

## Thematic sessions

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### Modernizing timber.

#### Regional developments and conceptual transfers of timber technology in the 20th century

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The development of glued laminated timber plays only a marginal role in the past research of construction history. There is no general research following the period from Otto Hetzer's patent in 1906 either on the context of its introduction or the basic conceptual influences from traditional timber technologies. Neither have the transfers of timber technology between different regions been traced. Although there was clearly a period during and after World War I (approx. 1915-1925) when timber was widely used as a substitute material for steel, and thus proved significant for large-scale structures worldwide, this engineering development has been of little research interest and is not seen as part of the history of building materials of the early 20th century.

The years after World War I saw a widespread growth of large-scale timber construction, which benefited from the steel and coal shortages during and after World War I. In Europe as well as in the United States of America the building industry struggled to adapt to the shortage of steel beams and/or reinforcement for concrete construction. At the same time there was a great need for industrial buildings, such as warehouses and factories, and also for buildings for sports. During that time, numerous new methods of timber fabrication and construction were developed and patented, mostly by contractors or engineers. These developments offered new methods for the use of this traditional building material either by transforming the earlier construction logic of timber itself or by borrowing constructional concepts from the established industrial materials: steel and reinforced concrete.

The proposed session aims to bring together research into regional developments of modern timber construction in the 20th century. These may be inventions, technological improvements and adaptations by engineers, architects or contractors, either applied regionally or internationally. These developments shall be specifically connected to an international context of timber construction at that time highlighting parallel developments, adoption of patents and general concepts and international knowledge transfer.