

The GKSS Research Centre is located in Geesthacht near Hamburg, Germany, with a further centre in Teltow near Berlin, and is a member of the Helmholtz Association of German Research Centres (HGF). With its approximately 800 employees it undertakes, in collaboration with universities and industry, research and development in the areas of coastal research, materials research, regenerative medicine, and structure research with neutrons and synchrotron radiation.

The Institute of Materials Research in Geesthacht invites applications for a 3-year

PhD position - Code-No. 2009/WM 2

Project description:

The PhD-project will focus on a thermo-mechanically coupled model suitable for the analysis of evolving microstructures. Particularly, the microstructures associated with re-crystallization in magnesium alloys will be investigated. The understanding of such physical phenomena is of utmost importance for predicting the macroscopic material response resulting from different metal forming processes such as extrusion. The goal of the PhD-project is to gain further insight into the relation between process parameters and the final macroscopic response. Such knowledge can finally be used for manufacturing metal sheets or profiles showing improved mechanical properties.

Requirements:

Completed undergraduate studies (master or diploma certificate) in one of the following areas: mechanical engineering, (computational) material science, computational engineering or physics. Good knowledge in continuum mechanics, computational mechanics and material modelling is vital. Language (fluent English and preferably also German) and computational skills are indispensable.

We offer an appropriate salary, related to TV-AVH as well as the usual public sector social benefits.

GKSS is an equal opportunity/affirmative action employer seeking to increase the proportion of female faculty members. Qualified women are therefore especially encouraged to apply. Handicapped persons with equal qualifications will be preferred.

Please send your application indicating **Code-No.: 2009/WM 2** with CV and references **until 8. October 2009** to **GKSS-Forschungszentrum Geesthacht GmbH, Personalabteilung, Max-Planck-Str. 1, 21502 Geesthacht, Germany**, or via E-Mail to personal@gkss.de.