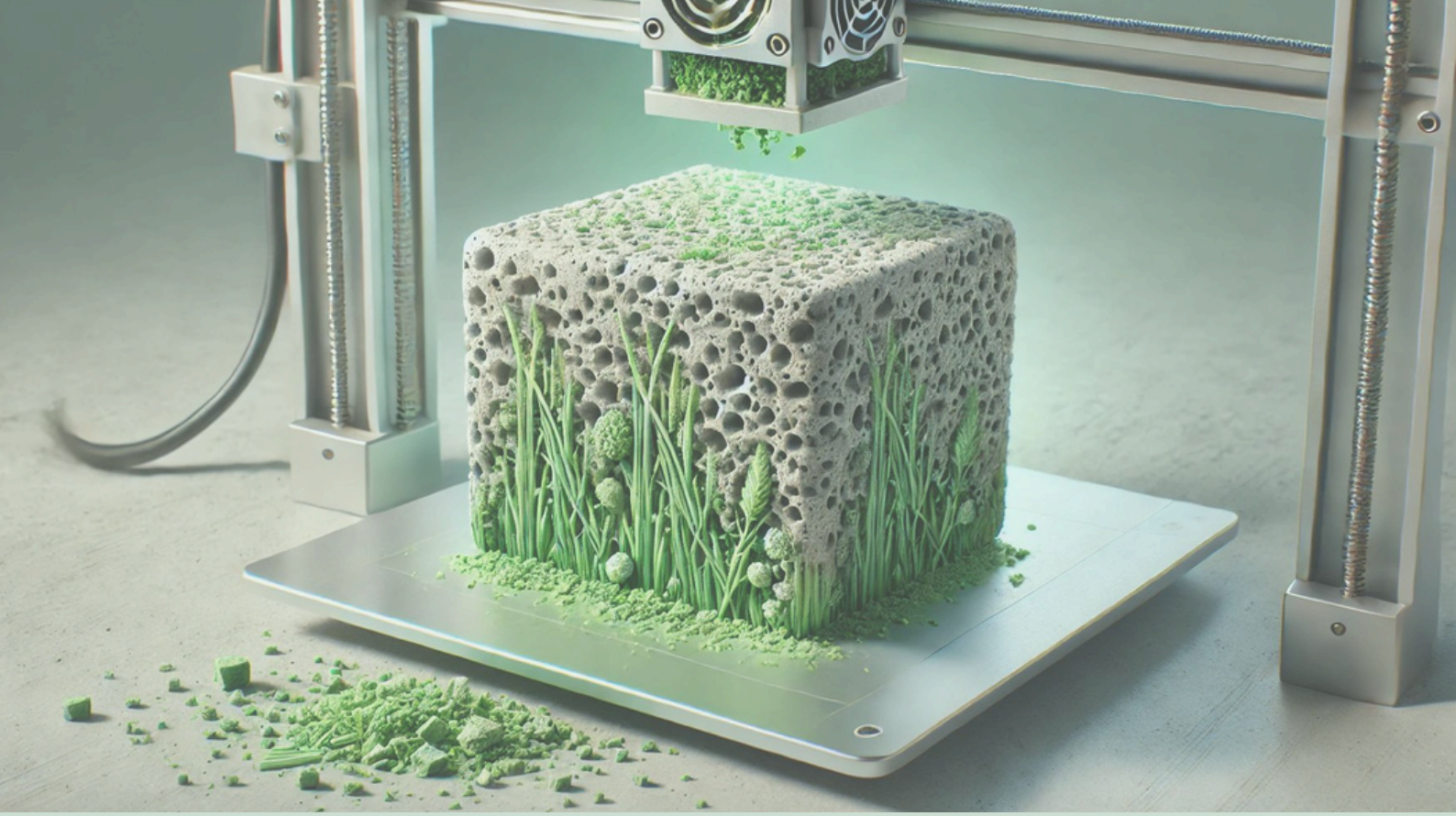

Register!

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.

- 3D printing of bio-based materials
- Bio-receptive concrete
- Bioashes and biochar in concrete
- Hempcrete and cellulose-based materials
- Sustainability and circularity in construction

03/12/2023, 9:00am - 4:00pm

Luleå University of Technology and online

magdalena.rajczakowska@ltu.se

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PROGRAM

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

09:30 – 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 – 11:50 Chamini Liyanage, RMIT, Australia
“Enhancing the Strength of Cementitious Composite by Integrating Upcycled Textile Cellulose.”

11:50 – 12.20 Clas Dahlén, HempInnovations, Sweden

12:30 – 13:20 Lunch break

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 Kingdon
"Utilisation of processed biomass ash as partial cement substitute "

14:45 – 15.00 Fika

15:00 – 15.20 Marcin Sundin, LTU, Sweden
"Eggshell Powder as a Natural and Sustainable Fire Retardant: Proof of Concept in Concrete Applications”

15:20 – 15.40 Emmanuel Mache, LTU, Sweden
“Utilization of paper pulp industrial residues for low-clinker content cement production”

15:40– 16:00 Discussion and closing

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