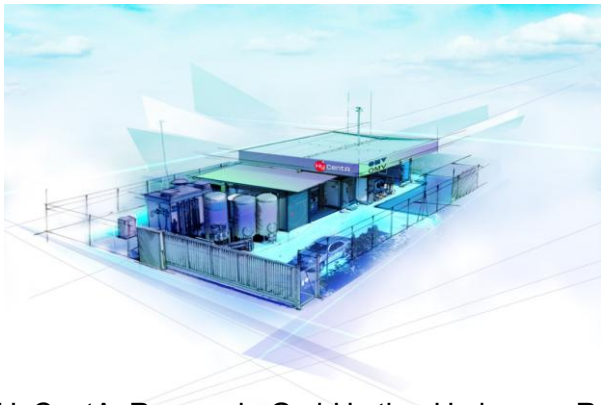




**Shaping the sustainable
hydrogen society
through research**

HyCentA Research GmbH, the Hydrogen Research Center Austria – at Graz University of Technology – is Austria's leading research institution exclusively dedicated to the research and development of green hydrogen technologies. Our outstanding technical infrastructure and state-of-the-art simulation methods enable us to conduct world-class research on technologies such as electrolysis, storage systems and fuel cells for our future energy system.

To strengthen our dynamic and highly qualified team, we are looking for a

Junior Researcher with a focus on Liquid Hydrogen Technologies

Working hours: Full-time, 38.5 hours per week

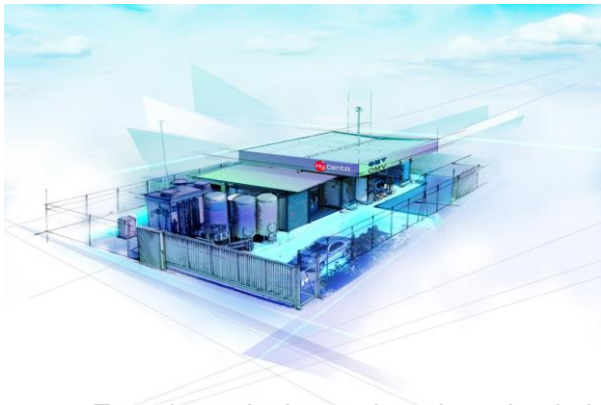
Job ID: 260302

Your responsibilities:

- Scientific work on research and development projects in the field of liquid hydrogen technologies
- Development, design and assessment of cryogenic hydrogen systems for mobility, industrial and energy applications
- Engineering of LH₂ systems, subsystems and components, in particular tanks, piping, valves, heat exchangers, sensors and safety equipment
- Conducting thermodynamic and fluid-dynamic analyses related to refuelling, extraction, pressure build-up, boil-off, phase change and heat ingress
- Development, application and validation of simulation models for liquid hydrogen systems, including CFD, 1D and reduced-order modelling approaches
- Planning, execution and evaluation of component, subsystem and system tests in cryogenic environments
- Supporting the setup, commissioning and operation of test benches and laboratory infrastructure for liquid hydrogen technologies
- Scientific analysis, interpretation and validation of experimental and simulation-based results
- Contributing to safety concepts, risk analyses, technical documentation, quality assurance and certification processes
- Preparing scientific publications and presenting project results in German and English

Your qualifications:

- University degree in a technical field, for example in mechanical engineering, process engineering, technical physics or a comparable discipline
- Knowledge or experience in the field of hydrogen technologies, cryogenic systems, thermodynamics, fluid dynamics or alternative propulsion systems
- Interest in liquid hydrogen technologies, in particular topics such as storage, refuelling, extraction, boil-off behaviour, phase change and thermal management



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- Experience in the engineering, simulation or testing of technical systems and components
- Experience in setting up test benches and in planning, conducting and evaluating experimental tests is an advantage
- Experience with MATLAB/Simulink, CFD, 1D simulation or thermodynamic modelling is an advantage
- Experience in organising, managing and documenting national and international research and development projects is an advantage
- Interest in safety-related topics, technical documentation, quality assurance and certification processes
- Structured, solution-oriented and independent approach to working on complex technical challenges
- High level of commitment, flexibility, responsibility and reliability
- Excellent command of written and spoken English

We offer:

- The opportunity to work at a renowned high-tech research institution with a clear focus on hydrogen technologies
- The opportunity to actively shape a forward-looking research field in liquid hydrogen, cryogenic technologies and sustainable energy systems
- Challenging work in an innovative field with high technological relevance for mobility, industry and energy supply
- The opportunity to work with state-of-the-art research infrastructure for liquid hydrogen technologies, covering engineering, simulation and experimental testing
- Opportunities for individual career development in an interdisciplinary research environment
- An excellent working atmosphere and a pleasant work environment
- Flexible, family-friendly working hours
- Depending on your qualifications and professional experience, a minimum gross monthly salary of € 4,056, paid 14 times per year
- Place of work: predominantly at our planned **location in Upper Austria**

We expressly welcome applications from women as part of our commitment to equal opportunity and gender equality.

Please submit your complete application package by email to: jobs@hycenta.at