

2<sup>nd</sup> World Congress and Exhibition on

# Construction & Steel Structure

September 22-24, 2016 Las Vegas, USA



## Halil Sezen

*The Ohio State University, USA*

### Collapse performance of steel buildings and guidelines for progressive collapse modeling and analysis

Experimental data from field testing of steel frame buildings will be presented. One to four first-story columns were physically removed from existing buildings using different methods. Strains and displacements were measured at several critical locations during the removal of columns. Computational models and analysis procedures will be presented to simulate collapse response of steel buildings. Static and dynamic analysis of two and three-dimensional structural models will be described. Redistribution of internal forces within the building after the loss of columns will be shown. Current progressive collapse design methodologies prescribed in the current code standards and guidelines will be presented.

#### Biography

Halil Sezen has received his BS, MS, and PhD degrees from the Middle East Technical University, Ankara, Turkey; Cornell University, New York; and University of California, Berkeley; respectively. He has been a Faculty Member at The Ohio State University since 2002. He has more than 130 technical publications. He has been serving as an Associate Editor and Editorial Board Member of several journals including the ASCE *Journal of Structural Engineering*, and *Engineering Structures*.

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