

## WWSC Workshop November 2021

November 24 – 26  
Sånga-Säby, Ekerö

### Wednesday November 25

- 10.30      *Bus leaving Cityterminalen, Stockholm*
- 12.10      *Lunch*
- 13:10      Welcome and introduction**  
Eva Malmström, Center Director
- 13:30      The supramolecular structure of cellulose I: Why are there different ‘opinions’ about the supramolecular structure of cellulose I?**  
Tomas Larsson, KTH / RISE
- 13:50      Ice-templated preforms for biocomposites and green electrodes**  
Kristiina Oksman, LTU
- 14:10      What does bibliometrics tell about the impact of WWSC research?**  
Lisbeth Olsson, Chalmers
- 14:50      *Break. Possibility to check in to rooms from 15.00.*
- 15:20      On the use and misuse of bibliometric data**  
Lars Kloos, KTH
- 16:00      Pitch session**
- 17:00      Poster session 1**
- 18:00      Poster session 2**
- 19:00      *Dinner*



## Thursday November 25

- 09:00**      **Exploring cellulose nanofiber networks with X-ray scattering and digital twins**  
Tomas Rosén, KTH
- 09:20**      **Cellulose joint formation - model surfaces and high-resolution measurements**  
Torbjörn Pettersson, KTH
- 09:40**      **Ion diffusion in nanocellulose membranes: Molecular dynamics study**  
Igor Zozoulenko, LiU
- 10:00**      **Softwood hemicellulose as a stabilizer for bicontinuous cubic liquid crystalline phase nanoparticles**  
Polina Naidjonoka, Chalmers
- 10:10*      *Break*
- 10:40**      **Forest-based materials in organic solar cells**  
Mats Fahlman, LiU
- 11:00**      **Cellulose-conducting polymer aerogels for efficient solar steam generation**  
Simone Fabiano, LiU
- 11:20**      **Interplay of the electrical and mechanical properties of conjugated polymers**  
Christian Müller, Chalmers
- 11:40**      **Modelling of volumetric double-layer charge storage in PEDOT:cellulose composites**  
Ihor Sahalianov, LiU
- 12:00**      **Cellulose-based cathode for high-power battery**  
Shizhao Xiong, Chalmers
- 12:10*      *Lunch*

- 13:10**      **In-situ processes and characterisation for nanocellulose-based materials**  
Aji Mathew, SU
- 13:30**      **Wood-based functional materials: from assembly of nanocelluloses to in-situ wood cell wall modification**  
Qi Zhou, KTH
- 13:50**      **Eco-friendly and sustainable processing of wood-based materials**  
Bernd Wetzel, The Leibniz-Institut für Verbundwerkstoffe, Kaiserslautern, Germany
- 14:50*      *Break*
- 15:20**      **Bark-biorefinery highlights**  
Monica Ek, KTH
- 15:40**      **Towards structure- and molecular-weight-dependent uses of technical lignin**  
Olena Sevastyanova, KTH
- 16:00**      **Degradation in open environment: Carbon dot-triggered photocatalytic degradation of cellulose acetate**  
Minna Hakkarainen, KTH
- 16:20**      **Towards hierarchies with wood components**  
Tiina Nypelö, Chalmers
- 16:40**      **Fabrication of flexible films from cellulose nanocrystal suspensions: properties and applications**  
Amit Sonker, Chalmers
- 16:50**      **Fibril alignment and tradeoffs between nanostructure and functional groups in composites**  
Fredrik Lundell, KTH
- 17.10*      *Activity*
- 19.00*      *Dinner*

## Friday November 26

*Check out from rooms no later than 09.00.*

- 09:00**      **Molecular modulation of cellulose and its characterization:  
topological surface tuning and characterization of CNC systems**  
Gunnar Westman, Chalmers
- 09:20**      **Lignin transport over membranes**  
Anette Larsson, Chalmers
- 09:40**      **Enzymes for wood valorization**  
Lisbeth Olsson, Chalmers
- 10:00**      *Break*
- 11:00**      **Plant bioelectronics**  
Eleni Stavriniidou, LiU
- 11:20**      **Wood nanostructure control towards multi-functionalities**  
Yuanyuan Li, KTH
- 11:40**      **X-ray diffraction analysis of well-dispersed 2D layered silicates in  
CNF matrix**  
Lengwan Li, KTH
- 11:50**      **Concluding remarks**
- 12:10**      *Lunch*
- 13:30**      *Bus back to Stockholm C*