



The Department of Inorganic Chemistry of the Fritz Haber Institute (FHI) of the Max Planck Society in Berlin, Germany, is specialized in the understanding, design and development of advanced heterogeneous catalysts for a wide range of applications. Various analytical techniques are used for characterization and testing of our catalysts.

The Microstructure Group in the Department offers a

Post-doc position in Materials Science

for 2 years with possibility of extension.

Carbon nanotubes occupy an increasingly important place in modern industry. They are considerably stronger than steel, enable electricity to travel through plastics, and improve the mechanical properties of ceramic materials. Entirely new materials with revolutionary properties in numerable fields of application are developed based on nanotube technology. As a huge increase in the use of these materials is expected in the future, new and more cost efficient production processes are desirable.

The successful candidate should work on a BMBF project, supported by the German Government, in cooperation with various Institutions and Companies in Germany, for the improved understanding of the growth of single- and multi walled carbon nanotubes and for their mass production. The project members are dynamic, high level academic and industrial partners with experience in the field.

The state-of-the-art characterization equipments are available. Besides the standard TEM/SEMs, the FHI has recently acquired an aberration corrected FEI 80-300 kV TITAN TEM/STEM equipped with EELS, EDX, and HAADF detectors, especially with structural characterization at the atomic level in mind.

The emphasis of the research work will be on

- advanced TEM/SEM/EELS/EDS characterization of catalyst materials and reaction products
- development of novel image analysis techniques

We offer:

- an international atmosphere in beautiful surroundings in one of the most dynamic cities in the world
- access to state-of-the-art equipment for various characterization techniques
- exposure to new techniques to develop your professional skills
- an independent working environment with personal correspondence responsibilities

We expect:

- a Ph.D. in physics, materials science or a related field
- experience in TEM is a prerequisite

Please send your application to:

Dr. Dangsheng Su
Fritz Haber Institute of the Max Planck Society
Faradayweg 4-6
D-14195 Berlin (Germany)
Tel. +49 (0)30 8413 5406
email: dangsheng@fhi-berlin.mpg.de