

Institute of Bioproducts and Paper Technology

*Student Employee (x1) and Bachelor's and Master's thesis opportunities*

## High-Speed Inkjet Printing: Coating Development, Ink Setting, and Print Quality

We are looking for a motivated student employee to support our research project on high-speed inkjet (HSI) printing on coated paper. The project covers the full chain from coating formulation and application through ink–substrate interaction to final print quality. Research topics span coating design (pigment selection, binder systems, pore structure control), the physics of droplet impact and penetration, ink setting and colorant fixation mechanisms, and print quality assessment.

### Your tasks may include:

- Characterization of coated substrates (surface energy, absorption)
- Preparation and application of pigment coating formulations
- Droplet deposition experiments and visualization of ink–paper interaction
- Image processing and data analysis
- Support with documentation and presentation of results

### What we are looking for:

- Enrolled student in Chemical and Process Engineering, Materials Science, Physics, Chemistry, or a related field
- Curiosity and willingness to learn – no previous knowledge required
- Careful and motivated approach to experimental work
- Basic programming skills are a plus but not required
- Good command of English

### What we offer:

- A paid student employee position with flexible hours compatible with your studies (max. 20h per week)
- Hands-on experience with coating preparation, advanced imaging techniques, and printing experiments
- Direct involvement in an industry-relevant research project with international partners
- A supportive research environment with day-to-day supervision

**Student employee:** start as soon as possible

**Bachelor's and Master's thesis opportunities** are also available within the duration of this project (2026-2029). Master's theses include a paid position (1379,60€/month). We are happy to discuss topics tailored to your background and interests.

### Contact:

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