



**The Canadian Society for Civil Engineering
La Société canadienne de génie civil**

**The CSCE offers the following one-day courses at its 2009 Annual Conference.
La SCGC offre ces formations d'une journée lors de son congrès annuel 2009.
Elles seront présentées en anglais.**

Sheraton Hotel Newfoundland
St. John's, NL, May 27, 2009
To register, please go to: www.csce.ca/2009/annual/

Please forward this announcement to whoever may be interested in attending. Thank you.
Veuillez communiquer cette annonce à toute personne souhaitant participer. Merci.

A. The Performance of Concrete in a Marine Environment

8:30 – 4:30 Garrison Room

Technological advances and new construction methods have made reinforced and prestressed concrete an economical material for a wide variety of marine structures such as off-shore drilling platforms, long-span bridges and underwater tunnels. However, harsh environmental factors and the deteriorative composition of sea water bring the durability of these structures in question. This workshop will address the issues associated with the deterioration of these marine structures from theoretical and practical points of view.

Agenda

- Chloride Ingress in marine concrete
- Freeze-and-Thaw Action/Scaling
- Field Studies in Marine Environment (Treat Island Exposure Site)
- Code Provisions for Marine Concrete
- Corrosion Monitoring and Modeling
- Corrosion Protection / Cathodic Protection Systems
- Performance and Care of Marine Structures

Speakers

Theodore W. Bremner, Ph.D., P.Eng. Professor Emeritus and Honorary Research
Professor University of New Brunswick

Raj Dhole

University of New Brunswick

O. Burkan Isgor, Ph.D., P.Eng.

Associate Professor

Carleton University

Allan Scott, Ph.D., P.Eng.

University of Canterbury, Christchurch, New Zealand

B. Top Ten Targets for Improving Construction Productivity

8:30 – 4:30 Signal Room

The need for successfully enhancing construction productivity has never been greater. This workshop will improve your company's bottom line. It is based on the research conducted by

Dr. Janaka Ruwanpura with a number of general contractors in Canada since 2004. It will demonstrate the applications of best practices to improve productivity.

Agenda

- Improving Worker Motivation and Satisfaction
- Best Practices Guidelines for Supervision
- Efficient Materials Management
- Improving Tool Time through Practical Solutions
- Technology-based Communications Strategies
- Mitigating Changes
- Better Work Practices

Speaker

Janaka Ruwanpura, Ph.D., MCSCE

Canada Research Chair in Project Management Systems

Director and Associate Professor, Project Management Specialization

Schulich School of Engineering, University of Calgary

C. Introduction to Blast Load on Structures

8:30 a.m. to 4:30 p.m. – C Room

This course will introduce participants to the basic characteristics of a blast wave and how to determine the fundamental blast parameters as it pertains to a target structure. Analysis and design of reinforced concrete and structural steel elements will be presented.

Agenda

- Introduction to explosives
- TNT Equivalence
- Air Blast Parameters
- Blast Loading of Structures
- Single-degree-of-freedom Model for Blast Load Analysis
- Design and Analysis of Reinforced Concrete and Structural Steel Elements for Blast Load
- PI Diagrams and response regimes for Blast Design

Speaker

Abass Braimah, Ph.D., P.Eng.

Blast Hazard Engineer

Canadian Explosives Research Laboratory

Natural Resources Canada