

CURRICULUM VITAE

Dipl.-Ing. Lukas Zeilerbauer

CONTACT DETAILS

First name/last name Lukas Zeilerbauer
Telephone +43 732/2468 – 5646
E-Mail zeilerbauer@energieinstitut-linz.at

EDUCATION

10/2018 – 06/2020 Master's programme Management in Chemical Technologies
Johannes-Kepler-University Linz
Thesis title: „Optimizing the catalytic depolymerisation of Lignin”

08/2016 – 12/2016 Semester abroad
Elmhurst College, Illinois, USA

10/2014 – 07/ 2018 Bachelor's programme “Technical Chemistry”
Johannes-Kepler-University Linz

WORK EXPERIENCE

From 06/2020 Research associate in the Energy Engineering department at
Energieinstitut an der Johannes-Kepler-Universität Linz

09/2019 – 4/2020 Master student at Kompetenzzentrum Holz (Wood K Plus) in the
department of Wood Chemistry and Biotechnology.

09/2018 – 09/2019 Student Assistent at Energieinstitut an der Johannes-Kepler-
Universität Linz

WORKS AS FIRST AUTHOR IN PEER-REVIEWED JOURNALS

- **Zeilerbauer, L.**, Lindorfer, J., Süss, R., & Kamm, B. (2022). Techno-economic and life-cycle assessment of a wood chips-based Organosolv biorefinery concept for production

of lignin monomers and oligomers by base-catalyzed depolymerization. *Biofuels, Bioproducts and Biorefining*, 16(2), 370-388.

WORKS AS CO-AUTHOR IN PEER-REVIEWED JOURNALS

- Süss, R., Kamm, B., Arnezeder, D., **Zeilerbauer, L.**, & Paulik, C. (2022). Homogeneously catalyzed depolymerization of lignin from organosolv medium: Characterization, optimization, and minimization of coke formation. *The Canadian Journal of Chemical Engineering*, 100, S38-S48.
- Süss, R., Aufischer, G., **Zeilerbauer, L.**, Kamm, B., Meissner, G., Spod, H., & Paulik, C. (2022). Depolymerisation of organosolv lignin by supported Pt metal catalysts. *Catalysis Communications*, 170, 106503
- Rodin, V., **Zeilerbauer, L.**, Lindorfer, J., Paulik, C., & Finger, D. (2022). Life cycle assessment of a novel electrocatalytic process for the production of bulk chemical ethylene oxide from biogenic CO₂. *Frontiers in Sustainability*, 3, 799389

Poster Presentations

Zeilerbauer, L. (2022, November 9-11). *The multifunctionality problem in Life Cycle Assessment and its influence on the sustainability assessment of plastic recycling*. [Poster Presentation] Recy & Depotech, Leoben, Austria. https://www.recydepotech.at/media/Programmheft_138.pdf

Zeilerbauer, L. (2021, September 6-8). *Life cycle Assessment of a wood chips-based organosolv biorefinery concept for the production of value-added phenolic monomers from lignin using an optimized base-catalysed-depolymerisation (BCD) approach*. [Poster presentation] 10th LCM conference, Stuttgart, Germany. <https://lcm2021-media.org/document/techno-economic-and-life-cycle-assessment-of-a-wood-chips-based-organosolv-biorefinery-concept-for-the-production-of-value-added-phenolic-monomers-from-lignin-using-an-optimized-base-catalysed-depolym/>

Vorträge nach Einladung

Zeilerbauer, L. (2022, November 23). *Life Cycle Assessment of high temperature heat pumps*. [Webinar], BAMBOO Project.