Post-Doc position in Materials Characterization / High Temperature Tribology

**Job description:**
An increasing complexity of exhaust gas management in combustion engines can be observed due to rising requirements concerning environmental sustainability and efficiency. Realistic tribological conditions require hot exhaust gas atmospheres, where presently wear mechanisms are not very well known. In this project your task is to use surface analytical techniques are used to investigate mechanical and chemical wear mechanism by

- Scanning electron microscopy (incl. FIB preparation)
- X-ray Photoelectron Spectroscopy (XPS)

The position is funded through a collaborative industrial research project (FVV). The group is part of the MicroTribology Center (μTC) which bundles tribology related research activities at KIT-IAM and Fraunhofer IWM.

**Qualification:**
You dispose of

- A PhD in Material Science, Physics or Physical Chemistry
- Experience in Electron Microscopy and FIB
- Knowledge of XPS, Surface Physics
- Experience in high temperature Tribology is an asset
- Good German and English language skills are desired.

**We offer:**
We offer an attractive and modern workplace with access to excellent facilities of KIT, diverse and responsible tasks, a wide scope of advanced training options, supplementary pension with the VBL (Pension Authority for Employees in the Public Service Sector), flexible working time models, a job ticket (BW) allowance, and a cafeteria/canteen.

**Salary:**
The remuneration occurs on the basis of the wage agreement of the civil service in TV-L E13

**Institute:**
Institute for Applied Materials – Computational Materials Science (IAM-CMS)

**Contract duration:**
The position is limited to one year.

**Starting date:**
October 2020

**Application up to:**
The review of the applications will continue until the position is filled.

**Contact person in line-management:**
For more information please contact Prof. Dr. Martin Dienwiebel, E-mail: martin.dienwiebel@kit.edu.
Application:

Application can be submitted at Karlsruhe Institute of Technology (KIT). Interested candidates are asked to send a cover letter, curriculum vitae, transcripts and contact information for at least one academic reference to martin.dienwiebel@kit.edu.

Incomplete applications will not be considered.

We prefer to balance the number of female and male employees. Therefore, we kindly encourage female applicants to apply for this job.

If qualified, handicapped applicants will be preferred.

KIT is certified as a family-friendly university (familienfreundliche Hochschule) and offers part-time employment, leaves for family-related reasons, dual career options, and individual coaching for family-work balance.

Karlsruhe Institute of Technology
Personnel Office