Traditionally, the safety of timber structures in what concerns fire has been achieved by means of Fire Resistance requirements. This has imposed severe limitations to height and to exposure. Furthermore, it has resulted in a design philosophy that often results in massive amounts of sacrificial timber, added cost and compromised aesthetics. Detailed understanding of timber combustibility and the way in which timber performs when exposed to a fire, thermally and mechanically, enables a more rational design philosophy. This presentation explains the concept of separation of risks as the backbone of a novel design philosophy for complex timber buildings.

BIO: Professor José L. Torero is Professor Civil Engineering and Head of the Department of Civil, Environmental and Geomatic Engineering at University College London. He works in the fields of safety, environmental remediation and sanitation where he specializes in complex environments such as developing nations, complex urban environments, novel architectures, critical infrastructure, aircraft and spacecraft. He holds a BSc for the Pontificia Universidad Católica del Perú (1989), and an MSc (1991) and PhD (1992) from the University of California, Berkeley. He received a Doctor Honoris Causa by Ghent University (Belgium) in 2016. José is a Chartered Engineer (UK), a Registered Professional Engineer in Queensland, a fellow of the Australian Academy of Technological Sciences and Engineering, the Royal Academy of Engineering (UK), the Royal Society of Edinburgh (UK), the Queensland Academy of Arts and Sciences (Australia), the Institution of Civil Engineers (UK), the Institution of Fire Engineers (UK), the Society of Fire Protection Engineers (USA), the Combustion Institute (USA) and the Royal Society of New South Wales (Australia).