

Research Assistant (HiWi)

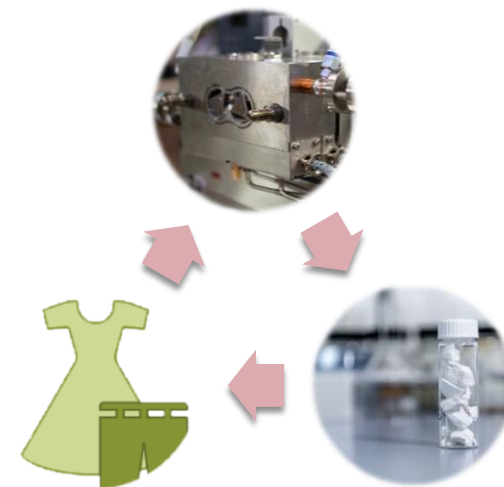
Chemical recycling of used textiles: The way to a closed-loop system

Despite growing awareness, textile recycling is still in its infancy: Recycled fiber accounts for only about 8.5% of the global fiber market, and only a fraction of that comes from true fiber-to-fiber recycling. Existing mechanical-thermal recycling processes often do not return raw materials to the original production process after processing, but instead use them for lower quality products. In particular, complex textile blends such as PET/CO (polycotton) remain a challenge because fiber blends, dyes, coatings, and contaminants make effective recycling difficult.

Your possible tasks (can be adjusted flexible ☺):

- **Laboratory experiments on depolymerization:** Experimental work on the application of the chemical recycling process to various textile blends, in particular PET/CO textiles, and evaluation of the quality of the monomers obtained.
- **Life Cycle Assessment (LCA):** Development of an environmental evaluation of the process over the entire life cycle to quantify sustainability and environmental impact.

At least 25 hours per month would be desirable (more is also possible)



Start as soon as possible or by agreement.

Interested? Further questions?
Feel free to contact me ☺



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