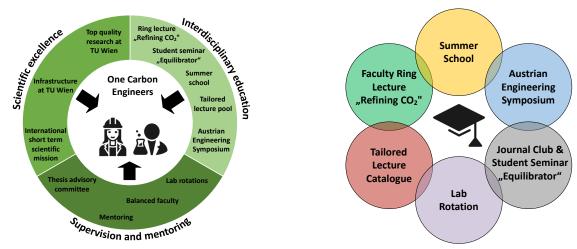
Welcome to CO₂Refinery!



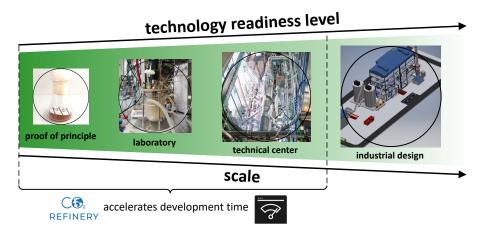
The main aim of this doctoral college (DK) is to train "one carbon engineer", which have a unique skillset in converting CO₂ and other one carbon molecules like methanol and carbon monoxide into value-added products. The TUW-DK CO₂Refinery will contribute by intensive joint research to the development of new processes and high-quality products to use CO₂ directly as carbon source.

The 10 PhD projects are now officially announced, apply here until 31st of December 2020: TU Career Portal



CO₂Refinery offers excellent scientific research, combined with a multi- and interdisciplinary curriculum (lectures and lab rotation) and a dedicated supervision and mentoring program. The PhD students are in the center of attention and their training and scientific advancement is the key to a successful implementation of this program. Research training will be obtained through work embedded into high-quality scientific research environments provided by supervisors that are internationally recognized experts in their fields and the close support through junior faculty members. In addition, a multifaceted training program will complement the research work and further advance their social and scientific skills.

Within the TUW-DK "CO₂Refinery", fundamental research concepts will be translated into technical sound and viable solutions for a technical center scale. This requires a tight collaboration between the different research areas and working groups which will foster an intensive scientific exchange in the faculty ("learning by doing", using a "Technikum" approach). The aim of this consortium and this training initiative is to develop new platform technologies to allow the efficient utilization of CO₂ substrate streams and to produce different platform chemicals, including solvents and food additives.



A cutting edge **CO2Refinery** approach based on the utilization of renewable energy sources will enable the manufacturing of new materials and open-up new economic possibilities in-line with a European and Austrianbioeconomy strategy. Ultimately, the joint research is to translate fundamental research concepts into technical sound and viable solutions for a technical centre (Technikum) scale. This requires a tight collaboration between the different research areas and working groups which will foster an intensive scientific exchange in the faculty.