High Performance Materials III -
Strengthening Bridges with Carbon FRP Composites

Issam Harik, Ph.D.
Raymond-Blythe Professor of Civil Engineering,
Kentucky Transportation Center, University of Kentucky

This presentation will briefly introduce fiber reinforced polymer composites (FRP) for use on bridges, using past and ongoing research on bridges in Kentucky to illustrate successful techniques. Particular emphasis will be placed on strengthening/retrofitting steel, reinforced concrete, and prestressed concrete bridges, showing the progression from laboratory testing to field application and subsequent field testing. Reinforced concrete, prestressed concrete, and steel girder bridges strengthened with carbon FRP fabric and laminates will be used as examples and the advantages and limitation of FRP applications in bridges will be discussed.

Biographical Sketch:

Dr. Issam E. Harik is the Raymond-Blythe Professor of Civil Engineering, and Program Manager of the Structures and Coatings Section at the Kentucky Transportation Center, University of Kentucky in Lexington, KY. He received his Ph.D. from Wayne State University in Detroit in 1982 and joined the University of Kentucky the same year. His research interests are in the areas of fiber reinforced polymer composite components and structures, structural evaluation and retrofit of bridges, natural and man-made hazard management of highway structures, field testing of bridges, structural health monitoring and remote sensing of highway structures. He currently serves as a member of eleven societies, and holds offices in three of them. He is the chair of the Transportation Research Board Committee AFF80 on Structural Fiber Reinforced Polymers. He has authored and co-authored more than 280 technical publications. He has directed the work on more than 80 research projects, and the research of more than 80 graduate students and 40 visiting professors and scholars.

Date / Time: Monday, September 26, 2011, 5:00 – 6:20 pm, Eastern Time
Location: North Campus, Baldy Hall, Room 200G
To register to attend in person: (716) 645-3307
Professional development credit available: 1.5 PDH ($75)
To register for free live webinar: http://mceer.buffalo.edu/education/Bridge_Speaker_Series/register.asp