



Register!



WORKSHOP BIO-BASED CONCRETE

The bioeconomy is redefining how we think about resources, and construction is no exception.

Explore the role of bio-based concrete in the bioeconomy.

🕒 03/12/2023, 9:00am - 4:00pm

📍 Luleå University of Technology and online

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3D printing of bio-based materials

Bio-receptive concrete

Bioashes and biochar in concrete

Hempcrete and cellulose-based materials

Sustainability and circularity in construction

PROGRAM

9:00 – 9:30 Opening: Magdalena Rajczakowska, LTU, Sweden
“Bio-based concrete: Benefits, challenges, and environmental impact”

09:35 – 10:10 Erik Schlangen, TU Delft, the Netherlands
”Printing bio(-receptive) concrete”

10:10 – 10:45 Shannon Hanson, ReefCircular, Denmark
”Turning shell waste into sealife: A circular alternative to concrete for artificial reefs”

10:45 – 11:00 Fika

11:00 – 11:30 Leonidas Matsakas, LTU, Sweden
“Biomass biorefinery for lignin extraction and its application in materials”

11:30 – 12:00 Chamini Liyanage, RMIT, Australia
“Enhancing the Strength of Cementitious Composite by Integrating Upcycled Textile Cellulose.”

12:00 – 13:00 Lunch

13:00 – 13:20 Marcin Sundin, LTU, Sweden
”Eggshell Powder as a Natural and Sustainable Fire Retardant: Proof of Concept in Concrete Applications”

13:20 – 13:40 Ojas Arun Chaudhari, RISE, Sweden
“3D Printing Strategy and Implementation for the Concrete Prefabrication Industry”

13:40 – 14:00 Ece Teker, LTU, Sweden
“The Impact of Wood Ash Grinding Duration on the Mechanical Characteristics of Alkali-Activated Mortars”

14:00 – 14:20 Dong Wong, LTU, Sweden
“Internal curing of biochar as a sand replacement in concrete”

14:20 – 14:40 Xinyuan Ke, University of Bath, United Kingdom

14:40 – 15:00 Fika

15:00 – 15:30 Clas Dahlén, HemplInnovations, Sweden

15:30 – 15:50 Emmanuel Mache, LTU, Sweden
“Utilization of paper pulp industrial residues for low-clinker content cement production”

15:50– 16:30 Discussion and lab tour

