



FibreNet ( [www.fibrenet.eu](http://www.fibrenet.eu) ) is a Marie Skłodowska-Curie European Training Network (ETN). It forms a project that combines the research in 8 institutions across Europe. FibreNet is hiring altogether 15 future professionals for a period of three years to work on different cellulose-fibre related topics. This is a unique opportunity to build an extensive professional network and to work with both, industry and academic world, while being trained as a researcher and PhD in bio-based fibres technology.

## PhD student (f/m)

at Graz University of Technology (Austria)

3 years, starting summer 2018

**Position description:** Viscoelastic and viscoplastic properties are of high importance for the end-use performance of cellulose fibre materials. The deformation of cellulosic fibres contains an irreversible component, even under small load. This irreversible part of deformation is of high importance e.g. in the behavior of wood- or pulp fibre based composites or in converting of paper and paper products. In this research work we are investigating the viscoelastic and – plastic properties of individual pulp fibers. Mechanical tests on individual pulp fibers will be carried out under different loading modes (shear and normal load). These results are used to develop a material model of the fiber wall.

**Required qualification:** We are looking for candidates with a Master's degree in materials science, physics or mechanical engineering. Interest in optical microscopy and mechanical testing on the microscale is recommended. Knowledge in the field of cellulosic materials and their technology is an advantage.

**Application and terms of employment:** For details on salary, EU-prerequisites for the open position and documents required for application please see <http://fibrenet.eu/list-of-positions/irp12/> . Apply **until March 11<sup>th</sup> 2018** to [ulrich.hirn@tugraz.at](mailto:ulrich.hirn@tugraz.at) .



Graz University of Technology