

# 'This earthquake was predictable'

*IITGn dir claims most damages are from unreinforced masonry*

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The 7.9 Richter scale earthquake that was felt by Northern India, and happened in Nepal, on Saturday morning, has taken more than 1500 lives while leaving many injured. Still, this earthquake was of a lesser magnitude compared to that of 1934. While a natural disaster cannot be prevented, experts believe that this earthquake was quite predictable.

Dr Sudhir Jain, Director, Indian Institute of Technol-

ogy, Gandhinagar, who was conferred a life membership by the New Zealand Society for Earthquake Engineering (NZSEE) in 2013, said, "This earthquake is not a surprise to us. It was very much predictable. If you look at the pattern of earthquakes in the past in a particular region, one would know the occurrence of it. We still need to put safety concerns first during construction. We have a safety centre at IITGn that does lot of research work on earthquake safety."

IITGn has recently developed a variant of seismic protective system. Speaking about the same, professor Dhiman Basu of IITGn, said, "A Seismic Protective System includes a set of devices that improves the performance of

File photo



Dr Sudhir Jain, director, IITGn

structures during earthquake. These protective systems absorb the brunt of the damage and can be replaced, making the building ready to face a new earthquake.

The concept is well-established in other countries including USA and Japan. How-

ever, in India codes and practices still require its full adoption. Protective systems are of different variety per their working principle and are usually applicable to important buildings; normal dwelling houses do not have them."

Jain added, "If you look at the damages of Nepal earthquake or any other earthquake on Indian subcontinent, most casualties are due to damage in dwelling houses. In the Indian subcontinent, a major portion of the dwelling house is of unreinforced masonry (URM) type. URM has very poor seismic performance. As an alternative, IITGn is popularising Confined Masonry that has much better seismic performance and affordable price."