

The Chair of Energy Systems seeks to fill a fulltime position at the earliest possible date as a

Research Associate / PhD student (m/f/d) in the field of experimental and numerical research on reversible high-temperature heat pumps / Organic Rankine Cycles for geothermal applications

Your tasks: You will be working on investigating and optimizing reversible high-temperature heat pumps / Organic Rankine Cycles with a special focus on applications in the geothermal sector. You will work on an innovative 20 kW_{el} demonstration plant that is currently being commissioned by our Chair. You carry out extensive experimental campaigns, and measures to increase efficiency and flexibility will be identified and implemented. Your tasks will also include deriving advanced control strategies using dynamic simulations and implementing them at the test rig. Your investigations will increase the efficiency, flexibility, and cost-effectiveness of reversible heat pump / ORC systems and contribute to their introduction into the market within the next few years as a commercial product. As part of national and international projects, you will work closely with partners from academia and industry. The results of your work will be published at scientific conferences and in journals.

Your profile: You have an above-average university degree in mechanical/engineering or process engineering. You already have some practical experience in plant design and/or operation. You stand out for your high-quality standards and independent, solution-orientated way of working and have in-depth knowledge of thermodynamics, plant engineering and control engineering. Do flexibility, creativity and a passion for energy technology round off your profile? Then apply for a job with us!

We offer you an interesting and challenging job with a high degree of personal responsibility and creative possibilities. The salary of the position is classified according to TV-L E13. It is a full-time position, which is planned for four years. The possibility of a PhD is given and highly encouraged. Disabled persons with similar qualifications will be given preference in the recruitment process. The university aims at increasing the share of female employees. Applications from qualified women are therefore explicitly welcomed. You can expect a team of roughly 40 scientists researching a broad range of topics on the latest technologies for a reliable and sustainable future energy supply.

Interested?

Then we look forward receiving your comprehensive application documents by e-mail by the middle of January 2024 addressed to:

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Phone.: +49 89/289 16269

Technische Universität München,
Chair of Energy Systems,
Boltzmannstr. 15, 85748 Garching

Note on data privacy and protection:

As part of your application, you provide personal data to the Technical University of Munich (TUM). Please view our privacy policy on collecting and processing personal data in the course of the application process pursuant to Art. 13 of the General Data Protection Regulation of the European Union (GDPR) at <https://portal.mytum.de/kompass/datenschutz/Bewerbung/>. By submitting your application, you confirm to have read and understood the data protection information provided by TUM.