

Wednesday, November 8, 2006

9:00 am – 12:00 pm

**Case Histories and Use of FRP for
Prestressing Applications**

GOV 14

Sponsored by Committee 440

Session Co-Moderators: Raafat El-Hacha
Assistant Professor
University of Calgary
Calgary, AB
Canada

Sami H. Rizkalla
Distinguished Professor
North Carolina State University
Raleigh, NC

**Guide for the Design of Concrete Prestressed with
FRP Tendons** **9:00 am**

Raafat El-Hacha, Assistant Professor, University of Calgary, Calgary, AB, Canada; and **Sami H. Rizkalla**, North Carolina State University

**Prestressed Carbon Strands Utilized in Repair of
Football Stadium Ramp** **9:20 am**

Charles W. Dolan, Professor, University of Wyoming, Laramie, WY; and **Craig Alburn**, ZBTB Structural Engineering

Prestressed Applications Using FRP for Long-Span Bridges **9:40 am**
Benjamin Tang, Principal Bridge Engineer, Federal Highway Administration, Washington, DC

**Anaylsis of Long-Term Effects in Concrete Columns
Prestressed with FRP Tendons** **10:00 am**

Issam E. Harik, Professor, University of Kentucky, Lexington, KY; and **Ching Chiaw Choo** and **Hans Gesund**, University of Kentucky

Corrosion Free Prestressed CFRP/CFCC Box Beam Bridge **10:20 am**
Nabil F. Grace, Professor, Lawrence Technological University, Southfield, MI; and **Saju Sachidanandan**, **Sreejith Puravankara**, and **Mina Grace**, Lawrence Technological University

Wednesday, November 8, 2006

9:00 am – 12:00 pm

**Case Histories and Use of FRP for
Prestressing Applications—continued**

GOV 14

Durability of Concrete Beams Prestressed with CFRP **10:40 am**
Sami H. Rizkalla, Distinguished Professor, North Carolina State University, Raleigh, NC; **Halit Cenan Mertol**, North Carolina State University; **Janet M. Lees** and **Paul Scott**, University of Cambridge; and **Raafat El-Hacha**, University of Calgary

Lessons from Anchor Design for CFRP Rods **11:00 am**
Khaled A. Soudki, Professor, University of Waterloo, Waterloo, ON, Canada; and **Alam Plumtree** and **Adil Al-Mayah**, University of Waterloo

Reactive Powder Concrete Anchorage System for CFRP Prestressing Tendons **11:20 am**
Ehab Shaheen, Post-Doctoral Fellow, University of Calgary, Calgary, AB, Canada; and **Nigel Shrive**, University of Calgary

Concrete Beams Strengthened with External Prestressing Using External Tendons and Near Surface Mounted Reinforcement **11:40 am**
Björn Täljsten, Technical University of Denmark, Lyngby, Denmark; and **Håkan Nordin**, Luleå University of Technology