INTERNSHIP/THESIS ASSIGNMENT

EFFECT OF WASHING ON RECYCLED FIBERS

Sustainability and the circular economy are increasingly important for producers and users of textile products. Due to new Extended Producer Responsibility (ERP), new products need to have an increasing amount of recycled fibers. In a circular economy these new products will be recycled as well after their lifetime. But what is the effect if this lifetime on the quality of the fibers. Little is known yet about the effect of washing on the recycled fibers. Therefor we want to research what the effect is of washing on for example fiber length.

Our Circular Textile Lab (CTL) offers the possibility to measure fiber properties, shredder textiles for recycling and spin fibbers into yarns.

TASK DESCRIPTION

- Measuring fiber properties like fiber strength.
- Creating yarns with different fibers (for example cotton, hemp and viscose) in the CTL lab.
- Knitting fabrics from the created yarns.
- Apply multiple washing cycles on the fabrics.
- Recycle fabrics in fibers by shredding.

PRACTICAL INFORMATION

- **Student profile:** This assignment is for textile students with an interest in sustainable textiles and textile processing.
- We are looking for a student that can work precisely and independent.
- As you will be working alongside other students and researchers in the lab we expect you to make a clear planning and have clear communication.
- **Contact person(s) for this assignment:** Laura Erkens l.m.erkens@saxion.nl
- **Research group Sustainable and Functional Textiles:** **saxion.nl/sft**