## Virtual Session 1: Scientific and Technical Challenges

In the field of civil engineering, there are still many barriers to overcome to improve the performance of our structures. This session will present recent scientific advancements, identify challenges, and propose potential solutions. The outcome of this discussion would be the formulation of a research group or project to be implemented with young member group.

Topics of Interest: How to harmonise resilience and sustainability in building construction?

## **Guest Speakers:**



DI Peter Gappmaier is an Austrian civil engineer and researcher specializing in sustainable construction technologies. He serves as a scientific project assistant at the Institute of Green Civil Engineering at the University of Natural Resources and Life Sciences (BOKU) in Vienna.

He will present it studies related to Advancing Structural ReUse – Scientific Challenges and Potential. He will tell us how Manufacturing Execution System implementation could enhance the structural component reuse



## **Moderator:**



Dr Monica Santamaria is a civil engineer and researcher specialized on risk and resilience management of critical infrastructures. She is currently a postdoctoral researcher at University of Minho in Portugal, where she is focused on designing resilience interventions for cultural heritage assets.

She will present a framework to manage the risks of transportation networks exposed to flooding and degradation processes, and how resilience considerations can be incorporated into the decisionmaking process.

Dr Andri Setiawan is a civil engineer from Imperial College London and researcher specializing in structural concrete and computational simulation. He is currently a postdoctoral researcher at the Universitat Politècnica de València (UPV) in Spain, where he focuses on enhancing the resilience of critical infrastructure against multiple hazards. **He will explain us the concept of hierarchy-based collapse isolation for more resilient structure** 

(Spoiler alert: you can check the video of project here <u>https://www.youtube.com/watch?v=Jfy2Koq3uOE</u>)

Date and time: Thursday, June 5, 2025, from 3:00 PM to 5:00 PM.

Link for the virtual session: https://urlr.me/!session1ymfib

Write an email to ymfib2025@afgc.asso.fr to confirm your attendance.