### COMET: K-Project

**Flippr²**

**Future Lignin and Pulp Processing Research – PROCESS INTEGRATION**

<table>
<thead>
<tr>
<th>Main location</th>
<th>TU Graz, Uni Graz, Steiermark; BOKU, Niederösterreich</th>
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<tbody>
<tr>
<td>Other locations</td>
<td>Papierholz Austria, Kärnten</td>
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**Research programme**

Production of renewable raw materials on feedstocks of pulp and paper mills to substitute petrol-based materials. The focus of this project lies on the optimal separation of lignin from liquor and fines of the pulp and paper industry. The integration into the current process setting of pulp and paper mills is crucial, to achieve closed-loop technologies. In parallel the up scaling activities of already tested modifications and applications of lignin and fines will be continued.

**Planned realisation and outcomes**

- Industrial applicable high-speed analytical methods for resulting products are available
- Efficient technologies for the production of lignin and fines which are characterized by closed-loop processes which are fitting into the current process setup of pulp and paper mills.
- Development of modern technologies for downstream processing of specified products.
- Reduction of energy, water and chemical demand for the production of products from pulp and paper industry.

**History of establishment**

The company partners are cooperating in pre-competitive research projects in developing their individual biorefinery concepts. The scientific partners are supporting the industrial consortium since decades in answering R&D tasks regarding paper technology and chemistry – the established collaboration is very useful to reach the targets of Flippr².

**Selected company partners** (max. 10)

1. Mondi Frantschach GmbH
2. Sappi Gratkorn Produktions GesmbH & Co KG
3. Zellstoff Pöls AG
4. Papierholz Austria GmbH

**Selected scientific partners** (max. 5)

- Universität für Bodenkultur (Inst. f. Holztechnologie, AG für Chemie nachwachsender Rohstoffe)
- Technische Universität Graz (Inst. f. Papier-, Zellstoff- und Fasertechnik; Verfahrenstechnik; Prozess- und Partikeltechnik)
- Universität Graz (Inst. f. Systemwissenschaften, Innovations- und Nachhaltigkeitsforschung)

**Selected international partners** (max. 5)

**Start of the K-Project**

1. April 2017 (4 years)

**Number of personnel**

58 (FTE) are involved (56 FTE are scientists)

**Total costs**

EUR 5,321,136

**Leader of consortium:**

DI Thomas Timmel, Project manager

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www.flippr.at

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1 Partners with headquarters outside Austria

The COMET Project is funded within COMET – Competence Centers for Excellent Technologies – by BMK, BMDW as well as co-financing federal provinces. The COMET programme is managed by FFG. >> [www.ffg.at/comet](http://www.ffg.at/comet)

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