



## Postdoc Program between the Freie Universität Berlin (FUB) and the China Scholarship Council (CSC)

### Open Postdoc position at FUB for CSC scholarship candidates 2016

*Please note: the postdoc position is only offered to Chinese who graduated with a PhD degree from a Chinese university.*

<b><u>Department/Institute:</u></b>	Department of Physics/Institute of Experimental Physics
<b><u>Subject area:</u></b>	Solid State Physics/Magnetism
<b><u>Professor / Research Group:</u></b>	Prof. Dr. Wolfgang Kuch
<b><u>Number of open Postdoc positions:</u></b>	1
<b><u>Project title:</u></b>	Ultrathin magnetic films

#### **Postdoc Project description:**

Ultrathin films are the main ingredient of magnetoresistive as well as future spinelronic devices. The term "spinelronics" refers to a technology in which the spin of electrons is used for information transport and processing rather than the charge, as in conventional electronics. Expected advantages are smaller integration, less power consumption, and higher operating speed. Recently, ultrathin antiferromagnetic layers have moved into the center of interest. They are less susceptible to external fields, can be operated at higher frequencies, and there is a larger number of semiconducting or insulating antiferromagnetic materials compared to ferromagnetic films. The candidate will study the properties of layered materials, deposited in situ in ultra-high vacuum, consisting of antiferromagnetic and ferromagnetic films. The methods available are low-energy electron diffraction (LEED), conventional and spin-polarized room-temperature scanning tunneling microscopy (STM) as well as in-situ magneto-optical Kerr effect (MOKE).

#### **Language requirements:**

English: IELTS 6.5 or TOEFL 95 ibt

#### **Academic requirements:**

PhD in physics or related disciplines, experience in surface science or thin-film magnetism.

#### **Information of the professor or research group leader:**

<http://www.physik.fu-berlin.de/einrichtungen/ag/ag-kuch/research>

#### **Please note:**

In a first step the complete application should submit to the Beijing Office for evaluation by November 21, 2015. Please don't contact the professor before. He/She will get in contact with you after having received the complete application.