



The 6th AIT Distinguished Adjunct Faculty Seminar Series

“Progressive Collapse Analysis of Reinforced Concrete Frame Buildings following Sudden Column Loss”

**Monday, 22nd August 2016 from 10:30 – 12:00 hrs.
at Main Auditorium, AITCC**

Abstract: The progressive collapse analysis of reinforced concrete moment-frame buildings under extreme loads is presented from the perspective of modeling issues and model validation. Emphasis is placed on threat-independent approaches wherein the loading event is not explicitly modeled. Considerations in constitutive modeling of materials, options in modeling the structural elements and specification of gravity loads is discussed. The role of the floor slabs in mobilizing catenary action and influencing the progressive collapse response is also highlighted. Finally, procedures derived from non-linear static and dynamic analyses for comparing the relative robustness of RC frame buildings against progressive collapse is presented.

Sashi Kunnath is Professor of Structural Engineering in the Department of Civil & Environmental Engineering at the University of California at Davis. He served as Chair of the department from 2009-2015. He is also Distinguished Adjunct Professor at Asian Institute of Technology, Distinguished Visiting Professor at Nanjing Tech University, and has been honored as one of the Thousand Talent Foreign Experts in China. He formerly served as the Editor-in-Chief of the ASCE Journal of Structural Engineering and also chaired the ASCE Technical Administrative Committee on Dynamic Effects and the Committee on Seismic Effects. He has received various research and service awards including: the 2012 Norman Medal and the Raymond Reese Research Prize from ASCE in 2008, and the American Concrete Institute (ACI) Structural Research Award in 2001. He is Fellow of the American Concrete Institute (2007), the American Society of Civil Engineers (2010) and the ASCE Structural Engineering Institute (2013).

