



## AGENDA

FOR THE 1ST CA 20139 CONFERENCE AND  
WORKSHOP (24-25. May, 2022)

Monday  
23rd May 2022

18:00 - 20:00 CG meeting  
20:00 - 21:00 Get together in the evening

Tuesday  
24th May 2022

09:00 - 13:00 Conference with invited lectures  
13:00 - 14:00 Lunch  
14:00 - 15:00 COST Action plenary meeting  
15:00 - 17:00 WG introductions and start of work  
17:00 - 18:00 MC meeting  
19:00 - 21:00 Dinner

Wednesday  
25th May 2022

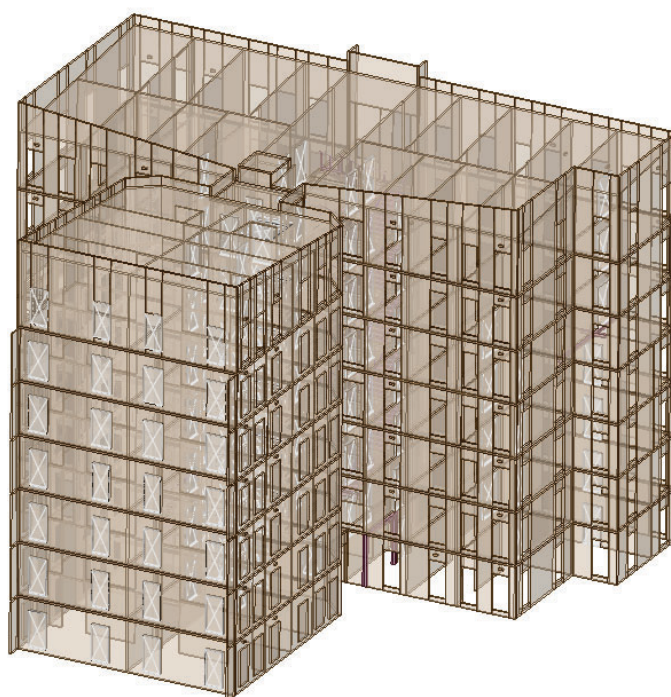
09:00 - 13:00 WG work  
13:00 - 14:00 Lunch  
14:00 - 15:00 Reporting on WG discussions and wrap up



## INVITED LECTURES

### YOKER BUILDING – full wind in-situ testing and FEM modelling Ltd

The structural design of a 7 storey CLT lightweight residential building will be presented. Its horizontal dynamic response has been experimentally tested through forced vibration testing and it is currently being monitored for ambient vibration response. Its finite element model has been thoroughly updated based on experimental test results. One of the key interest lies in the response to wind at serviceability levels of this relatively low-rise building.



# HOLISTIC DESIGN OF TALLER TIMBER BUILDINGS



**Fernando Pérez**  
Senior Engineer, Smith and Wallwork



Fernando is an experienced structural engineer specializing in timber construction, especially mass timber projects with exposed elements. He was the project engineer for the tallest residential timber building in Scotland. Fernando has a particular interest in combining research and construction projects. He is currently an industry partner in the Dynamic Response of Tall Timber Buildings under Service Load (DynaTTB) project, where he ensures the work and guidelines produced can be applied by practicing structural engineers.

**Aleksandar Pavič**  
Professor, University of Exeter; Managing Director, Full Scale Dynamics Ltd; Business Development Director, FSD Active Ltd

Alex is an expert in vibration serviceability for slender civil engineering structures. He believes that the best laboratory is full-scale, real-world with plenty of unique large civil engineering structure prototypes. Alex made his academic career by modelling, testing and monitoring full-scale (foot)bridges, floors, grandstands, staircases, and long and tall structures, utilizing the knowledge of how these structures behave in the real world. His extensive (co-)authorship and contribution have been recognized in state-of-the-art design guidelines in the UK and internationally.



**Blaž Kurent**



Blaž Kurent is a PhD student at the University of Ljubljana, Faculty for Civil and Geodetic Engineering. The main topics of his research are modelling the dynamic properties of tall timber buildings and updating these models using Bayesian inference. His doctoral work is a part of the DynaTTB project, which is supported by ERA-NET Cofund ForestValue. He is also a member of the Slovene-Hungarian bilateral project DataBridge, aimed to explore the possibilities of performing structural health monitoring on several bridges in Slovenia.



## GOOGLE EUROPEAN HEADQUARTERS IN LONDON fire protection strategy

The Google European Headquarters is the first, wholly owned and designed Google building outside the US. This new 11-storey building comprising of more than 1 million square feet, will be a part of the Google campus with the potential to house 7000 Google employees. The building, designed by Heatherwick Studio and Bjarke Ingels Group (BIG) features a natural theme, with all materials sourced through Google's healthy materials programme. The fire strategy is designed to allow maximum flexibility for the building, a key requirement for Google in a building with a design life of 100 years.



### Simeon Anastasov Principal Fire Engineer, OFR Consultants

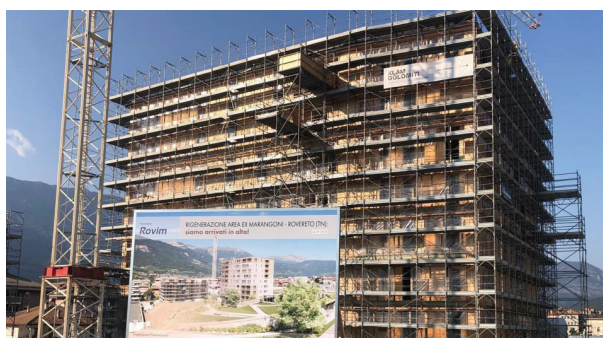
During his career, Simeon has been responsible for delivering numerous schemes, including residential, office and commercial developments. He has also been involved with several construction phase assessments. Key projects include the Shell Centre Refresh, Google Headquarters (KGX1) and 4 Pancras Square. Simeon is experienced in applying specialized fire engineering approaches, including structural fire engineering and computational fluid dynamics. He has a track record of adopting these in support of bespoke, sustainable fire strategies integral to the architectural and client aspirations for buildings.





## THE ROVERETO BUILDING – integration of different project aspects in a 9 storey CLT building

The construction site is located in north Italy (Rovereto). It is composed of 2 buildings of 9 and 5 levels for a total of 68 apartments. The 5-storey building consisting of 24 apartments with an area of 510 m<sup>2</sup> in plan. The 9-storey building consisting of 44 apartments with an area of 570 m<sup>2</sup> in plan. The height reached by the 9-storey building is 29 m while the 5-storey building has a height of 16 m. The buildings is made by cross laminated walls and floors without any structural elements in concrete or steel (except the connections). A great effort done by the design group was the integration between the different aspects of the project (e.g. seismic resistance, acoustic, durability, isolation, etc). The 9 storey building is the tallest timber building in Italy.



**Tiziano Sartori**  
Founder, and principal at Rewis Wood

Tiziano Sartori received his master's degree in civil engineering and his PhD in Civil Mechanical structural system engineering from the University of Trento (Italy). Within the collaboration with the Timber Research group of the University of Trento, he was involved in some important national and international research projects, investigating the behaviour of timber buildings. He designed and carried out hundreds of laboratory tests on mechanical devices and timber walls. He has developed some innovative mechanical devices as well. He designs timber structures since 2014 in Rewis Wood studio.





## INNORENEW CoE BUILDING the largest timber building in Slovenia

The InnoRenew Building is, in addition to the COST Action HELEN CA 20139 1st conference and meeting place, also the biggest timber building in Slovenia. Its load bearing structure consists of 870 m<sup>3</sup> timber and the building in total has over 1000 m<sup>3</sup> installed. The lecture will present its construction and the challenges that its construction presented



**Iztok Šušteršič**  
Research group leader at InnoRenew CoE  
Assistant Professor at University of Primorska

Iztok Šušteršič is the research group leader in sustainable building with renewable materials at the centre of excellence InnoRenew CoE and an assistant professor at the University of Primorska. Previously, he was working in both academic research at the University of Ljubljana, as well as in private engineering practice CBD d.o.o. He led over 200 building projects and worked on or coordinated 15 national and international research projects dealing with timber and hybrid timber structures, new adhesives, and seismic analysis.

