

Structural Control for Wind and Seismic Applications

Dr. Asif Iqbal¹

In recent years Mechanical and Electro-mechanical systems have been adopted into buildings, bridges, and other structures to improve performance in dynamic loading due to strong wind and seismic ground motions. Control systems can be in the form of base isolators, various types of dampers or combinations of different devices. The technology has progressed to be included in codes and has found many applications, particularly in North America, Japan, New Zealand over the past few decades. An overview of the different types of structural control systems and their worldwide applications is presented. Emerging concepts, prospects and future challenges are also discussed.

¹School of Engineering, University of Northern British Columbia, Prince George, B.C., V2N 4Z9, Canada.