Touching Cellulose

[Rethink construction] 13 - 24 September 2021

Open Public Lecture Series & Registered Student Workshop

Next generation of wood architecture. Architecture and the building industry are in need of a paradigm shift, due to the growing awareness of their huge contribution to global climate change and ongoing depletion of mineral resources. In order to counter carbon emissions and sourcing building material sustainably, future design and construction is unthinkable without a massive use of timber, the only structural building material that stores carbon while it grows in our forests! The introduction of mass timber at the end of the 20th century as an alternative to concrete and steel was already a huge innovation for the construction industry. Now it is time for the next generation of wood architecture in which computer aided design and robotic manufacturing go hand in hand with a revival of craftsmanship and wood building culture.

Touching Cellulose is initiated by Gilbert Koskamp and further developed with Anne Beim, Felix Waechter and Pierre Jennen together with Delft University of Technology, the Royal Danish Academy and Technical University of Darmstadt

This year Touching Cellulose is a two part online series launched on 23 April 2021. These lectures, which are found online on the Touching Cellulose website, include speakers like Fabio Gramazio and Pablo van der Lugt. For the second part, 13-24 September 2021, we are hosting online seminars that are open to the public until the 22nd and a international design workshop for registered students





The aim of the ten day workshop is to touch and learn about the building culture of wooden architecture . The first week explores timber design through analytica tools, i.e. 2D and 3D drawing and model-making of preselected case studies During the second week, a utilitarian wood construction will be developed through the case study analysis and presented in drawings and physical form. Participants will have personalized studio sessions and recorded online lectures. Design will be carried out in international mixed groups and presented as a manifesto of Touching Cellulose.







Sustainability







Digital Fabrication Organised by

Einfaches Bauer







Programme Lineup

$Mon \mid 13^m$	
0845 - 0930	Opening Lecture & Tools for TREE_TimberREengineered Ing. Arch Gilbert Koskamp - TU Delft, Ssse OvO, NL
0930 - 1100	Keynote Lecture: Inventive Dedication 'draw it we build it' No Limite Dipl. Ing. ETH SIA H.Prof Hermann Blumer - FH Aachen, DE - Creation Holz AG, CH
1645 - 1815 Tues 14 th	Radical [wood] Tectonics The detail is crucial Prof. Anne Beim - Royal Danish Academy, CINARK, DK
0845 - 1015	Rethink Structure Timber Structuralism Prof. Felix Waechter - TU Darmstadt, Waechter & Waechter Architekten, DE
1645 - 1815	Design Challenges of a Mass Timber Office Building T3 Bayside Toronto
Wed 15th	Elizabeth Nichols MSc - New York, US
0845 - 0930	Circular Social Wood anchored - LCV Lifecycle value Ir. Oscar Vos - krft Amsterdam, NL
0930 - 1015	City Wood Pavilion Insights in assembly of wet sawn wood Ir. Florian Eckardt - architectinamsterdam, NL
1645 - 1815 Thurs 16 th	Future Tree Complex Timber Structures and Digital Concrete Dr. Aleksandra Anna Apolinarska - Gramazio Kohler Research, ETH, C
0845 - 1015	Craft and Timber Friluftsbygning (Outdoor Building), Silkeborg Simeon Østerlund Bamford cand.arch. MAA - ReVaerk Arkitektur, DK
1645 - 1815	Didactic Architecture Furbished by construction
Fri 17 th	Ir. Mechthild Stuhlmacher - Korteknie Stuhlmacher Architecten, BE, NL
0845 - 1015	Prototyping with PAPER Constructed by Cellulose Prof. Ulrich Knaack - TU Darmstadt, DE
1645 - 1815	BAUBOTANIK Build with Tree and Time Prof. Dr. Ferdinand Ludwig - TU Munich, DE

Past Lectures

Mon 20"	
0845 - 0945	Made almost entirely of wood Re-use meets craftsmanship
	Ir. Pierre Jennen MSc - TU Delft, Ssse OvO, NL

Intelligent Fabrication with Timber | Resolution of Tectonics 1645 - 1815 Prof. Achim Menges - TU Stuttgart, DE Tues | 21st

Regional regenerative building materials | Building methods 0845 - 0930 and products Bouwtuin - TU Delft. NL

0930 - 1015 ONE TOOL for a complete building | Resolution of joinery Ir. Nick Krouwel - ANK Atelier Krou

1645 - 1815 **Building Culture of Simplification | Insight in Deciduous Timber** Dipl. Ing. **Anne Niemann** - TU Muni Wed | 22nd Case Study | Landwirtschaftliches Zentrum 0845 - 1015

(Agricultural Center), Salez CH Andy Senn, Architekt BSA SIA - AndySenn Office, CH

Timber Construction | History 1645 - 1815

Waechter available online.







Sponsored by:





Past Lectures by Pablo van der Lugt, Fabio Gramazio, Edmund Green & Ludvig Sundberg, Anne Beim, Felix