

# EUROMAT 2019 / Bio-based materials

## SYMPOSIUM: I2

<b>Title: Nanocellulose</b>		
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<b>Abstract</b>		
<p>The fascinating properties of nanocellulosic materials, such as cellulose nanofibrils (CNFs) and cellulose nanocrystals (CNCs), have generated huge interest in researchers around the globe. In the last years, the number of publications has increased exponentially, and the materials have now been commercialized and are found in numerous products on the market. However, despite the incredible potential of these materials, they are still awaiting their true commercial breakthrough. Developing a thorough understanding of particle behavior, surface chemistry and de-watering is critical to fully optimize and exploit their use as strength agents, barriers, rheological modifiers, emulsion stabilizers, catalytic supports and reinforcing agents, amongst others. Furthermore, the ability to tailor nanocellulose properties for diverse applications, through processing, surface modification, or additive addition, is critical in order to meet commercial demands and specifications.</p> <p>This symposium aims to bridge the gap between fundamental research and nanocellulose applications, making the connection between particle-level features and macro-scale material properties. Characterization of CNFs and CNCs as well as their use in the preparation of novel nanomaterials will be highlighted with a strong focus on the links between nanocellulose properties and applications.</p> <p>Targeted topics of the session:</p> <ul style="list-style-type: none"><li>• Cellulose nanocrystal and nanofibril fundamentals</li><li>• Scale up and commercialization of nanocellulose</li><li>• Nanocellulose in packaging, coatings, and energy technology</li><li>• Porous materials and responsive hybrid systems containing nanocellulose</li></ul>		