

Issam Elias Harik, Ph.D.

Education

- Ph.D., Civil Engineering (Structures), Wayne State University, Detroit, Michigan, 12/82.
- M.S., Civil Engineering (Structures), Wayne State University, Detroit, Michigan, 12/78.
- B.S., Civil Engineering, Wayne State University, Detroit, Michigan, 6/77.

Specialization

Transportation Structures; Structural Evaluation, Analysis, Design, and Retrofit; Fiber Reinforced Polymer Composites; Structural Health Monitoring; Hazard Mitigation, Field Testing of Bridges; Reinforced and Prestressed Concrete, and Steel Structures.

Experience

- July 2000 – Present: Raymond-Blythe Professor, Department of Civil Engineering.
March 1993 – Present: Program Manager, Structures, Kentucky Transportation Center, University of Kentucky.
- July 2001 – June 2005: Chair, Department of Civil Engineering
July 2000 – June 2001: Interim Chair, Department of Civil Engineering.
July 1994 – Present: Professor of Structures; Department of Civil Engineering, University of Kentucky.
- July 1987 – June 1994: Associate Professor of Structures, Department of Civil Engineering, University of Kentucky.
- August 1982 – June 1987: Assistant Professor of Structures, Department of Civil Engineering, University of Kentucky.

Recent Relevant Research Awards

1. Peiris, M.N.A., and Harik, I.E., "Retrofit of Impact Damaged PC I-Girder with CatStrong Carbon Fabrics (105B00143N – US 460 over I-75 – Scott County, D07)," *Kentucky Transportation Cabinet*. 01/01/2022 to 6/30/2025. \$90,750
2. Peiris, M.N.A., and Harik, I.E., "Retrofit of Impacted RCDG Bridge Girders using CatStrong UCF (089B00085N - KY 2692 over Western KY Pkwy Bridge in Muhlenberg County, KY, D02)," *Kentucky Transportation Cabinet*. 06/15/2021 to 6/30/2024. \$127,000
3. Peiris, M.N.A., and Harik, I.E., "Deployment of CatStrong UCF to Retrofit Damaged PC Girders (105B00107R – KY-620 over I-75 in Scott County, KY, D07)," *Kentucky Transportation Cabinet*. 07/10/2021 to 6/30/2024. \$45,000
4. Peiris, M.N.A., and Harik, I.E., "Bridge Load Posting Based on Load Testing," *Federal Highway Administration and Kentucky Transportation Cabinet*. 7/1/2019-6/30/23. \$300,000

Recent Relevant Articles

1. Jawdhari, A., Peiris, A., and Harik, I.E., "Load Rating of Bridge Size RC Arch Culverts," *Structure and Infrastructure Engineering*, <https://doi.org/10.1080/15732479.2020.1850803>, Vol. 18, No. 3, March 2022, pp. 362-375.
2. Sharifi, H., Peiris, A., and Harik, I.E., "A Triage Method for Load Rating Bridge Size Two-Cell RC Box Culverts for the HL-93 Truck," *Structures and Infrastructure Engineering*, <https://www.tandfonline.com/doi/full/10.1080/15732479.2021.2015793>, appeared Online in December 2021 (in print – to appear in 2023).

3. Peiris, A., and Harik, I.E., "Steel Beam Strengthening With UHM CFRP Strip Panels," *Engineering Structures*, <https://doi.org/10.1016/j.engstruct.2020.111395> , Vol. 226, January 2021.
4. Peiris, A., and Harik, I.E., "Impact Damage Retrofit of RC Bridge Girder Previously Retrofitted with CFRP Fabric," *American Concrete Institute Special Publication ACI SP346-03*, Online-January 2021, pp. 31-50.

Recent Conference Articles

1. Hutchinson, C., Peiris, A., and Harik, I.E., "Load Testing and Rating of a Concrete Arch Bridge," *International Conference on Structural Engineering and Construction Management (ICSECM 2021)*, Kandy, Sri Lanka, December 17-19, 2021. 16 pp.
2. Jawdhari, A., Peiris, A., and Harik, I.E., "Evaluating the Bond Characteristics of Intermediate and Ultra-High Modulus CFRP Laminates Adhered to Steel," *10th International Conference on FRP Composites in Civil Engineering (CICE 2020)*, Istanbul, moved to December 8-10, 2021, 10 pp.
3. Jawdhari, A., and Harik, I.E., "Analytical Study on the Bond Between CFRP Rod Panels and Concrete Substrate," *8th International Conference on Advanced Composite Materials in Bridges and Structures (ACMBS)*, Sherbrooke, Quebec, Canada, August 5-7, 2021, 6 pp.
4. Peiris, A., and Harik, I.E., "Retrofit of RC and PC Bridges with CFRP Fabrics," *American Concrete Institute Convention (Virtual)*, Raleigh, NC, October 25-29, 2020, 10 pp.

Awards and Honors

- University of Kentucky, Raymond-Blythe Professor of Civil Engineering, 2000-present.
- University of Kentucky, University Research Professor, July 2021- June 2023.
- Co-Recipient, with Dr. A. Peiris, of the American Concrete Institute Design Award, 2019.
- Fellow of the American Concrete Institute (ACI), 2020.
- Fellow of the International Institute for Fiber Reinforced Polymers in Construction, 2018.
- Southeastern Conference Faculty Achievement Award-University of Kentucky, 2018.
- College of Engineering Dean's Award for Excellence in Research, 2017.
- University of Kentucky, Chancellor's Award for Outstanding Teaching, 1996.
- Outstanding Civil Engineering Teacher in 1983, 1988, 1992, and 1994, Dept. of Civil Eng., Univ. of Kentucky.

Summary of Accomplishments

- Since joining the University of Kentucky in August 1982, Dr. Harik has directed or co-directed research on more than 120 funded projects.
- Dr. Harik has directed or is currently directing the research of 55 Post Docs/visiting professors/scholars, 100 graduate students, 70 undergraduate students, and 24 high school students.
- Dr. Harik currently serves as a member of engineering societies and 4 committees; he chaired the Transportation Research Board Committee on Structural FRP (AFF80) from 2009 to 2015 and is a Council Member of the International Institute for Fiber Reinforced Polymer Composites in Construction and a member of the International Advisory Committee - Bridge Engineering Institute. He has organized, co-organized, and chaired national and international conferences, workshops, and technical sessions.
- Dr. Harik has authored or co-authored more than 360 technical publications.