

Large Engines Competence Center

Become part of our team!

We search for a

PhD Student (m/f/d)

Research focus: Ammonia combustion system



Task description

We are looking for a research engineer to investigate and develop ammonia combustion systems for large-bore internal combustion engines for power generation and maritime applications. The goal is to accelerate the decarbonization of all sectors where high-power systems are employed. You will perform experimental investigations, simulation with various simulation tools and detailed analysis and documentation.

Responsibility

- Plan, prepare and execute experimental investigations on a single-cylinder research engine and a rapid compression machine
- Design and prepare engine power unit components for liquid and gaseous ammonia admission
- Perform chemical kinetics simulations and 1D performance simulations
- Analyze experimental and simulation results to gain a deeper understanding of potentials and limiting factors of ammonia combustion in spark ignition and diesel pilot ignition combustion concepts
- Communicate the project results in regular internal meetings and to external project partners
- Disseminate the project results in the form of scientific publications

The LEC supports equal opportunities and diversity. We are looking for dedicated and motivated individuals with research talent.

Your profile

- Qualified degree (Dipl.-Ing, MSc), preferably in mechanical engineering
- Analytical skills and technical writing skills
- Fluent in English
- Experience working with design tools (e.g., CATIA) and 1D simulation tools desired

Our offer

- Doctoral thesis related to an exciting research field
- Outstanding research infrastructure
- Independent work in an excellent team and with international partners
- Personal and professional development opportunities
- Full-time position with a monthly gross salary of € 3.277,-
- Earliest starting date: immediately



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Become part of our LEC team!

We look forward to receiving your application.

www.LEC.at