SPONSE INTERNATIONAL ASSOCIATION FOR THE SEISMIC PERFORMANCE OF NON-STRUCTURAL ELEMENTS

Research Organization: **Institute of Engineering Mechanics, China Earthquake Administration, China**

Individual Research Member: **Zhe Qu, PhD, Professor**

*Short CV:*

Zhe Qu is a Professor at the Institute of Engineering Mechanics (IEM), China Earthquake Administration, China. He received his PhD in Civil Engineering from Tsinghua University in 2010, where he also earned ME (2007) and BE (2005) degrees in Civil Engineering. After being a postdoctoral fellow in the Center for Urban Earthquake Engineering, Tokyo Institute of Technology, Japan, he joined IEM in 2013 and was promoted to professor in 2017 in the same institute. He has experience of being visiting scholars in University of Edinburgh (2006), UCLA (2012) and Tokyo Tech (2017).

His research interests are in earthquake engineering and structural engineering with a special focus on controlling the seismic damage to buildings so as to reduce the disaster risks of urban systems in earthquakes. His research on structural damage control is focused on advanced seismic protection systems and components including pin-supported walls, seismic isolation and buckling restrained braces. He started to pay close attention to nonstructural damage since an M7.0 earthquake in China and since then have conducted research, both experimental and numerical, on various types of nonstructural components including suspended ceilings, masonry infills and piping. His research on nonstructural components also includes the design-oriented estimation of peak floor acceleration, multi-parameter sensitivity of commonly-used nonstructural components, improved structural seismic design criteria for protecting nonstructural components. He was also responsible for the development of a nonstructural component simulator at IEM.

Professor Qu has published about thirty papers in SCI-indexed journals, authored the Chinese book *Structure Sketches*, the picture book for children *Quake 'n Shake: Why Buildings Vibrate* and translated the book *Damage Control-Based Design of Building* into Chinese. His academic awards include the Best Presentation Awards for Young Researchers at the CUEE conferences in Tokyo (2010, 2012 and 2013), the First Place Award in Academic Category in the PEER/NEES Concrete Column Blind Prediction Contest (2010) and the Outstanding Young Engineers' Contribution Award by IABSE (2015). He received the Second-class National Award for Science and Technology Progress in China in 2016.