PTS FIBRE based solutions

Further job vacancies at PTS: **www.ptspaper.de/ueber-uns/stellenangebote**

Internship or Thesis (Research Project, Bachelor, Master, Diploma)

Wool keratin as a functional paper additive

Job Code – PTS-HK0103



Your Profile

- Degree program in Chemistry, Process Engineering and Natural Materials Technology, Materials Science, or a related field
- Initial experience in laboratory work
- Good knowledge of MS Office
- Good command of English
- Independent and precise working style
- Technical understanding and interest in solving complex problems
- Strong communication skills

Your Tasks

Independent scientific work under the supervision of the Functional Surfaces Department in a bioeconomy project investigating the utilization of wool keratin as a functional paper component.

- Literature research.
- Characterization of various wool by-products in terms of keratin content, ash content, residual fat content as well as thermal and morphological properties.
- Systematic screening and parameter optimization of environmentally friendly solvent systems (with a focus on deep eutectic solvents) for the dissolution and regeneration of keratin.
- Laboratory-scale preliminary trials on the use of keratin solutions and dispersions as bio-based barrier coatings or wet-strength agents for paper.
- Analysis, clear presentation and reporting of scientific results.

Your Perspective

- An exciting and varied role for professional and personal development
- Flexible working hours: full-time or part-time
- Valuable experience and insights into a modern research, development, and service environment
- Opportunity to contribute your own ideas
- Collaboration with an open and motivated team
- Reachable from Dresden in 20 min

Contact person

Lisa Beyer
+49 (0) 3529 551-720
career@ptspaper.de

Please apply via email with your complete application documents (cover letter, CV, and, if applicable, certificates – combined in a single PDF file), stating the job code and your earliest possible starting date.

Work location: Heidenau near Dresden

Starting immediately, part-time or full-time

We welcome applications from all suitable candidates regardless of gender, cultural and social background, age, religion, worldview, disability, or sexual identity.

DRESDEN concept
Exzellenz aus Wissenschaft und Kultur