

We hope to attract a wide audience, bringing together producers of cellulose fibres, representatives from industry that may see a potential for nanofibrillar cellulose, as well as scientists working with wood fibres and material technology, allowing a fruitful exchange of knowledge and ideas.

The arrangement will be hosted by PFI at Gløshaugen in Trondheim, address Høgskoleringen 6B. Regarding hotel reservations we recommend Britannia Hotel. More information is available at the PFI homepage.



## Research seminar: Nanofibrillar cellulose – promising new materials

Arranged by

Papir- og fiberinstituttet AS  
Paper and Fibre Research Institute



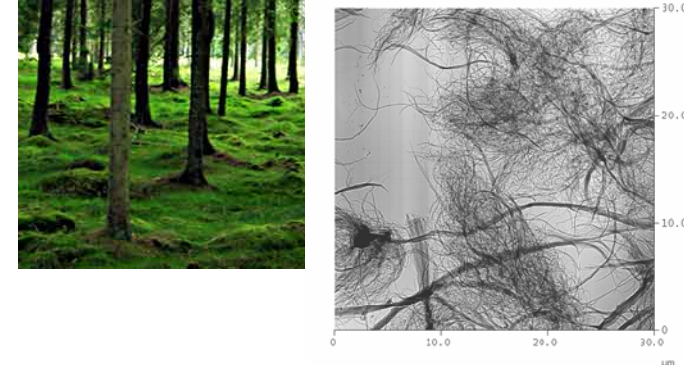
You can find more information about  
the arrangement at the PFI  
homepage:

[www.pfi.no](http://www.pfi.no)

PFI, SINTEF and NTNU invite to  
research seminar

## Nanofibrillar cellulose – promising new materials

PFI, Trondheim,  
1 – 2 November, 2006

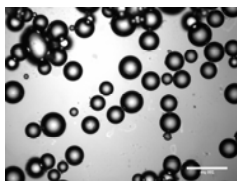


The use of cellulose fibres in paper production is a nearly 2000 year old invention. The modern processes for production of fibres from wood are approx. 150 years old. We are currently facing the next step in the development of woodbased materials: The production and utilization of micro- and nanofibrillar cellulose and the variety of products this may lead to.

The cellulose polymer, synthesized by nature, represents a considerable natural resource. There is a large net annual increase in wood fibre production in Norway. These wood fibres have currently no use, and for the forestry and wood processing industries it is very important to make value of this fibre surplus. The situation is similar in many European countries.

There is an increasing competition within the pulp and paper industry. This makes it necessary for the producers to add value to their products in order to meet the challenges that are foreseen. Production, modification and tailored applications of nanofibrillar cellulose may be the way to go.

In this research seminar we will focus on ongoing research at PFI/SINTEF/NTNU within production, surface modification and applications of nanofibrillar cellulose.



## Programme

### November 1:

10:30 Registration

11:30 Lunch

12:30 Welcome to the research seminar

12:45 From cellulose fibres to microfibrillar cellulose (MFC)  
(Per Nygård, PFI)

13:15 Characterization of MFC (Øyvind Gregersen, NTNU)

13:45 Energy consumption and morphology of MFC  
produced by grinding (Hiroki Nanko, IPST)

14:15 Coffee break

14:30 Virgin MFC as surface layer of paper (Kristin  
Syverud, PFI)

15:00 Why new applications require new fibre (Mikael  
Lindström, STFI-Packforsk)

15:30 Wood fibre composites – from micro to nano (Bjørn  
Steinar Tanem, SINTEF)

16:00 Presentation of NTNU Nanolab (Thomas Tybell,  
NTNU)

18:30 Dinner

### November 2:

08:30 NANOMAT: Current status and future plans (Dag  
Høvik, The Research Council of Norway)

09:00 Chemical surface modification of MFC (Per Stenstad,  
SINTEF)

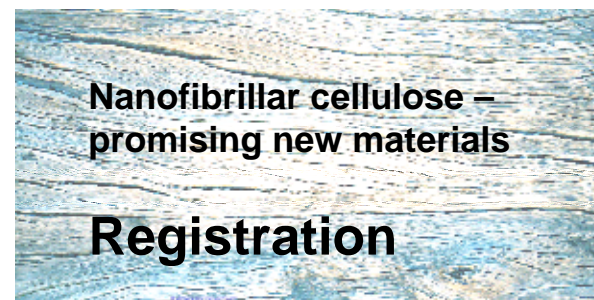
09:30 Characterization and applications of surface modified  
MFC (Martin Andresen, NTNU)

10:00 MFC as a barrier enhancer in food packaging  
systems (Karin Øyaas, PFI)

10:30 Applications of MFC – challenges and possibilities  
(Per Stenius, NTNU)

The subject is open for discussion.

11:30 Lunch and closing of the seminar



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Name

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Position

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Affiliation

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Address

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Phone

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E-mail

Conference fee: NOK 2 800 incl. VAT (350 €)  
(includes lunch both days and dinner Nov. 1)

Terms of payment: See the homepage  
[www.pfi.no](http://www.pfi.no)

Please register to Elin Bremseth (PFI),

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