



EINLADUNG
zum
virtuellen Vortrag von
Prof. Dr. Regina Palkovits
RWTH Aachen University, Aachen, Germany

**Catalytic Valorization of Renewable
Carbon Resources**

Dienstag, 24. Mai 2022, um 17:30 Uhr

Zoom-Meeting beitreten:

<https://univienne.zoom.us/j/68865461756?pwd=ZGdzbU44VSsyNXQ2Z1JWWWE5GTWxvUT09>

Meeting-ID: 688 6546 1756

Kenncode: 185915

Abstract

Renewable carbon feedstocks such as biomass and CO₂ present an important element of future circular economy. Especially biomass as highly functionalized feedstock provides manifold opportunities for the transformation into attractive platform chemicals. However, these resources require novel paradigms in process design. Fossil feedstocks are processed in stationary gas-phase processes at elevated temperature. On the contrary, biorefineries are based on processes in polarsolvents at moderate conditions to selectively deoxygenate the polar, often thermally unstable and high-boiling molecules. Considering “green electrons” provided by renewable energy technologies, also dynamic (electro)catalytic processes become attractive as key technology of a throughout circular economy.

Herein, novel concepts in catalyst design will be discussed focusing on solid molecular catalysts for CO₂ activation, novel biomass transformations and the contribution of catalysts in life cycle assessment as well as the future role of a potentially electrified biorefinery.

CHEMISCH-PHYSIKALISCHE GESELLSCHAFT

c/o Universität Wien, Fakultät für Physik, 1090 Wien, Strudlhofgasse 4/Boltzmanngasse 5, Austria

Generalsekretär: Christl Langstadlinger

Tel.: +43-(0)1-4277/51108 - Mobil: 0664-60277 51108 - E-Mail: christl.langstadlinger@univie.ac.at

ZVR-Zahl: 513907440 - <http://www.cpg.univie.ac.at>

Konto: Bank Austria - IBAN: AT22 1100 0086 4440 8000 - BIC: BKAUATWW