Editorial

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Editor of special issue

Governments of countries around the globe which do not already have seismic design provisions for their built infrastructure are continuously pressured to act amidst publicity surrounding large scale earthquake disasters which have emerged in different parts of the world from time to time. Many countries located in regions of low and moderate seismic activity are still in the process of deciding when (and not if) a comprehensive set of provisions for seismic protection of buildings are to be developed and implemented. One of the main challenges with code developments in these countries is in ascertaining the extent in which foreign codes of practices, which were typically developed to address the threats of interplate earthquakes in high hazard areas (eg. California), are applicable to their own local conditions.

Interplate earthquakes are events generated frequently from tectonic plate boundaries. In contrast, intraplate earthquakes have much lower rate of recurrences than interplate earthquakes, but could be as destructive should they occur and could constitute potential threats to regions which are well away from tectonic plate boundaries. The two types of earthquakes are actually of the same physical phenomenon even though certain features that are typical of intraplate earthquakes have been revealed. However, the engineering approaches for the two types of earthquakes are fundamentally very different and this is reflected in the way the earthquake hazards and the potential seismic performance of structures are modelled in the two types of environment. For example, Australia and New Zealand have separate standards for seismic actions whilst having joint standards with other environmental actions. The new edition of the Australian standard for seismic actions encapsulated important outcomes from years of research which were undertaken to address intraplate conditions that characterize Australia. The same is said of countries including China, India, Vietnam and Singapore where for over a decade research has been undertaken to address seismic issues specific to local conditions. The *Electronic Journal of Structural Engineering* sees the value of this special issue for disseminating and integrating these important research outcomes.

Professor Ray Su who has a depth of both research and practical experiences in many facets of earthquake engineering and is a leading figure in the field, accepted the invitation of the journal as guest editor of the issue. Prof. Su gravitated important contributions into this special issue from front rank researchers across the industrial and economic hub of southeast Asia, India and Australia. The whole spectrum of earthquake engineering research, from seismic activity modelling to structural performance modelling, is encapsulated in some twelve articles. A short introductory article by the guest editor is first presented for highlighting key features which were noted from his own reading of the publications in the issue. At around press time, Prof Su returned from his reconnaissance trip to Sichuan and delivered an oral presentation on the Sichuan Earthquake at the University of Melbourne. The PowerPoint presentation by Prof Su and the report prepared jointly by three PhD students who took part in the reconnaissance trip have both been incorporated into the special issue in the appendix.