



Rüdiger Lück

Date of birth: 07/07/1997 | **Nationality:** German | **Phone number:**

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Address: Vienna, Austria (Home)

WORK EXPERIENCE

01/08/2022 – CURRENT Vienna, Austria

PROJECT ASSISTANT TU WIEN, RESEARCH GROUP FOR INTEGRATED BIOPROCESS DEVELOPMENT

- research interest: continuous microbial processing as an enabler for sustainable biomanufacturing
- abilities: recombinant protein production with lab scale INFPOR HT bioreactor, analytical methods for process and product characterization, software tools for digital bioprocessing (Python, Lucullus, eve)

Website <https://www.tuwien.at/en/tch/icebe/ibdgroup>

31/05/2020 – 29/09/2021 Dresden, Germany

STUDENT ASSISTANT TU DRESDEN, PROCESS SYSTEMS ENGINEERING GROUP, CHAIR OF PROCESS CONTROL SYSTEMS

- support in scientific research project: modular demonstration plant for the flexible use of biogenic residues; team work on the digital simulation twin of the plant, modeling of continuous absorption-desorption process in Aspen Plus
- software abilities: Matlab/Simulink, AspenPlus, LaTeX

30/09/2019 – 08/02/2020 Stuttgart, Germany

INTERNSHIP MAHLE FILTERSYSTEME GMBH

- test engineering: product testing and validation of air filtration systems for vehicles
- development engineering: design optimization of raw air routing by model-based tools
- software abilities: Solidworks, Solidworks FlowSimulation

30/04/2017 – 29/04/2018 Radebeul, Dresden, Germany

TUTOR FOR STUDENTS COLLEGE LINE

- out-of-school teaching for students: several subjects (math, chemistry, English); different group sizes (private lessons up to 10 students)

EDUCATION AND TRAINING

02/2022 – 06/2022 Dresden, Germany

DIPLoma DEGREE (DIPL.-ING.) TU Dresden, Chair of Chemical Process Engineering

Website <https://tu-dresden.de/ing/maschinenwesen/ifvu/cvt> | **Field of study** Chemical Process Engineering |

Thesis Conception of a continuously operated three-phase suspension reactor for thermochemical energy storage

17/10/2021 – 30/04/2022 Wien

ERASMUS AUSTRIA TU Wien, Research Group for Chemical Reaction Engineering and Combustion

- experimental work and model-based design on reactors for thermochemical energy storage

Address Getreidemarkt 9/166-3, 1066, Wien |

Website <https://www.tuwien.at/en/tch/icebe/e166-03/e166-03-2-research-group-for-chemical-reaction-engineering-and-combustion> |

Field of study Chemical Process Engineering

- development and optimization of hybrid model structures: using generic process models for smart plants
- software abilities: Matlab, Matlab Simulink

Address 01062, Dresden, Germany |

Website https://tu-dresden.de/ing/maschinenwesen/ifvu/svt/studium/studentische-arbeiten/abgeschlossen?set_language=en |

Final grade 1,7 | **Number of credits** 20 |

Thesis Dynamic, hybrid semi-parametric models for the design-space specification in modular plants

04/03/2021 – 10/05/2021

KEEN HACKATHON Dechema e.V., TU Dortmund, ABB

- young researcher project hosted by Dechema e.V.
- development of a soft-sensor for detecting operation states in an extraction column, application of image recognition based on deep learning methods
- software abilities: Python (TensorFlow, Keras)

Website <https://www.achema.de/en/the-achema/innovation-challenge/keen-challenge>

● LANGUAGE SKILLS

Mother tongue(s): **GERMAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	C1	C1	C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● DIGITAL SKILLS

Programming

Python | MATLAB & MATLAB Simulink

Further skills

Microsoft Office | LaTeX | Lucillus | AspenPlus | Solidworks

Laboratory

INFORS HT Bioreactor | GEA Lab Homogenizer PandaPLUS