

Engineering Seminar



Findings of a Reconnaissance Trip in Nepal Following the 2015 Earthquake



Abstract: The M7.8 Ghorka Earthquake struck Nepal on April 25, 2015. This earthquake and its aftershocks had a significant impact on the urban and rural areas in the country causing more than 9,000 human losses, as well as widespread ground failure that prevented speedy recovery in many affected regions. The seismic sequence also caused extensive structural damage to the building stock that consists of low- to mid-rise reinforced concrete and masonry structures.

This presentation will discuss the findings of a reconnaissance team that visited Nepal shortly after the main shock in June 2015. The UB team collaborated with researchers from universities in the US and Europe, as well Nepalese researchers to document damage and collect perishable architectural and structural data. Data were obtained through traditional methods as well as 3D ground-based LiDAR scans. Moreover, ambient vibration recordings from selected damaged structures were obtained and are used in developing and validating numerical models and damage assessment algorithms which will be discussed.

Speaker Bio: Andreas Stavridis is an Assistant Professor in the Department of Civil, Structural and Environmental Engineering at the University at Buffalo. He obtained his Diploma in Civil Engineering in 2002 from the National Technical University of Athens. He earned his MSc and PhD in Structural Engineering in 2004 and 2009 from the University of California, San Diego. His current research focuses on assessing and improving the seismic performance of existing concrete and masonry structures as well as improving the design guidelines for new construction using computational simulations as well as large-scale quasi-static and dynamic tests. He is a member of EERI, ASCE, ACI, and The Masonry Society, and a member of the ACI 369 and the ASCE 41 masonry committee.

Date: May 03, 2016 Time: 11:00 AM Location: 140 Ketter Hall, North Campus, University at Buffalo