



The University of Natural Resources and Life Sciences, Vienna (BOKU)

is currently inviting applications for the position of a Full Professor of

Thermo-Chemical Synthesis Gas Generation

The University of Natural Resources and Life Sciences, Vienna (BOKU) seeks to appoint a Full Professor of Thermo-Chemical Synthesis Gas Generation with an employment level of 50% with 1st January 2025. The position is offered in accordance with §99 paragraph 1 of the 2002 Universities Act in the form of a contractual employment relationship for a limited period of 4 years.

The University of Natural Resources and Life Sciences, Vienna, the "Alma Mater Viridis", is the University of Sustainability and Life Sciences. It is BOKU's task to make a key contribution to the conservation and protection of resources for future generations through its wide variety of expertise. Combining natural sciences, engineering plus social and economic sciences, its aim is to increase knowledge of the ecologically and economically sustainable use of natural resources. With 10,000 students and over 2,900 staff members, BOKU is one of Europe's leading life science universities.

The central fields of research of the Department of Material Science and Process Engineering, which will be integrated into the new Department of Natural Sciences and Sustainable Resources from 1st January 2025, aim to develop a comprehensive understanding of the efficient conversion of renewable raw materials, taking into account their fossil and technical counterparts. Research at the Institute of Process and Energy Engineering focuses on the development of conversion processes in the field of bioeconomy. The process development runs from the initial idea via laboratory and pilot plants to industrial implementation, supplemented by modelling and simulation.

The applicant should strengthen the core competence of the future Department of Natural Sciences and Sustainable Resources and in particular the Institute of Chemical and Energy Engineering in the field of process engineering for thermal synthesis gas production from biomass. In research, the focus will be on developing and optimizing technical processes. As the position is intended to complement the team specifically in the area of design, planning and operation of pilot or industrial-scale plants, previous experience, in particular of processes with fluidized bed systems, is relevant. The research activities are integrated into the research activities of BOKU in the fields of circular economy and bioeconomy. The applicant is expected to contribute research activities in solid matter chemistry at high temperatures and the application of catalytic systems for thermal biomass utilization as well as the characterization of fuels, in particular with regard to ash composition and its impact on thermal conversion processes.

In teaching, the professorship represents the field of process engineering for bachelor, master and doctoral studies (in German and English); primarily for the study programmes of Food and Biotechnology, Wood and Natural Fiber Technology as well as Environmental and Bioresource Management.

We are looking for applicants from the fields of mechanical, thermal and chemical process engineering with experience in thermal gas generation, fluidized bed technology and synthesis gas processing.

Job specifications

- Venia docendi or international equivalent or a subject-relevant academic qualification, that is equivalent to a habilitation.
- Relevant experience and competence in teaching, guidance in scientific work, as well as the supervision of junior scientists (PhD students).
- Subject-specific research experience, national and international reputation, as well as ability to network.
- Excellent publication achievements in the scientific field.
- Sound international research experience.
- Teaching in German and English.
- Experience in the successful acquisition, execution and management research projects.
- Cooperation with national and international research institutions and with relevant partners from public services and business.
- Management and interpersonal skills including skills in gender and diversity management, inclusion and accessibility in communication; communication and team skills.
- Participation in public relations.
- Participation in relevant focus and cooperation programs of the University.
- Participation in the self-governance of the University of Natural Resources and Life Sciences, Vienna.
- Excellent knowledge of written and spoken German and English or willingness to learn German in the first two years.

For more information about this position, please contact the Head of Department of Material Sciences and Process Engineering, Univ.-Prof. Dr. Chris Oostenbrink, phone: +43 1 47654 89411, e-mail: chris.oostenbrink@boku.ac.at

Please submit your application as **single PDF file** (LastName_FirstName.pdf) containing the information mentioned below in English via email to the Rectorate of the University of Natural Resources and Life Sciences Vienna (berufungen@boku.ac.at) no later than **15th September 2024**.

Please include the following documents with your application:

- Brief explanation of why you believe yourself to be particularly suitable for this position (max. 1 page A4)
- CV, including ORCID, and details of professional, teaching and research activities, including a teaching portfolio – further information is available at <http://short.boku.ac.at/teachingportfolio>
- Draft concept for research and teaching; presentation of planned research priorities (max. 4 pages A4)
- List of publications (referenced / not referenced), presentations and projects
- Copies of 5 recent publications that you consider particularly important

By submitting the application, you also agree to the participation of an external recruitment consultant in the selection process.

The University of Natural Resources and Life Sciences, Vienna is seeking to increase the number of its female faculty members and therefore, qualified women are strongly encouraged to apply. Women are given priority when qualifications are equal, except in cases where there are outweighing factors concerning another candidate.

People with disabilities and appropriate qualifications are specifically encouraged to apply.



Universität für Bodenkultur Wien

The employment contract is classified as group A1 of the collective agreement for university employees. Minimum gross yearly salary: € 89,075; the actual annual gross salary is subject to negotiation.

More information on this position and about BOKU and this department can be found on the website: <https://boku.ac.at/>