Catapult (et) climate-k

Researchers Summer School

How can we fully harness the climate change mitigation potential of wood construction?

26 Aug-6 Sept 2019

Helsinki & Gothenburg

This two-week full-time residential programme will take place from 26th August – 6th September in Helsinki (first week) and Gothenburg (second week), where you will learn about the mitigation potential of wood construction in climate change.

Turn your research into practice with our two-week EIT Climate-KIC Summer School on wood construction in climate change mitigation. In the future, we will think of wood buildings not just as living or working places, but also as "temporal carbon storage" that will ideally be recirculated into new buildings. The wood material contained will be a valuable resource that not only performs its technical function in the building but it will also store carbon and substitute energy intensive materials, thereby helping to mitigate climate change.

To reflect this value, great care will be taken to analyse the entire wood supply chain, to understand the stakeholder ecosystem and to design the wood products, structures and buildings so that wood can be used in the best overall way to help combat climate change.

Come and join our program to learn about the unique potential that wood has to mitigate climate change!

#ClimateCatapult catapult.climate-kic-org

Climate-KIC is supported by the EIT, a body of the European Union

The Challenge

How can we fully harness the climate change mitigation potential of wood construction?

Wood has been used for millennia to build shelters and remains one of our most versatile materials. In recent years, wood has been enjoying renaissance as a construction material and there are a growing number of examples of the use of wood in high-rise buildings.

Wood is seen as an ecological material, with the potential to lower the impact of buildings - through the substitution of energy-intensive materials and through its ability to store carbon. The role that it can play in helping to mitigate climate change is rather less well understood.

This course will provide an overview of how the inherent properties of wood can be used to good effect to create a more sustainable built environment, through the development of reallife solutions, co-created in multidisciplinary teams. One of the key components of this summer school will be a real-life challenge given by an invited stakeholder from one of the following sectors – construction industry, forest industry, real estate owners, investors or public authorities.

Learning goals:

- **1** Knowledge building (e.g. students understand the role of forests in climate change mitigation, the wood value chain, wood building system etc.)
- **2 Transdisciplinary learning** (e.g. students learn to work in a transdisciplinary context applying a holistic "systems thinking" approach to problems)
- **3 Systemic solutions development** (e.g. students develop the ability to create tangible solutions)

The Aim

We offer a learning-by-experiencing approach to tackle real-life challenges. You will be able to boost your skills in a inter-disciplinary thinking and cooperation environment. The objetives:

- To equip participants with the **knowledge of transformative**, **socio-technical innovation**.
- To exchange ideas between students and experts and to develop new project ideas for innovation in the industry.
- To provide **practice oriented tools** that will enrich the student's individual projects.
- To enable PhD students to link their individual research projects to real life problems and innovation activities.



Partners

Aalto University Wood Material Technology

One of the key focus areas of the Wood Material Technology group is the use of wood in materials- and energy-efficient buildings that enhance the health and wellbeing of people. With increasing concerns about climate change and the need to reduce the environmental impact of buildings, wood construction is undergoing a renaissance and this is stimulating research in areas such as wood in the circular economy, and the health and wellbeing benefits of using wood in buildings. The group has strong links with a range of stakeholders in the wood value chain in Finland and elsewhere as well as having collaborations with other research groups both nationally and internationally.

Chalmers University of Technology Sustainable Building

The research group Sustainable Building is working with concepts, tools and strategies to enhance the sustainability performance of the build environment, approached at different scales (single building, district, city, countries). The research is related to ecological and economic life cycle assessment of construction materials, buildings and infrastructures, sustainability assessment tools for buildings, social-cultural and climate adapted design concepts, as well as building stock modelling based on energy and material resources.

The research group actively cooperates with small and medium enterprises (SME), leading global industries, different level of public authorities and renowned research institutes in all fields mentioned. Research funds stem from industry grants, European Commission (Horizon 2020, EIT Climate-KIC), as well as competitive funding programmes from national research councils.

Norwegian University of Science and Technology – NTNU Wood

NTNU Wood, a cross-disciplinary centre that advances projects, studies and initiatives at NTNU with wood and forests as their primary resource base.

Lund University Centre for Environmental and Climate Research (CEC)

Expertise lies in applied systems analysis, system dynamics modelling and facilitation of stakeholder participatory group modelling process.



Who can participate?

EIT Climate-KIC and University Partners welcome PhD and postdoctoral researchers, post-graduate and professionals interested in climate topics. All researchers are welcomed to apply:

- Climate-KIC Label PhD
- PhD at European University
- PhD at non-European University
- Postdoctoral researchers
- Professionals

All sessions are held in English.

Participation is free of charge.

It includes: Accommodation, meals and local transfers.

Programme

Week 1 Helsinki, Finland

Sunday 25th August Informal welcome get-together-Monday 26th August

- Arrival and Check-in
- Introduction to the programme contents and participants presentation
- Visiting the topic, understand the challenges

Tuesday 27th August

- Setting the scene: Challenge mapping
- Group formation
- · Workshop and training

Wednesday 28th August

- Field trip
- System and stakeholders

Thursday 29th August

- Expert Input
- Workshop and training
- Group work

Friday 30th August

- Expert Input
- Workshop and training
- Topic presentation
- Group work

Weekend Free time and move to Gothenburg



Week 2 Gothenburg, Sweden

Monday 02nd September

- Expert input
- Group work

Tuesday 03rd September

- Expert input
- Field trip

Wednesday 04th September

- Stakeholder workshop
- Group work

Thursday 05th September

- Group work
- Pitch training

Friday 06th September

- Pitch presentation of group work to jury
- Wrap up of program
- Farewell dinner

Speakers & Coaches to be confirm



Contact us