**NON-LINEAR TIME HISTORY ANALYSIS OF TALL STRUCTURE FOR  
SEISMIC LOAD USING DAMPER**

**ABSTRACT**

Earthquakes are natural hazards under which disasters are mainly caused by damage or collapse of buildings and other man-made structures. Experience has shown that for new constructions, establishing earthquake resistant regulations and their implementation is the critical safeguard against earth quake induced damage. As regards existing structures, it is necessary to evaluate and strengthen them based on evaluation criteria before an earthquake. Earthquake damage depends on many parameters, including intensity, duration and frequency, content of ground motion, geologic and soil condition, quality of construction.

The proposed procedure is placed the dampers on the floors of the ninth-floor and five-floor of a ninth story building frame then compare the different performance of structure with damper up to Ninth-floors, damper up to Fifth-floors and without damper of ninth-story building frame using SAP2000 V19. As per IS- 1893 2002 non-linear time-history analyses of frame structure indicate that maximum displacement, maximum base shear and maximum acceleration effectively reduce by providing the damper in building frame from base support to fifth- floor and base support to ninth-floor comparison to as usual frame.