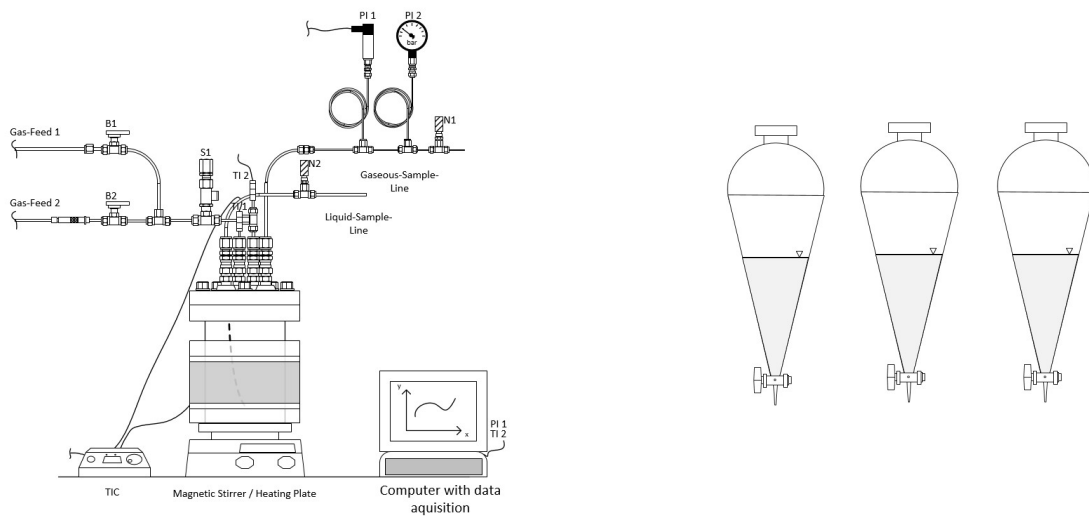


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| <input type="checkbox"/> Bachelor's Thesis             | <input checked="" type="checkbox"/> Biorefinery Project        |
| <input checked="" type="checkbox"/> Konstruktionsübung | <input checked="" type="checkbox"/> experimentell/experimental |
| <input checked="" type="checkbox"/> Master's Thesis    | <input checked="" type="checkbox"/> english or german          |

**Topic: Oxidation of lignin and extraction of value added products**

Modification of lignin solutions by oxidation in a batch reactor followed by liquid-liquid extraction of value added products e.g. vanillin. Varying parameters in oxidation (time, temperature,...) as well as in extraction (S:F-ratio; solvents, time of extraction...).

Goal: Optimised process parameters of oxidation and extraction for maximum yield of vanillin and needed specifications of final products.



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**Planned start:** October 2022