



## The authors

### Description



#### **Clementine Darpentigny**

Clementine Darpentigny studied polymers for advanced technologies at the University of Grenoble Alpes. During her PhD she investigated the use of supercritical carbon dioxide for the functionalization of nanocellulose-based structures. This work was performed under the supervision of Bruno Jean, Guillaume Nonglaton and Julien Bras and was a collaborative project between the Centre de Recherches sur les Macromolécules Végétales (Cermav), the laboratory of pulp and paper science (LGP2), and the CEA-Leti in Grenoble. She graduated from the Doctoral School of Chemistry and Life Sciences in November 2019. She is now working at the LGP2 to study the performance improvement of high technicity papers.



#### **Bruno Jean**

Bruno Jean is a CNRS Research Scientist currently leading the "Structure and Properties of Glycomaterials" research team at CERMAV lab in Grenoble. His works deal with the investigation of structure-properties relationships in various molecular systems (polymers, surfactants, colloids) and are based on soft matter concepts and the use of X-ray and neutron scattering techniques on large-scale instruments. Since his recruitment at CERMAV in 2005, he focuses on nanocellulose production, derivatization and surface and bulk assembly with the aim of designing functional bio-sourced materials. He was especially recently involved in the investigation of cellulose nanocrystals-based multilayered films and in the design of innovative stimuli-sensitive nano cellulose assemblies