



Licentiate student position in Nanocellulose development with specialization in surface modification

MoRe Research Örnsköldsvik AB together with FSCN – Mid Sweden University is searching for a licentiate student in the field of Nanocellulose development with specialization in surface modification of wood fibers using multi-layer techniques.

FOR MORE INFORMATION

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We decline contact with sellers of advertising and recruitment services.

APPLICATION

The application must contain: (1) one-page statement describing your motivation for applying this position, (2) transcripts from your prior degree programme(s), and (3) a CV. Please send all documents electronically to: info@more.se

**Deadline for application:
2016-08-15**

FSCN – Fibre Science and Communication Network is a multi-disciplinary research centre at Mid Sweden University. FSCN develops research that improves the forest industry's profitability and creates new applications and business opportunities based on sustainable bio-materials from the forest.

MoRe Research Örnsköldsvik AB is a neutral and independent research and development company in the field of products and processes for e.g. the forest industry. MoRe Research, alongside Holmen, Melodea and SP Technical Research Institute of Sweden, is investing in the field of nanocellulose by building a pilot facility for producing nanocrystalline cellulose, in Örnsköldsvik. The facility will be the first of its kind in Europe and represents an important step for the development of new materials from cellulosic raw material and commercialization of nanocrystalline cellulose in variety of applications.

PROJECT OVERVIEW

The main objective of the project is to investigate how to facilitate and reduce related costs when using multilayering techniques in paper material production. Multilayering techniques are used today to increase the strength properties of different paper materials, e.g. paper and board. In this technique, an oppositely charged polyelectrolyte adsorbs on a charged surface, in this case a negatively charged fibre surface. The substrate is recharged and then, as a second oppositely charged polyelectrolyte is added, the surface is again recharged. The process can be repeated and a large number of layers formed. The anionic component used commercially today is related to relatively high costs. The objective is to investigate if nanocellulose could be used as the anionic component and if this solution could generate cost savings.

TERMS OF EMPLOYMENT

Employer: MoRe Research Örnsköldsvik AB, Örnsköldsvik, Sweden.

Employment: The post graduate employment is intended to be an employment equivalent to two years of fulltime research studies and aims to lead up to a licentiate degree. The appointment may be extended up to the doctoral degree, provided that additional funding can be obtained. The employee will have a close collaboration with other researchers and PhD students within FSCN – Mid Sweden University.

Start date as soon as possible or as per agreement (not later than October 1st 2016).

Supervisor: Prof. Per Engstrand FSCN – Mid Sweden University

ELIGIBILITY AND ASSESSMENT CRITERIA

Entry requirements: To meet the basic entry requirements for doctoral programmes applicants must have a second-cycle degree or have completed studies for at least 240 credits, of which at least 60 credits were awarded in the second-cycle, or have equivalent qualifications.

Selection criteria: Apart from the formal competence the selection will also be based on other work (i.e. thesis work), courses and on interviews of the applicant. Prior experience in fiber technology, paper making and cellulosic chemistry and technology. Personal qualities like teamwork skills, spirit of initiative, and suitability for PhD studies will be weighted together with the formal subject knowledge.