

Stellenausschreibung .../2011

Friedrich-Schiller-Universität Jena
Institut für Geowissenschaften

BMBF - Spitzenforschung und Innovation in den Neuen Ländern

Integrated Fluid Dynamics in Sedimentary Basins (INFLUINS)

is offering

1 PhD Position

(3 years, starting October 1st 2011 or thereafter)

INFLUINS is a high performance research joint venture. INFLUINS addresses questions and problems concerning the coupled dynamics of near-surface and deep fluid circulation in sedimentary basins on all relevant scales, using the Thuringian Basin as a natural laboratory. To achieve its goals, INFLUINS will bring together geology, hydrogeology, soil science, mineralogy, geophysics, sedimentary basin analysis, remote sensing and climatology in an innovative research focus. It offers top post-graduates the opportunity to achieve a doctoral degree (PhD) in Geosciences.

The working group Near Surface Geophysics (NWG1) focuses on magnetic and electro-magnetic methods for a detailed reconnaissance of shallow and medium depth geological structures, for instance to understand fluid-fault interactions. A toolbox of three different magnetic measurement systems based on Superconductive Quantum Interference Devices (SQUID) is used. The main tool is a system measuring the full tensor of the Earth's magnetic field (FTMG) in airborne or ground based operation. A large survey with the airborne system in a nonmagnetic bird towed by a helicopter at low altitude will be carried out in 2012 and 2013. A 3D inversion of the acquired magnetic data highlights the underlying magnetic sources.

The **Institute of Geosciences at the Friedrich Schiller University of Jena** in close collaboration with the **Institute of Photonic Technology (IPHT)** and **Supracon AG** in Jena is looking for a high potential PhD student (salary TV-L 13/2) with the ability to work on the interpretation of the magnetic data, to capture, manipulate, analyze, and present all types of geographically referenced data in a geographic information system (GIS). The successful candidate has to merge the magnetic survey results with the data gathered by the other work groups in INFLUINS to provide a joint interpretation of the geological structures. Part of the work of her/him is field work and the organization of the airborne survey in the Thuringian basin.

The University of Jena is an equal opportunity employer and explicitly supports applications of women, and non-German citizens. Languages: English and German. Applications should include a letter of intent, a copy of the diploma or MSc certificate, and a summary of the diploma/MSc thesis as well as the names and addresses of at least two referees. For further information about the project see <http://www.influins.uni-jena.de/>.

For questions, please contact:

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E-mail applications:

They should be sent to **Dr. R. Stolz (ronny.stolz@ipht-jena.de)** or **Prof. Dr. Nina Kukowski (nina.kukowski@uni-jena.de)**. Applications will be accepted until the position is filled.