



www.seabc.ca
E-mail: info@seabc.ca

January Seminar

BASE ISOLATION

Date:	January 22, 2014
Venue:	Theatre C300, UBC Robson Square, 800 Robson Street, Vancouver
Time:	Refreshments 6:00pm, Presentation 6:30pm
Presenter:	Dr. Tony Yang, P.Eng. Assistant Professor, UBC Department of Civil Engineering
Cost:	Free for SEABC Members. \$75 + tax for non-members Registration is required: www.seabc.ca/baseisolation

The West Coast of Canada is in a highly seismically-active region known as the “Pacific Ring of Fire”. Past earthquakes in this region (New Zealand, Taiwan, Japan, USA, Mexico and Chile) have caused tremendous life losses and property damage. This results to hefty financial burden to the facility owners and cripples their ability to recovery after the earthquake. With high probability of experiencing large intensity earthquakes in Vancouver, it is crucial to building structures to withstand the inevitable earthquake shaking with minimal financial impacts and able to be recovered efficiently. This can be achieved by utilizing innovative structural components and systems, such as base-isolation and added energy dissipation technologies. Base isolation and energy dissipation devices have been well established in United States, Japan, China and many other earthquake prone countries. However such technology has not been well adopted in Canada. This presentation will highlight the base isolation and energy dissipation technologies.



Prof. Yang is an assistant professor at the Department of Civil Engineering at the University of British Columbia, Vancouver. He is a registered professional engineer in British Columbia, Canada. He received his B.Sc. (2001) and M.Sc. (2002) from the University at Buffalo, New York, and his Ph.D. from the University of California, Berkeley in 2006. His researches focus on improving the structural performance through advanced analytical simulation and experimental testing. He has developed the next-generation performance-based design guidelines (adopted by the Applied Technology Council, the ATC-58 research team) in the United States; developed advanced experimental testing technologies, such as hybrid simulation and nonlinear control of shake tables; developed risk-based simulation models for countries in the North and South America and the Global Earthquake Model (GEM) for the counties in the South East Asia. Prof. Yang is a key member of the Tall Building Initiative Project funded by the Pacific Earthquake Engineering Research Center, which has received multiple awards including the WSSPC Award of Excellence. Prof. Yang has been actively involved in using novel technologies, such as base isolation systems and dampers, to improve structural performance. Prof. Yang has worked with multiple leading structural engineering firms to peer-review and design landmark buildings in United States, Canada and China. Prof. Yang is an active member of multiple National and International Code and Research committees.

