Session ID: IDD-1

Title
RECENT PROJECTS OF SEISMIC ISOLATION AND ENERGY DISSIPATION IN LATIN AMERICA

Convenors
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Description
The design of critical structures to withstand the effects of earthquakes continues to gain importance all over the world. Most recently, several countries in Latin America have started the implementation of advanced seismic protection systems. The main objective of these systems is to protect lives, and the infrastructure. However, the integrity of the structures and their serviceability immediately after an earthquake play an important role in the speed of the emergency response, particularly in critical infrastructure such as bridges, hospitals, and schools. Additionally, the cost associated with repair or reconstruction of damaged structures is likely to be small compared to the economic and social impact caused by disruption of serviceability after an earthquake, and during the long reconstruction phase.

Seismic isolation and energy dissipation systems provide an alternative to conventional earthquake resistance design such as strengthening of structural elements (columns or beams) and have the potential for significantly reducing seismic risk without compromising safety, reliability, and economy of structures. The use of effective devices able to dissipate high amounts of energy ensures that other structural elements do not undergo excessive demands that could cause significant damage of key infrastructure.

This objective of this session is to present recent applications of seismic protection in several countries in Latin America. All these countries are in highly active seismic areas which have experienced strong earthquakes in recent years. It is important to learn how the development of the engineering expertise in the region, together with the availability of affordable and effective systems have encourage the use of advance seismic protection technologies in this large part of the world.

Invited Speakers
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