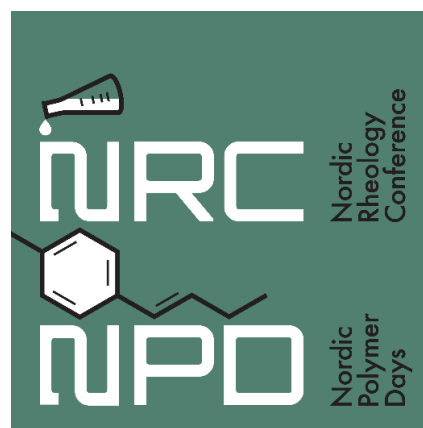


## Conference report: Nordic Rheology Conference & Nordic Polymer Days 2021

On August 18-20, 2021, the joint Nordic Rheology Conference (NRC) & Nordic Polymer Days (NPD) brought together 138 delegates from the Nordic countries and beyond. The conference was postponed from 2020 due to the COVID-19 pandemic, and eventually a decision was made to organize the conference in Cyberspace using an avatar-based virtual platform provided by Virtway Events and Omniprex. This was the third time that NRC and NPD were held jointly – the previous times being in 2011 and in 2016, both times in Helsinki. The NRC&NPD2021 was co-organized by the Nordic Rheology Society (NRS) and the Society for Wood and Polymer Chemistry in Finland (SPPY). The conference was chaired by Olli-Ville Laukkanen (RWTH Aachen University), with the help of co-chairs Sami Hietala (University of Helsinki), Sami-Pekka Hirvonen (University of Helsinki) and Michael Hummel (Aalto University). The general theme of the conference was “Sustainable Chemistry and Materials”.



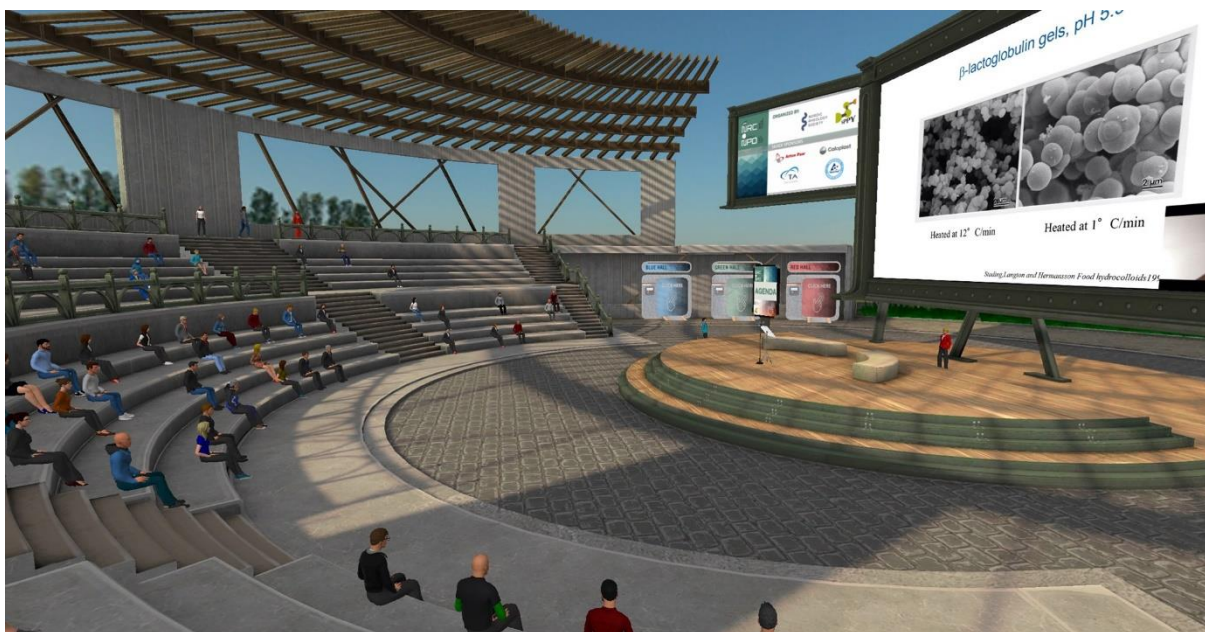
The conference was preceded by a ½-day rheology short course that was free of charge for conference participants. The course was mainly targeted for PhD students working with/on rheology, but it was also open for industry representatives. The course consisted of three lectures by Annika Sahlström (Reokonsa), Antti Koponen (VTT Technical Research Centre of Finland) and Katarina Dimic-Misic (Aalto University). The topics of these lectures were related to the fundamentals of rheology, as well as to its application in cellulose and suspension research. The short course was very popular, being attended by about 60 delegates.



*Oral conference presentations took place in three virtual lecture halls*

The scientific program featured 75 oral presentations and 15 poster contributions on a wide variety of topics related to rheology, polymers and biomaterials research. The presentations were divided into the following sessions: Rheology of biopolymers, Food rheology, Rheology of sustainable materials, Advances in rheometry, Non-Newtonian fluid mechanics, General rheology, Polymer synthesis, Sustainable polymers, Biopolymers, Polymer composites & processing, Functional polymers. The conference also featured an NRC industry workshop, hosted by Gustaf Mårtensson (Mycronic) and Fredrik Innings (Tetra Pak). The aim of this workshop was to discuss challenges on the modelling of complex flows in industrial processes.

The conference program was highlighted by plenary lectures of six internationally renowned materials scientists: Kiyohiko Igarashi (University of Tokyo / VTT Technical Research Centre of Finland), Anne-Marie Hermansson (Chalmers University of Technology), Robert Luxenhofer (University of Helsinki), Bernhard A. Wolf (Johannes Gutenberg University Mainz), Tiina Nypelö (Chalmers University of Technology) and Minna Hakkarainen (KTH Royal Institute of Technology). These plenary lectures covered emerging topics in the research of sustainable bio-based materials, and they sparked off lively discussions among the conference audience. During the conference, the NRS also awarded Prof. Hermansson with the Carl Klason Rheology Award for her outstanding achievements in the field of rheology.



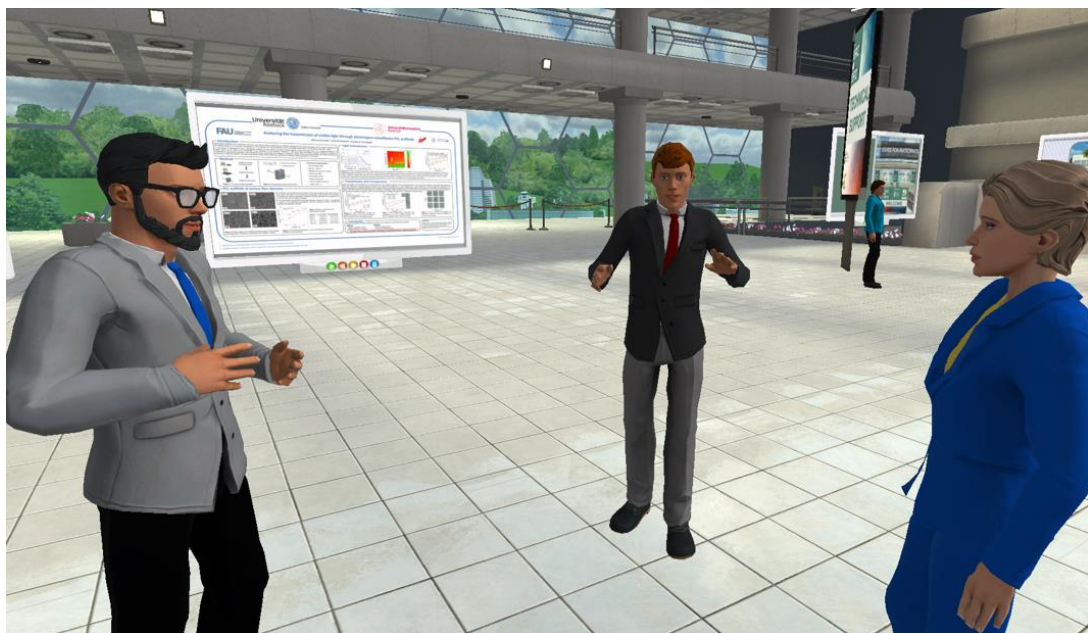
*Prof. Anne-Marie Hermansson giving her Carl Klason Rheology Award Lecture on the structure related rheology of food and biopolymers systems*

In order to support the high-quality scientific research presented at the conference, prizes were awarded to best oral and poster presentations. The best oral and poster presentation prizes sponsored by MDPI journal *Polymers* were handed to Linnea Cederholm (KTH Royal Institute of Technology) and Jennifer Tersteegen (Aalto University), respectively. The best presentation prize sponsored by Incipientus Ultrasound Flow Technologies was awarded to Christian Fengler (Karlsruhe Institute of Technology).



*The conference also featured a quiz that was hosted by Dr. Alexandra Aulova*

The conference was financially supported by Anton Paar, Coloplast, TA Instruments, Tetra Pak and the Federation of Finnish Learned Societies. Moreover, the virtual conference center featured exhibition booths showcasing the products of Anton Paar, Incipientus Ultrasound Flow Technologies, Reokonsa and TA Instruments. The exhibition area also served as a meeting point for conference participants, a place where they could network and mingle with each other.



*Participants having a casual conversation during one of the conference breaks*



*An overview of the exhibition area; exhibition booths in the middle and posters on the sides*

As announced at the closing ceremony of the conference, the Nordic Rheology Conference 2022 will take place in Iceland, whereas the Nordic Polymer Days 2022 will be organized in Gothenburg, Sweden. We are looking forward to meeting you in person at these events!

NRC&NPD2021 core organizing committee,  
Olli-Ville Laukkanen, Sami Hietala, Sami-Pekka Hirvonen and Michael Hummel



*Group photo taken at the closing ceremony of the conference*