The NSW Chapter of the Society of Fire Safety (SFS) invites members and associated professionals to attend an upcoming Technical Information Session on Fire Safety Design for Timber Buildings

The seminar will cover the following topics:

- **Designing Safe Mass Timber Buildings: Fire Research for Modern Infrastructure** – Mass timber construction is becoming the emerging norm for modern infrastructure due to the numerous benefits of engineered timber structures. Nevertheless, timber is a combustible material and as such it poses a fire hazard to be explicitly considered in the design of the building. Based on previous research at the University of Edinburgh and the ongoing research activities at the ARC Future Timber Hub at The University of Queensland (UQ), Dr Juan P. Hidalgo will present an overview of the fire safety design challenges of mass timber construction. He will highlight the importance of a performance-based design framework that enables the fire-safe use of timber in mid- and high-rise buildings.

- **Timber Construction: A Structural Overview and Fire Safety Impacts** – This presentation will provide an overview of the different types of timber structures and how to design these buildings to avoid progressive collapse. Dr Ali Habibi will also discuss how fire impacts structural design, the building façade and the structural approaches to design for fire outlining the NCC Deemed-to-Satisfy vs Performance Solutions design options.

- **Fire Engineering of Exposed Mass Timber** – There is an increasing prevalence for building professionals seeking to deviate from the NCC Deemed-to-Satisfy Provisions to expose timber structural elements in large buildings. The presentation will detail important design aspects to consider when developing fire safe designs of such buildings from a fire engineering consultant perspective.

**Who should attend?**

The recommended audience for this seminar includes, but it not limited to, Architects, Designers, Mechanical Engineers, Fire Safety Engineers, Fire Protection Consultants, Building Regulation Consultants, Fire & Arson Investigators, Private Certifiers and Regulatory Authorities including Councils and Fire Brigade Personnel.

**About the Society**

For information about the NSW Chapter of the Society of Fire Safety, please contact the NSW Chair Edmund Ang at edmund.ang@aecom.com or you may be interested in visiting the Society’s Website [https://www.engineersaustralia.org.au/Communities-And-Groups/Technical-Societies/Society-Of-Fire-Safety](https://www.engineersaustralia.org.au/Communities-And-Groups/Technical-Societies/Society-Of-Fire-Safety)

Members who feel they can contribute to the seminar or would like to participate in the discussion during the seminar are invited to contact the NSW Chair prior to the seminar.
**SPEAKERS**

**Designing Safe Mass Timber Buildings: Fire Research for Modern Infrastructure**

Dr Juan Hidalgo is Lecturer at The University of Queensland whose research focuses on fire safety of modern infrastructures such as timber and tall buildings. Graduating from the University of Edinburgh with a PhD in Fire Safety Engineering he developed innovative research on the fire performance of insulation materials. After his PhD, he took a post-doctoral research associate position working on the fire safety of a carbon fibre composite material for hydrogen storage and the fire safety of cross-laminated timber compartments. He also co-led the design and execution of the real-scale experimental program for the ‘Real Fires for the Safe Design of Tall Buildings’ project developed at the Building Research Establishment.

At present, he is the lead CI of one of the largest projects in the Australian Research Council (ARC) Future Timber Hub in partnership with QFES, Lend Lease and Hyne Timber. He is also involved in the Queensland Non-Conforming Building Products Audit Taskforce, the Warren Centre project and Centre for Future Structures (CFTS).

**Timber Construction: A Structural Overview and Fire Safety Impacts**

Ali is a Principal Structural Engineer in Northrop’s Sydney team, with specialist skills in high-rise residential and commercial buildings, and engineered timbers. With over 15 years’ experience in the industry, Ali contributes his technical expertise to the design, documentation, and construction liaison for a range of structural engineering works and leads a team of engineers and drafters in the Sydney Structural group. In the wider industry, Ali is a board member of the Association of Consulting Structural Engineers (ACSE) and he has presented many papers, particularly in the area of high-rise developments and earthquake engineering and also engineered timber structures.

**Fire Engineering of Exposed Mass Timber**

Robert is a Senior Structural Fire Engineer at Arup. Over the past few years Robert has focused much of his time on research into the fire behaviour within mass timber buildings and developing fire safety designs, particularly where exposed timber is present. Robert has worked on, and is currently engaged in the designs of mass timber buildings in the UK, US, Singapore, and Australia. Robert is currently participating in global research initiatives with universities across Australia and Europe.