



2023 Rheology Lecture Series

The Australian Society of Rheology is presenting a national series of lectures, which is open to anyone interested in the flow and deformation of matter. The next event in the series will be held online.

Calendar details

Date:	Tuesday, February 07, 2023
Time:	5:00 to 6:00 PM
Eventbrite link:	https://www.eventbrite.com.au/e/australian-society-of-rheology-seminar-07-february-2023-registration-518137111047

Invited lecture

<p>Prof. Roland Kádár (Chalmers University of Technology, Sweden)</p>
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<p>Presentation Title Nanoparticles in simple and not-so-simple flows</p>

Abstract: The behaviour of nanoparticles in flow is one of the fundamental aspects for the upscaling of novel nanostructured materials into products with favourable performance. This includes efforts to increase the use of renewable materials and/or targeting new and/or multi-functional properties. The key lies in the nanoparticle-nanoparticle interactions and their interaction with the surrounding medium, whether it is a solvent or a polymeric matrix. These are essential factors that can drive, e.g. self-assembly and dispersion properties. In this framework, after a brief overview of our research, the presentation will highlight mainly some of our work on cellulose nanocrystal suspensions, especially in relation to novel synchrotron rheological experimental techniques we have been developing.

Speaker's biography:



Roland is an Associate Professor at Chalmers University of Technology in Göteborg, Sweden. He obtained his Bachelor degree in Mechanical Engineering, as faculty valedictorian, and Masters degree in Biomedical Engineering from the Polytechnic University of Bucharest. In 2010 he obtained his PhD degree working on dynamics of simple and complex fluids from the same university. Roland then moved as a postdoctoral researcher to the Karlsruhe Institute of Technology (KIT). In 2014 he was appointed on a tenured position at Chalmers, where he is leading a research group focused on the Rheology and Processing of Soft Matter. Roland is PI in the Wallenberg Wood Science Centre (WWSC 2.0) and the Vinnova Competence Centre '2D material-based technology for industrial applications' (2D-TECH). Roland is also Research

Competence Area leader for Predictive Processing within the FibRe Vinnova Competence Centre. In addition to his activities at Chalmers, Roland is currently the President of the Nordic Rheology Society.