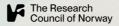
## Welcome to the conference

Recent advances in

## cellulose nanotechnology research

Production, characterization and applications

11-12 September 2024



The Research Council of Norway is acknowledged for financial support



RISE PFI is part of RISE - Research Institutes of Sweden

## Program

11 September

10.45

08.30	Registration
09.00	Philip Reme (RISE PFI) Welcome to the research seminar
09.05	<b>Mihaela Tanase-Opedal</b> (RISE PFI) The potential of microalgae as a source of cellulose and nanocellulose
09.30	Wim Thielemans (KU Leuven) Optimizing nanocellulose surface interactions for improved performance in supercapacitor electrode and microalgae flocculation applications
10.00	<b>Tekla Tammelin</b> (VTT) Nanocellulose Hybridized with Inorganic Nanomaterials with Electrochemical and Optical Features
10.30	Coffe break

**11.10** Asle Hammer (NTNU)
Characterization of the hygroscopic behavior of cellulose and cellulose esters

Effect of lignin content on the multistage mechanical fibrillation of kraft pulps and on the aqueous acetylation of

Nanci Ehman (RISE PFI)

the nanofibers

11.30	Simen Følkner Prang (Norske Skog Saugbrugs) Filling a void in thermoset coatings with cellulose nano fibrils
12.00	Lunch will be served in RISE PFI's premises
12.45	<b>Henrikki Liimatainen</b> (University of Oulu)  Tailoring the characteristics of porous solids of cellulose nanomaterials for advanced applications
13.15	<b>Gilberto Siqueira</b> (EMPA) Nanocellulose spray coating and aerogels for packaging
13.45	Katri Kontturi (VTT) Cellulose surface modification via polymer physisorption in non-polar environment
14.15	Coffee break
14.30	Amalie Solberg (RISE PFI) Self-assembling alginate-based block polymers
14.30 15.00	
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15.00	Self-assembling alginate-based block polymers  Marianne Øksnes Dalheim (RISE PFI) Self-assembling cellulose-based block polymers for layered structures  Sole Peresin (Auburn University) Nanocellulose-based assemblies for emerging
15.00 15.30	Self-assembling alginate-based block polymers  Marianne Øksnes Dalheim (RISE PFI) Self-assembling cellulose-based block polymers for layered structures  Sole Peresin (Auburn University) Nanocellulose-based assemblies for emerging contaminants remediation  Akira Isogai (University of Tokyo) Natural rubber/CNF composites with high dry and wet
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## 12 September

**09.00** Synnøve Holtan (Borregaard) Borregaard's Cellulose Fibrils in Coatings **09.30 Eva Pasquier** (RISE PFI) Implementation of end-of-life analysis methods for cellulose-based products **09.50** Karthik Raghunathan (RISE PFI) From simulation to solutions: Computational strategies for nanocellulose and bio-based molecule research 10.10 Coffee break **10.30 Johana Kunvova-Kallio** (UPM Biomedicals) Nanocellulose as a sustainable non-animal implantable material 11.00 Susana Fernandes (UPPA) Structural features of macroalgae cellulose and nanocellulose **11.30** Koon-Yang Lee (Imperal College London) Nanocellulose in unconventional applications: Binders for loose fibres, stopping bullets and aerosol particulates 12.00 Lunch will be served in RISE PFI's premises 13.00 Kristin Syverud (RISE PFI) Tailoring bio-based materials with functionalized nanocellulose 13.20 Jost Ruwoldt (RISE PFI) Exploring new applications for lignin-nanoparticle systems **Øyvind Eriksen** (RISE PFI) 13.40 Conclusions and perspectives

14.00 Guided tour in RISE PEI's laboratories