Shaping the Future for Sustainable Technologies

The Large Engines Competence Center (LEC) is one of the world’s leading research institutions in the field of sustainable transport and energy systems and offers excellent career prospects in a scientific environment of the highest quality. The cooperation with world-leading industrial partners and renowned research institutions allows application-oriented top-level research with the aim of preserving an environment worth living in for future generations.

For our team in Graz we are looking for a

Research Engineer (PhD Student)
Integrated Sensor System for Sliding Bearings

Job description
The work focuses on the development and enhancement of a new generation of sliding bearings with an integrated sensor system. With this measurement system, the target is to obtain a deeper understanding of bearing and lubricant behavior in internal combustion engines. Furthermore, the gained knowledge will be applied to contribute to the development of strategies towards condition monitoring (CM), condition-based maintenance (CBM) and smart controls with regard to the bearing system and the overall engine.

Major responsibilities

• Prepare experimental setups (bearing test rig, single cylinder research engine) that make it possible to investigate relevant processes in the bearing system at defined conditions
• Plan and execute the tests with a suitable methodology to ensure the best possible output
• Analyze the results to gain a deeper understanding of the influence and interactions of different boundary conditions on bearing and lubricant behavior
• Develop and improve measurement concepts and measurement techniques
• Integrate and test an engine condition monitoring system
• Contribute to the development of strategies for condition monitoring, condition-based maintenance and smart controls with regard to the bearing system
• Communicate the project results in regular internal meetings and to project partners
• Disseminate the project results in the form of scientific publications and elaborate a PhD thesis

Your profile

• Qualified degree (MSc, Dipl.-Ing) in in Electrical Engineering or Physics
• Strong interpersonal skills with initiative and perseverance
• English fluent, German would be an asset
• A valid work permit for Austria is a prerequisite

Our offer

• Doctoral thesis within an exciting research project
• Availability of outstanding research infrastructure
• Self-reliant work in an excellent team and with international partners
• Possibilities for further personal and professional development
• The offered position is full time with an annual salary of € 39,100
• Earliest starting date: February 1, 2019

The LEC supports equal opportunity and diversity. We are looking for committed and motivated people with a passion for research.

Contact:
Johannes Kreil
HR Manager
T: +43 (316) 873-30107
M: career@lec.tugraz.at
LEC GmbH
Inffeldgasse 19/II
A-8010 Graz

Become part of our successful LEC team! We look forward to your application.

www.LEC.at