete Institute PCI (2015)
- ✓ National Award: "Fulbright U.S. Scholar", (2015-2016)
- ✓ National Award: "Fulbright Specialist", (2013-2018)
- ✓ *Chair* of the "*Academic Council*"-"Prestressed Concrete Institute-Foundation" & *Board of Trustees* member.
- ✓ National: "PCI-Foundation" award to establish the 1st US "Engineering Professor Design Studio"
- ✓ UNF: "Distinguished Professor Award", (2018)
- ✓ *Peer Reviewer for Fulbright Specialist/Scholar* (Engineering Education) Program
- ✓ Fulbright Alumni Resource for Pre-Departure Orientation in Washington DC
- ✓ *Phi Kappa Phi* member

RESEARCH AWARDS

- 1. National Award: "The 2023 Distinguished Educator Award", PCI (2023)
- 2. National Award: "The Educator Of The Year Award" PCI (2015)
- 3. National Award: "Fulbright U.S. Scholar" Grant (2015-2016), United Arab Emirates University (UAEU)
- 4. National Award: "Fulbright Specialist", (2018), Canada

- 5. National Research & Teaching Award: "<u>Precast/Prestressed Concrete Foundation Award</u>" to establish the 1st "Engineering Professor Design Studio" in the US (2009-2015)
- 6. International Award: <u>International Scholarship and Journal Paper Award</u>, International Journal of Concrete Structures and Materials (IJCSM) award for journal publication (March 2013)
- 7. UNF: "Distinguished Professor Award", (2018)
- 8. UNF Platinum STARS (PI obtaining funding of \$1 million or more in contracts/grants over the past ten years)
- 9. UNF Prestigious Fellowship Award: To recognize faculty who was on a prestigious fellowship, as defined by the National Research Council.
- 10. UNF: "UNF Award of Research Excellence" (2013-14 Office of Research & Sponsored Programs)
- 11. UNF Award: "Principal Investigator with 5 Years of Continuous Funding" Award, (2014)
- 12. UNF Award: "Outstanding Faculty Scholarship Award", UNF (2013)
- 13. UNF Award: "University Researcher of the Month" Award, UNF (2012)

TEACHING AWARDS

- 14. National Award: "The 2023 Distinguished Educator Award", PCI (2023)
- 15. National Award: "The 2015 Educator Of The Year Award", PCI, (2015)
- 16. National Award: "Fulbright Specialist" Candidate (2013-2018) in Engineering Education.
- 17. 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)
- 18. State Award: "Florida Prestressed Concrete Association (FPCA) Education Foundation Award": FPCA Recognition for Outstanding Achievement, Big beam 2012 award, (1st place-Southeast region)
- 19. State Award: "FPCA Education Foundation Award": FPCA Recognition for Outstanding Achievement Big beam 2010 award (2nd place in Southeast region), \$1,000
- 20. UNF: "Distinguished Professor Award", (2018)
- 21. UNF Certified Online Instructor and Course Developer
- 22. UNF Award: "Outstanding Undergraduate Teaching Award" (2010)
- 23. 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.
- 24. Academic Award: Cairo University honor student (undergraduate student award)

SERVICE AWARDS

- 25. "<u>National Team Advisor Award</u>": Precast/Prestressed Concrete Institute "<u>Award for Excellence</u>", (2012 & 2013) Advisor *National Champion of Big Beam Engineering Design Competition*, 1st and 2nd places in Southeast region and 6th place nationally (2013) & 1st place Regionally & 4th place nationally (2012)
- 26. National: "PCI Award for Excellence", Advisor National Champion of Big Beam Engineering Design Competition, Second Place in South-East region (2010)
- 27. 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)
- 28. UNF Leadership Award: "Outstanding International Leadership Award" (2013)
- 29. UNF Award: "UNF Disability Resource Center Professor Empowerment Award" (2012)
- 30. UNF *Faculty Advisor*: 1st International TLO Service Project for Eng. students to Ghana (2009)
- 31. UNF Co-Leader: "International Program Development" leading 10 faculty in the Middle East (2012)

PUBLICATIONS

TECHNICAL/RESEARCH REPORTS, BOOKS, OR BOOK CHAPTERS

- 1. **Adel ElSafty**, James Fletcher, Thomas Fowler, and Dylan Jones. (*September 2021*), "*Bridge Deck with Link Slab for FPID: 435390-1-52-01: US 41 from Midway Blvd to Enterprise*", Florida Department of Transportation (*FDOT*), BVD 34-986-02, State Research Office, Tallahassee, FL.
- 2. Sara Boudali, Bahira Abdulsalam, Ahmed Soliman, Sébastien Poncet, Stephan Godbout, Johann Palacios, and Adel ElSafty. (December 2021) "Implementation of agricultural crop wastes toward green construction materials", Book Chapter, ELSEVIER: Handbook of Sustainable Concrete and Industrial Waste Management. Recycled and Artificial Aggregate, Innovative Eco-friendly Binders, and Life Cycle Assessment, Publisher: (Woodhead Publishing Series in Civil and Structural Engineering), 1st Edition, Editors: Francesco Colangelo, Raffaele Cioffi, Ilenia Farina, Paperback ISBN: 9780128217306
- 3. Adel ElSafty, (2017), STATICS: AN INTERACTIVE WORKBOOK, Kendall Hunt Publishing.
- 4. **Adel ElSafty** and Grace Hsuan, (Feb 2020), "Accelerated Weathering of Traffic Control Materials by Laboratory Testing", FDOT Research Report BE717, State Research Office, Tallahassee, FL.
- 5. **Adel ElSafty** and Grace Hsuan, (May 2018), "Testing, Evaluation, and Specification for Polymeric Materials Used for Transportation Infrastructures", FDOT Research Report BDV34-977-02, Tallahassee, FL.

- 6. **Adel ElSafty** et al., (2018), "Degradation mechanisms and service life estimation of fiber reinforced polymer (FRP) concrete reinforcements", FDOT Research Report BDV34 TWO 977-02, Tallahassee, FL.
- 7. **Adel ElSafty**, K. Tawfiq, A. Okeil, (April 2017), "Empirical Deck for Phased Construction and Widening", Technical Report, FDOT Contract No. BDV34 TWO 977-01, FDOT, State Research Office, Tallahassee, FL.
- 8. **Crowley, R.**, Brown, C. ElSafty, A., and Fuller, J.* (2016). Analysis, comparison, and contrast of two primary maintenance contracting techniques used by the Florida Department of Transportation. *Final Report No. BDV34-977-04*, Florida Department of Transportation, Tallahassee, FL.
- 9. **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.
- 10. **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.
- 11. **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, Tallahassee, FL.
- 12. 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.
- 13. 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. Ahmed Elbady, Salaheldin Mousa, Hamdy M. Mohamed, **Adel ElSafty**, and Brahim Benmokrane, (2023), "Concave performance evaluation of GFRP-reinforced precast concrete tunnel lining segments". *Journal of Tunnelling and Underground Space Technology incorporating Trenchless Technology Research*, under review
- 2. Khanh Q. Nguyen, Khaled Mohamed, Patrice Cousin, Mathieu Robert, **Adel El-Safty**, and Brahim Benmokrane, (2023) "Stress Crack Resistance and Life Prediction of Corrugated Recycled and Virgin HDPE Pipes Used in Road Drainage Systems: A Case Study in Quebec, Canada", *Journal of Materials in Civil Engineering, American Society of Civil Engineers (ASCE), doi: 10.1061/(ASCE)MT.1943-5533.0004522*.
- 3. Shehab Mehany, Hamdy M. Mohamed, **Adel El-Safty**, and Brahim Benmokrane, (2022), "Bond-Dependent Coefficient and Cracking Behavior of Lightweight Self-Consolidating Concrete (LWSCC) Beams Reinforced with Glass- and Basalt-FRP Bars", *Journal of Construction and Building Materials*, Volume 329, 25 April 2022, 127130,https://doi.org/10.1016/j.conbuildmat.2022.127130,https://www.sciencedirect.com/science/article/pii/S0 95006182200811X.
- 4. Khanh Q. Nguyen; Mathieu Robert; Patrice Cousin; Khaled Mohamed; **Adel El-Safty**; Brahim Benmokrane, (2022), "Effects of Ultraviolet Radiation on Recycled and Virgin HDPE Corrugated Pipes Used in Road Drainage Systems", Journal of Polymers and the Environment, volume 30, pages3391–3408 (2022), https://doi.org/10.1007/s10924-022-02437-x, https://doi.org/10.21203/rs.3.rs-978155/v1.
- 5. Mathieu Robert, Khanh Q. Nguyen, Patrice Cousin, Khaled Mohamed, **Adel El-Safty**, and Brahim Benmokrane, (2021), "Polymer Degradation and Stability Effects of Ultraviolet Radiation on Recycled and Virgin HDPE Corrugated Pipes Used in Road Drainage Systems", *Journal of Polymer Degradation and Stability*, DOI:10.21203/rs.3.rs-978155/v1
- 6. Brahim Benmokrane, Hamdy M. Mohamed, Salaheldin Mousa, **Adel ElSafty**, and Steven Nolan, (2021), "Design, Construction, Testing, and Behavior of Driven Precast Concrete Piles Reinforced with GFRP Bars and Spirals", *Journal of Bridge Engineering*, August 2021 | Volume 26, Issue 8.
- 7. Ahmed E. Salama, Brahim Benmokrane, and **Adel El-Safty**, (2021), "Extended Strut-and-Tie Model for Punching-Shear Strength of FRP-RC Edge—Slab Column Connections", *ACI Structural/Materials Journal*.
- 8. Boudali, Sara; Abdulsalam, Bahira; Rafiean, Amir H.; Poncet, Sébastien; Soliman, Ahmed; **ElSafty, Adel**. 2021. "Influence of Fine Recycled Concrete Powder on the Compressive Strength of Self-Compacting Concrete (SCC) Using Artificial Neural Network", *Sustainability* 13, no. 6: 3111. https://doi.org/10.3390/su13063111
- 9. Abdulsalam, B., Ali, A., **ElSafty, A.** and Elshafey, N., 2021. "Behavior of GFRP strengthening masonry walls using glass fiber composite anchors". *Structures Journal*, Vol. 29, pp.1352-1361.
- 10. **Adel ElSafty**, Ayman M. Okeil, Krickstein Torres, Kamal Tawfiq, and Sam Fallaha, (2020), "Investigation of Empirical Deck Design in Bridge Widening", *Journal of Bridge Engineering*, DOI: 10.1061/(ASCE)BE.1943-5592.0001617.
- 11. Omar Khalafalla, Mohammad Pour-Ghaz; **Adel ElSafty**; and Sami Rizkalla, (2019). "Durability of CFRP Strands Used for Prestressing of Concrete Structural Members Corresponding", Journal of Construction & Building Materials, *Journal of Construction and Building Materials*

- 12. Ahmed H. Ali, Hamdy M. Mohamed, Brahim Benmokrane, and **Adel ElSafty**. (2019). "Theory-based approaches and microstructural analysis to evaluate the service life-retention of stressed carbon fiber composite strands for concrete bridge applications", *Elsevier Journal of Composites Part B: Engineering*, Volume 165, 15 May 2019, Pages 279-292
- 13. Ahmed H. Ali, Hamdy M. Mohamed, Brahim Benmokrane, **Adel ElSafty**, and Omar Chaallala. (August 2018). "Durability performance and long-term prediction models of sand-coated basalt FRP bars", *Elsevier Journal of Composites Part B: Engineering*, (2018), https://doi.org/10.1016/j.compositesb.2018.08.065
- 14. Ahmed H Ali, Hamdy M Mohamed, Brahim Benmokrane, and **Adel ElSafty**. (July 2018). "Effect of applied sustained load and severe environments on durability performance of carbon-fiber composite cables", Journal of Composite Materials, ELSEVIER, https://doi.org/10.1177/0021998318789742
- 15. Siavash Vahidi, Grace Hsuan, and **Adel ElSafty**, (2020), "Predicting the depletion of antioxidants in high density polyethylene (HDPE) under sunlight using the reciprocity law", *Geotextiles and Geomembranes*, Vol. 48, pp. 170–175, https://doi.org/10.1016/j.geotexmem.2019.11.009.
- 16. Sukjoon Nathe, Siavash Vahidi, Hieu Nguyen, **Adel ElSafty**, and Grace Hsuan, (2018), "SUNLIGHT DEGRADATION OF POLYMERIC DETECTABLE WARNING SURFACE (DWS) PRODUCTS" The Transportation Research Record (TRR), Journal of the Transportation Research Board.
- 17. Amr El-Nemr, Ehab A. Ahmed, **Adel El-Safty**, and Brahim Benmokrane, (June 2018), "Evaluation of the flexural strength and serviceability of concrete beams reinforced with different types of GFRP bars", *Journal of Engineering Structures*, 173 (2018) 606–619
- 18. Ahmed H Ali, Brahim Benmokrane, Hamdy M Mohamed, Allan Manalo, and **Adel El-Safty**. (Feb. 2018). "Statistical Analysis and Theoretical Predictions of the Tensile Strength Retention of GFRP Bars based on Resin Type." Journal of Composite Materials, https://doi.org/10.1177/0021998318755866.
- 19. Benmokrane B, Ali AH, Mohamed HM, **ElSafty A**, Manalo A, (February 2017), "Laboratory assessment and durability performance of vinyl-ester, polyester, and epoxy glass-FRP bars for concrete structures", *Elsevier Journal of Composites Part B: Engineering, Composites Part B* (2017), doi: 10.1016/j.compositesb.2017.02.002.
- 20. Amr El-Nemr, Ehab A. Ahmed, **Adel El-Safty**, and Brahim Benmokrane, (2017), "Experimental Testing of Concrete Beams Reinforced with GFRP Bars of Different Grades and Surface Configurations", *Elsevier Journal of Composites Part B: Engineering*, (under review)
- 21. Aiyin Jiang, Yimin Zhu, **Adel ElSafty**, and Mark Tumeo, (2017), "Effects of Global Climate Change on Building Energy Consumption and Its Implications in Florida", *International Journal of Construction and Research*, Volume 14, 2018 Issue 1: Education for Sustainable Development in the Built Environment
- 22. **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
- 23. 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.
- 24. Benmokrane, B., Ali, A., Mohamed, H., Robert, M., and **ElSafty, A.**, (Feb. 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, Vol 20, Issue 1.
- 25. 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.
- 26. **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
- 27. **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.
- 28. **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.
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- 32. **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, Issue 1, pp 79-93, https://doi.org/10.1007/s40069-013-0034-3
- 33. **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.
- 34. **Adel ElSafty,** (April 2013), "BRIDGE PRESERVATION: Getting clearance", *Roads & Bridges magazine*, http://www.roadsbridges.com/archive?issue=April%202013
- 35. 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.
- 36. **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.
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- 39. 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/
- 40. 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.
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- 42. **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.
- 43. **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. http://www.ctresources.info/ccp/paper.html?id=3920, Civil-Comp Proceedings ISSN 1759-3433
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- 46. B. Zhang, B. Benmokrane, A. Chennouf, P. Mukhopadhyaya, and **A. El-Safty**, (May 2001), Tensile Behavior of Grouted FRP Tendons for Prestressed Ground Anchors, *ASCE Journal of Composites for Construction*, American Society of Civil Engineering, pp 85-93.

REFEREED CONFERENCE PROCEEDINGS

- 47. **Adel ElSafty**, Ayman Okeil, James Fletcher, Thomas Fowler, Dylan Jones, and Steven Nolan, (July 2023), "Instrumentation and Strain Monitoring of BFRP Bars in Pedestrian Bridge Deck Link-Slab", EURODYN2023 XII International Conference on Structural Dynamics, Delft, The Netherlands.
- 48. Brahim Benmokrane, Hamdy M. Mohamed, **Adel ElSafty**, and Steven Nolan, (September 2019), "FIELD DYNAMIC LOAD TEST OF BRIDGE PRECAST CONCRETE PILES REINFORCED WITH GFRP BARS", PROTECT 2019, 7th International Colloquium on Performance, Protection and Strengthening of Structures Under Extreme Loading and Events, Whistler, BC, Canada, September 16-17, 2019

- 49. S. Boudali, A.M. Soliman, B. Abdulsalam, S. Poncet, and Adel El Safty, (2019), "Sulfate Attack and Microstructural Study of Self-Compacting Concrete Incorporating Recycled Concrete with Various Sizes", *Journal of Sustainable Cement-Based Materials*, 2019
- 50. Brian Kopp, Juan Aceros, Ryan Campiz, and **Adel ElSafty**, (April 2019), "Experiments for Reinforced Concrete Foundation Remote Monitoring", IEEE SoutheastCon 2019, Huntsville, Alabama
- 51. Ahmed H. Ali, Hamdy, M. Mohamed, Brahim Benmokrane, and **Adel Elsafty**, (July 2018), "Combined Effect of Sustained Load, Corrosive Solutions, and Elevated Temperature on the Durability and Long-Term Performance Of CFCC Tendons", The 26th annual International Conference on Composites or Nano Engineering, ICCE-26 July 15-21, 2018, Paris, France.
- 52. Ahmed H. Ali, Hamdy, M. Mohamed, Brahim Benmokrane, and **Adel Elsafty**, (July 2018), "Experimental Investigation on the Effects of Alkaline Solution, Temperature, and Resin Type on Tensile Strength of GFRP Bars", The 26th annual International Conference on Composites or Nano Engineering, ICCE-26 July 15-21, 2018, Paris, France.
- 53. Brahim Benmokrane, Hamdy M. Mohamed, **Adel Elsafty**, and Steven Nolan. (2018). "Field Driving Tests of Precast Concrete Piles Reinforced With Glass FRP Bars and Ties", The International Federation for Structural Concrete 5th International FIB Congress 2018, Melbourne, Australia.
- 54. Siavash Vahidi, Grace Hsuan, and **Adel ElSafty**, (September 2018), "Predicting the depletion of antioxidants in high density polyethylene (HDPE) under sunlight using the reciprocity law", 11th International Geosynthetic Conference at Soul, Korea.
- 55. Omar Khalafalla, Sami Rizkalla, Mohammad Pour-Ghaz, and **Adel ElSafty**. (2018). "Behavior Of CFRP Strands Exposed To Severe Environmental Conditions", CICE 2018 conference, The 9th International Conference on Fibre-Reinforced Polymer (FRP) Composites in Civil Engineering (CICE 2018), 17-19 July 2018, Paris, France.
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- 57. Na, Vahidi, Nguyen, **ElSafty**, and Hsuan, (January 2018), "Sunlight Degradation Of Polymeric Detectable Warning Surface (DWS) Products", Transportation Research Board (TRB), Washington DC.
- 58. O. Khalafalla, M. Pour-Ghaz, A. ElSafty, S. Rizkalla. (2017). "Durability of Carbon Fiber Reinforced Polymer Strands for Pre-Stressing of Concrete Members", 5th International Conference on Durability & Sustainability of Fibre Reinforced Polymer (FRP) Composites for Construction & Rehabilitation of Structures (CDCC 2017), July 19-21, 2017, Sherbrooke (Quebec), Canada.
- 59. B. Benmokrane., A. H. Ali, H. M. Mohamed, and **A. ElSafty**. (2017). "Durability and Long-Term Design Tensile Properties of Tokyo Rope CFCC under Stress and Alkaline Environment." 5th International Conference on Durability & Sustainability of Fibre Reinforced Polymer (FRP) Composites for Construction & Rehabilitation of Structures (CDCC 2017), 19-21th July, 2017, Delta Hotel, Sherbrooke (Quebec), Canada.
- 60. A. H. Ali, H. M. Mohamed, **A. ElSafty**, and B. Benmokrane. (2017). "Influence of Resin Type on Physical, Mechanical and Durability Performance of Glass-FRP Bars." 5th International Conference on Durability & Sustainability of Fibre Reinforced Polymer (FRP) Composites for Construction & Rehabilitation of Structures (CDCC 2017), July 19-21, 2017, Sherbrooke (Quebec), Canada.
- 61. A. H. Ali, P. Cousin, H. M. Mohamed, **A., ElSafty**, and B. Benmokrane. (2017). "Durability Study of Solid And Hollow Glass FRP Reinforcing Bars Exposed to Marine Environment and Elevated Temperature." 5th International Conference on Durability & Sustainability of Fibre Reinforced Polymer (FRP) Composites for Construction & Rehabilitation of Structures (CDCC 2017), July 19-21, 2017, Sherbrooke (Quebec), Canada.
- 62. M. Hassan, **A. ElSafty**, and B. Benmokrane. (2017). "Bond Durability and Service Life Prediction of Basalt-FRP Bars Embedded in Concrete under Alkaline Environment." 5th International Conference on Durability & Sustainability of Fibre Reinforced Polymer (FRP) Composites for Construction & Rehabilitation of Structures (CDCC 2017), July 19-21, 2017, Sherbrooke (Quebec), Canada.
- 63. **Adel ElSafty**, Andrea Toro, Ayman Okeil, and James Fletcher, (Jan 2017), "Effect of Lateral Stiffness of Wide-flanged Prestressed Concrete Beams on Arching Action in Bridge Decks", Transportation Research Board (TRB), Washington DC.
- 64. 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

- 65. 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.
- 66. 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.
- 67. 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.
- 68. 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.
- 69. 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.
- 70. 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.
- 71. 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.
- 72. **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.
- 73. Ahmed Gamal, **Adel ElSafty**, Maged Malek, and Gerald Merckel, (December 2012), "Health Monitoring Systems for Infrastructure", Egyptian-American Scientists Association, EASA 2012 Conference.
- 74. **Adel ElSafty** and Ahmed Abdel Mohti, 2013, "Evaluation Of Bridge Deck Early-Age Cracking", Transportation Research Board (TRB), Washington D.C.
- 75. **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.
- 76. **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.
- 77. **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.
- 78. 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
- 79. 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.
- 80. **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, http://dx.doi.org/10.4203/ccp.96.187
- 81. **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.
- 82. **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.
- 83. **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.
- 84. **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.

- 85. 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.
- 86. **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.
- 87. **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.
- 88. **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.
- 89. **Adel ElSafty** and Upul Attanayake, (January 2009), The effectiveness of CFRP laminates in strengthening reinforced concrete girders, Transportation Research Board (TRB), Washington DC.
- 90. **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.
- 91. **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.
- 92. **Adel El-Safty**, (June 2008), Behaviour of RC bridge deck slabs and girders strengthened with CFRP laminates, STRUCTURAL FAULTS & REPAIR-2008, Edinburgh, United Kingdom
- 93. **Adel El-Safty**, (June 2008), Shear strengthening of reinforced concrete beams using CFRP laminates, STRUCTURAL FAULTS & REPAIR-2008, Edinburgh, United Kingdom
- 94. **Adel ELSAFTY**, Michael Zinszer, and George Morcous, (April 2008), Forensic Investigation of a Bridge Construction Scaffolding Collapse, Crossing Boarders- 2008 Structures Congress, Vancouver, Canada
- 95. **Adel ELSAFTY,** (April 2008), Extending the Service Life of Bridges Using FRP Repaired Beams and Continuous Decks, Crossing Boarders 2008 STRUCTURES CONGRESS, Vancouver, Canada.
- 96. **Adel ElSafty**, (September 2007), Retrofit Of Bridge Decks Supported By Steel Girders, The 1st International Conference of European Asian Civil Engineering Forum (EACEF), Indonesia.
- 97. **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
- 98. 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, http://dx.doi.org/10.4203/ccp.83.140
- 99. **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.
- 100. **Adel El-Safty**, S. Abdel-Baky, (Oct. 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.
- 101. 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.
- 102. 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.
- 103. **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.
- 104. 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.
- 105. 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.

PhD EXAMINER & MASTER CHAIR OR COMMITTEE MEMBER

- PhD Committee Member & PhD External Examiner for more than 20 PhD candidates (Canada)
- Advisor & Committee Chair or Member for Master's degree for 15 graduate students (UNF-Florida)

Advisor for Visiting International Students/Scholars (Malaysia, China, Turkey, Brazil & Egypt)

INVITED SPEAKER

- International Guest Lecturer/Speaker
 - Invited Lecturer/Guest Speaker, Technische Hochschule Köln (THK), Cologne, Germany (December 2013), "FRP applications and design".
 - o *Guest Lecturer*, *AUC- Egypt:* lecture 2012 to AUC graduate students and examiner for graduation project and examiner for master students.
 - O Presenter, Tokyo Japan, 2013, presented test results of FRP experiments.

• Guest Lecturer/Speaker

- Invited Speaker to 2018 TRB Conference Workshop of Corrosion-Resistant Prestressing Strands of Carbon Fiber–Reinforced Polymer and Stainless Steel in Highway Structures, "Testing & Structural Performance of CFRP Prestressed Concrete Beams After Aging/Conditioning For 12 Months (P18-21964)".
- Speaker, International Concrete Repair Institute (ICRI), (Dec 2013), "The Testing and Design of BFRP", Jacksonville, Florida.
- 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.
- Speaker for the ACI meeting in Jacksonville, FL (October 2011), Title: Bridge Deck Cracking.
- Speaker for the ACI meeting in Jacksonville, FL (Feb 2010), Title: Concrete Engineering at UNF An Update of Current Research and Projects.
- o **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.
- Keynote speaker at the Florida Prestressed Precast Concrete Association FPCA- (Jan. 2010), Lake Mary, FL.
- o Guest speaker PCI-Foundation on Concrete Research and Testing, Chicago, March 2009.
- Speaker- UNF Office of Faculty Enhancement, Making Learning Meaningful: Integrating Community-Based Learning and the Classroom, September 2009.
- o PCI-Foundation, Students' Involvement in Research & Authentic Learning, Texas, San Antonio, 2009
- 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.
- Guest Speaker to MENSA on The Repair of Corroded Structures with Electrochemical Technique, 2008
- o **Speaker** for the **ACI** meeting- (Feb 2006), Title: What's New at U.N.F. Engineering
- Speaker –UNF Community-Based-Transformation-Learning opportunity (CBTL) Integrating CBTL in Classroom
- Guest to TV and radio interviews (~20 interviews) & outreach activities, examples:
 - 10 TV interviews on Mathews Bridge damage (2013) & Bridge deck damage on I95 (2014)
 - TV Interviews with News4Jax, (2018), interview on FIU Bridge Collapse.
 - TV Interview with First Coast news station, (2013), interview on "The Mathews Bridge".
 - TV Interview with First Coast news station, (2014), interview on "Deficient Bridges".
 - TV Interview, First Coast news station, (2012), "The Concrete Concerns at New Courthouse".
 - Radio interview on WJCT 89.9 FM, (December 2007), Media questions about the Berkman Plaza parking garage collapse in Jacksonville, FL.

PROFESSIONAL AFFILIATION, SERVICES & ACTIVITIES

- *ABET* Program Evaluator (*PEV*)
- *Chair* of the "*Academic Council*" "Prestressed Concrete Institute-Foundation" (2018-now)
- Board of Trustees member "Prestressed Concrete Institute-Foundation" (2018-now)
- *Member PCI Journal Committee –* (2023-now)
- National: "PCI-Foundation" award to establish the 1st US "Engineering Professor Design Studio"- (2009-2015)
- Chair: Coordinator/Chair: Statewide Course Numbering System (Florida), 2005-2014.
- *Editor*, International Journal of Advance in Civil Engineering.
- Fulbright U.S. Scholar, UAE, (2015-2016)
- Fulbright Specialist, Canada, (2017)
- Peer Reviewer for Fulbright Specialist/Scholar (Engineering Education) Program.
- Fulbright Alumni Resource for Pre-Departure Orientation in Washington DC
- 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.
- Reviewer: Transportation Research Board, 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.
- Experiential learning, Service learning, and International Leadership:
 - o *Service & Experiential Learning: Faculty Advisor* for UNF students travel to *Ghana* for the 1st International Service Project for the School of Engineering (May 2009). Worked with students to build and repair Tamale Orphanage Children's Home, install screening, improve sanitary conditions, and build new foundation for drinking water tanks.
 - O Service & Experiential Learning: Restoration of Historic Structures in Perugia, Italy (Summer 2019).
 - o *Co-Leader*, Co-leading a group of 18 UNF students to Morocco (March 2014) & Ghana (2009).
 - o Leader for the Regional Council (Middle East Council) at UNF.
 - o Leader for international Study-abroad to Germany, Morocco, and Italy with students.
 - o *Co-Leader*, leading a group of 10 UNF faculty professors on *international academic visits* to Turkey, Morocco & Egypt to establish and maintain research initiatives & exchange programs.
- Advisor for Civil Engineering Students' clubs and competitions (3 clubs): ASCE, PCI, and FSEA
 - o Advisor PCI-Big Beam competition, students won 1st place regionally & 4th nationally in 2012 & 1st and 2nd place regionally & 6th nationally in 2013. & FSEA Northeast students Chapter, co-advisor student chapter ASCE (2013)