



**shaping the sustainable  
hydrogen society  
through research!**

The extra-university research centre HyCentA Research GmbH at Graz University of Technology is the leading institution of Austrian applied research on hydrogen technologies. Using the outstanding technical infrastructure and modern simulation methods, research is conducted on technologies such as electrolysis, storage systems and fuel cells for future energy systems at the highest international level.

To strengthen our competent and dynamic team, we are offering the following position:

## **PhD Position – ML Methods in Renewable Hydrogen Economies**

**Degree of employment:** Full-time (39.5 hours/week)  
**Job-ID:** 240202

### **Job Description:**

As team member of the Hydrogen Research Centre Austria, a Competence Centre for Excellent Technologies (COMET), you contribute to our excellent Research and Development in the area of hydrogen based sustainable energy systems. The PhD is conducted in the ReASSET project, which aims to revolutionize hydrogen and renewable energy planning, analysis and operation by leveraging artificial intelligence (AI) and machine learning (ML) techniques. The project focuses on developing innovative solutions to enhance sustainability and efficiency in the energy sector.

- Development of advanced AI models for energy price prediction and hydrogen infrastructure optimization within the relevant legal frameworks (e.g. RED II)
- Development of a planning assistant for PPA procurement in renewable hydrogen production
- Publication of research findings in reputable journals, contributing to the body of knowledge in AI-driven renewable energy solutions

### **Your Skills:**

- Structured approach to working on complex issues in research and development and solving practical problems
- High affinity for working on IT related problems and strong proficiency in AI and ML algorithms and techniques as well as applicable programming languages
- Experience in conducting high-quality research and publishing in academic journals
- Experience with data analytics, method development, and optimization



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- Comprehensive understanding of current technologies in the hydrogen sector as well as the associated energy systems on the basis of the underlying thermodynamic principles is an advantage
- Completed Master's degree in a relevant technical field of study (e.g. Engineering, Computer Science, Applied Mathematics)
- High level of commitment, ability to work in a team and willingness for further development and training
- Pleasure in technical trouble shooting and problem solving
- Language skills: Fluent in written and spoken English and German

#### **Our Offer:**

- Collaboration in a well-established high-tech research company in Graz
- Excellent working atmosphere under pleasant conditions at a family friendly employer with flex time and optional home office up to two days per week.
- Challenging work and creative freedom in an exciting field of activity
- We offer a minimum salary of € 3.578,80 gross/month (full-time basis)
- In addition, we offer numerous benefits, including flexible working conditions and individual training and career opportunities such as ongoing training in a highly innovative environment.

Gender equality is particularly important to us, so we especially encourage women to apply for our team.

Please submit your CV, motivation letter and certificates via e-mail to [jobs@hycenta.at](mailto:jobs@hycenta.at)