Postdoctoral fellow in Nanostructured gas sensors

At University Duisburg-Essen, Faculty of Engineering Sciences, Technology of Nanostructures
Field(s): applied physics Application deadline: April 1, 2006, but submit preferably earlier!
Submitted: Feb 28, 2006
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Job description:
In an interdisciplinary centre of excellence on nanoparticles (SFB 445), in which physicists and engineers cooperate, we are looking for a postdoc. The research is strongly interdisciplinary as well as our research group, originating from engineering departments, physics, materials science, computer science and chemistry. The group's expertise is in nanoparticles, mainly produced in the gas phase and deposited as thin films.

The research topic is the investigation of thin metal oxide films (e.g. SnO2) which serve as gas sensors. The films are built out of equal sized nanoparticles. Doping with metal nanoparticles is one of the main research goals. A fully automated, state-of-the-art gas sensor setup has been constructed, as well as extensive synthesis facilities for size fractionation. Microhotplates are used as sensor devices. A Hall measurement system is integrated in the setup. The possibility to construct very well-defined thin films allows for the first time to obtain an insight in the mechanisms involved in gas sensing.

The candidate should have a strong interest in (electrical) characterisation of thin films and nanoparticles. In the physics department, extensive characterization facilities are available in the university (XRD, HRTEM, EDX, etc). Experience with thin film characterisation or gas sensor measurements is advantageous. We are seeking a person with a strong research record.

The position is initially limited to 31.12.2007, but is planned to be extended in the period 2008-2010. The gross salary is in the range 38000-45000 Euro, and is subjected to taxes. The wage level is according to IIa BAT (composed of "Grundvergütung + Ortszuschlag + allgemeine Zulage", available at http://www.uni-tuebingen.de/uni/qqp/Verg-BAT-Euro.html).

Send your application including your CV, and list of publications to Dr.F.E. Kruis, University Duisburg-Essen, Bismarckstr. 81, Duisburg, Germany, preferably by email (e.kruis@uni-duisburg.de).