

**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

**PFI**

RISE PFI is part of RISE – Research Institutes of Sweden

# Program

## 11 September

**08.30 Registration**

**09.00 Philip Reme** (RISE PFI)  
Welcome to the research seminar

**09.05 Mihaela Tanase-Opedal** (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 Tekla Tammelin** (VTT)  
Nanocellulose Hybridized with Inorganic Nanomaterials with Electrochemical and Optical Features

**10.30 Coffe break**

**10.45 Nanci Ehman** (RISE PFI)  
Effect of lignin content on the multistage mechanical fibrillation of kraft pulps and on the aqueous acetylation of the nanofibers

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

- 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 Henrikki Liimatainen** (University of Oulu)  
Tailoring the characteristics of porous solids of cellulose nanomaterials for advanced applications
- 13.15 Gilberto Siqueira** (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
- 15.00 Marianne Øksnes Dalheim** (RISE PFI)  
Self-assembling cellulose-based block polymers for layered structures
- 15.30 Sole Peresin** (Auburn University)  
Nanocellulose-based assemblies for emerging contaminants remediation
- 16.00 Akira Isogai** (University of Tokyo)  
Natural rubber/CNF composites with high dry and wet strengths
- 16.30 Poster session.** Snacks and beverages will be served
- 18.30 Bus transportation** from RISE PFI to Kvilhaugen gård
- 19.00 Dinner at Kvilhaugen gård**

## 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** (Imperial 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
- 13.40** **Øyvind Eriksen** (RISE PFI)  
Conclusions and perspectives
- 14.00** Guided tour in RISE PFI's laboratories