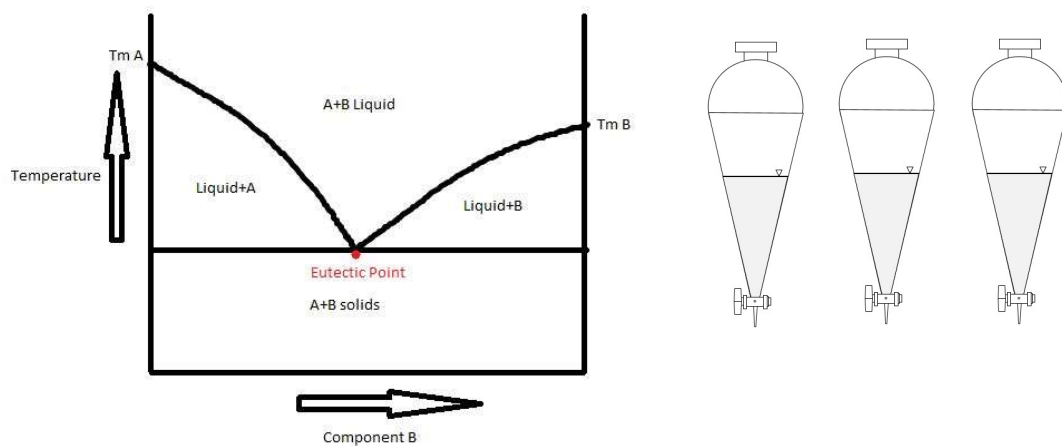


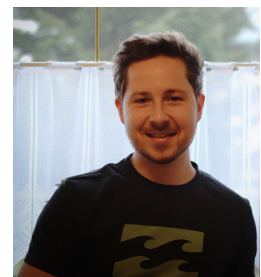
- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Bachelor's Thesis  | <input checked="" type="checkbox"/> Biorefinery Project         |
| <input checked="" type="checkbox"/> Konstruktionsübung | <input checked="" type="checkbox"/> experimentell/ experimental |
| <input type="checkbox"/> Master's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

## Topic: **Synthesis and characterisation of DES**

Deep eutectic solvents (DES) are synthesised from two or more components by mixing substances usually solid at room temperature and heating them above their individual melting temperatures. In case of eutectic behaviour a melting point depression is achieved through interactions of the single components, creating a eutectic solvent, which then stays liquid in a temperature range where the single components are not, and additionally combining their properties. Such DES shall be synthesised and furthermore be characterised regarding their resulting properties like density, viscosity as well as their usability in case of liquid-liquid extraction.



**Contact:** Dipl.-Ing. Alexander Kaufmann  
 Office: MCEG194  
 Inffeldgasse 25C/EG  
 E-Mail: [alexander.kaufmann@tugraz.at](mailto:alexander.kaufmann@tugraz.at)  
 Tel.: +43 316 873 – 7980



**Planned start:** October 2022