

Interested? Send your CV, motivation letter and references to markus.lukacevic@tuwien.ac.at and michael.harasek@tuwien.ac.at
Reference: "Postdoc position WC3D – Chemical engineering of wood-based biocomposites".

Postdoc position for Chemical engineering of wood-based biocomposites

(m/f/d)



ICEBE
IMAGING
NATURE



WoodComp3D

Start of employment:	October 2024
Duration of employment:	2 years, Full-time (40 h/week) – possible extension after agreement
Employer:	Technische Universität Wien (TU Wien)
Place of work:	Vienna, Austria
Salary:	The gross salary for this Postdoc position is € 4.752,30 (14 times per year), full-time according to the collective agreement for university employees (salary group B1).

Description of position and tasks

The position will be part of the **Christian Doppler Laboratory for Next-generation wood-based biocomposite (WoodComp3D)**. The project goal is to reassemble the ingenious lightweight structure present in sawmill byproducts into macroscopic load-bearing structures in a sustainable way. This way, we could double the yield of sustainable load-bearing structures produced from wood immediately without using additional natural resources. For more information on this 7-year project, see also <https://www.woodcomp3d.at>.

You will become part of a diverse, international, interdisciplinary, professional team. The team consists of three professors, three postdocs, and five PhDs, combining fields like process engineering, material chemistry, chemical engineering, and mechanical engineering.

You will be involved in the development of wood-based biocomposites, covering the entire process—from fiber production using various pulping methods, through the combination of these fibers with lignin and extractives, including enhancing their reactivity, to the final production of biocomposites using techniques such as hot-compression molding. Your role will include both direct participation in these process steps and the supervision and support of PhDs/students in planning, executing, and discussing the outcomes of their activities.

Competences and experiences

Compulsory Requirements

- You have completed (or are close to) your PhD in chemical engineering or technical chemistry.
- You have experience in fiber/lignin/wood chemistry.
- English spoken and written to at least a C1 level (certification) and good communication skills.
- You can work and collaborate in an international team but also be independent to carry out your own tasks.
- You are curious and passionate about science.

Nice to Have

- Experience in analytical characterization of lignocellulosics and wood chemistry.
- Experience in lignocellulosic biomass pretreatment.
- Knowledge of German/Willingness to learn. Learning German can facilitate your inclusion in work and life in Austria.

We offer

- Continuing personal and professional education, and flexible working hours.
- TU Wien offers various coaching programs for postdocs for career development.

Company description

TU Wien is Austria's largest research and educational institution in the technical and scientific field. It has been making an indispensable contribution to securing Austria's international competitiveness and innovative strength as a research location. The position will be at the Institute of Chemical, Environmental & Bioscience Engineering (ICEBE), within the

Employer

TU Wien
<https://www.tuwien.at>

Contact TUW-ICEBE

Dr. Markus Lukacevic, Ao.Prof. DI Dr. Michael Harasek
<https://www.tuwien.at/tch/icebe>
<https://www.woodcomp3d.at>

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Research Unit Thermal Process Engineering and Simulation. The Research Unit covers a broad range of processes and technologies in the area of chemical, biochemical, and environmental engineering. Process simulation, computational fluid dynamics, and techno-economic and environmental assessments support our experimental work.

Gender and diversity aspects

TU Wien is strongly committed to equity, diversity, and inclusion. All persons can apply for this position. We encourage the application of persons who are traditionally underrepresented in the field of technology. TU Wien is committed to increasing the proportion of women, in particular, in leadership positions. Female applicants are explicitly encouraged to apply. Preference will be given to women when equally qualified unless reasons specific to a male applicant tilt the balance in his favor. At the Faculty of Technical Chemistry, FemChem has been established to exchange ideas, information, and experiences for female researchers. Through this platform, additional funding and training options will be supported to women candidates in hard- and soft-skills and career-orientation topics. People with special needs are equally encouraged to apply. In case of any questions, please contact the confidant for persons with disabilities at TU Wien, Mr. Gerhard Neustätter.

Application

Does this position sound interesting to you? Please send your CV, a motivation letter, a list of publications, and your references to markus.lukacevic@tuwien.ac.at and michael.harasek@tuwien.ac.at, using "Postdoc position WC3D – Chemical engineering of wood-based biocomposites" as the subject of your email. The position is open starting right away until a suitable candidate is found. International applications are encouraged.

Employer

TU Wien
<https://www.tuwien.at>

Contact TUW-ICEBE

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