



## Job Announcement

### Dynamic Solid Electrolyte Sensors

The Kurt-Schwabe-Institute for Measuring and Sensor Technology e.V. (KSI) Meinsberg is offering the position of a scientific assistant for three years. Payment is based on the Labour agreement of the German federal states (TVL). Working time is 75 %. The possibility to graduate is included.

In summer 2017 the project "Dynamic methods for electrochemical gas sensors (DynaSens) will be started in cooperation with the Department of Functional Materials of the University of Bayreuth.

Within the framework of the offered position, processes of signal establishment at solid electrodes on solid electrolytes will be investigated in different gas atmospheres and methods for dynamic signal generation with solid electrolyte sensors will be developed.

The control of mobile and stationary combustion processes is facing new challenges due to the development of the world climate and global resources. For these challenges, highly sensitive and selective new gas sensors for the long-term stable measurement of nitrogen oxides, carbon monoxide and other combustibles are required.

Therefore, the aim of the project consists of the comprehensive investigation of dynamic interdependencies between gas phases and dynamically polarized electrode systems on high-temperature ionic conductors. Detailed knowledge of these interdependencies is a crucial precondition for the development of dynamically operated high-temperature gas sensors and other high temperature functional elements like fuel cells and electrolyzers.

Potential candidates will work on this highly fascinating topic in a well-equipped research environment as a member of a multidisciplinary team and have the possibility to graduate. In addition to a structured introduction to the basics, we will prepare the candidate for conference participation and support her or him with publishing her or his results. The interdisciplinary work is ensured by cooperating with the Bayreuth team as well.

Applicants who have already finished their diploma or master degree in chemistry, physics or material sciences or are at the point of doing so and want to invest their energy and enthusiasm into the above-mentioned project, should submit their application.

Application should contain a letter of interest and motivation, a CV and certificates. Please send these documents via E-mail with the subject "Application DynaSens" to the KSI Meinsberg ([info@ksi-meinsberg.de](mailto:info@ksi-meinsberg.de)).

Applicants are also invited to contact Dr. Jens Zosel or Prof. Michael Mertig with any questions.

We look forward to receiving your application.