



## PhD Program between the Freie Universität Berlin (FUB) and the China Scholarship Council (CSC) Open PhD position for CSC scholarship candidates 2015

The PhD position is only offered to Chinese PhD candidates for application in the framework of the FU-CSC Program.

<b><u>Department/Institute:</u></b>	Institute for Chemistry and Biochemistry, Freie Universität Berlin
<b><u>Subject area:</u></b>	Nanoscience/ Physical Chemistry
<b><u>Name of Supervisor:</u></b>	Prof. Dr. Christina Graf
<b><u>Number of open positions:</u></b>	1 but only sandwich program for max. 1 year
<b><u>Project title:</u></b>	(1) Lanthanide-doped magnetic nanoparticle as multifunctional probes for biomedical research (2) Antibacterial nanoparticle nanoparticles for the treatment of biofilms on skin wounds

### **Project description:**

- (1) Preparation of magnetic nanoparticles, characterization of their chemical properties, structure, magnetic properties and biocompatibility
- (2) Preparation and characterization of inorganic nanoparticles with antibacterial properties, surface functionalization of the particles, testing of their biocompatibility and antibacterial properties, investigation of their diffusion behavior in biofilms

Since this will be a sandwich program with a Chinese university other topics in nanoscience are also possible, please contact me (see below) for further details.

### **Language requirements:**

The doctoral thesis can be written in English. German language proficiency is not required for the daily work in the laboratory.

### **Academic requirements:**

Master of Science in Chemistry or a related subject (like nanoscience or material science)

### **Link to professor and further information:**

[http://www.bcp.fu-berlin.de/chemie/chemie/forschung/PhysTheoChem/aggraf/Prof\\_\\_Dr\\_\\_C\\_\\_Graf/index.html](http://www.bcp.fu-berlin.de/chemie/chemie/forschung/PhysTheoChem/aggraf/Prof__Dr__C__Graf/index.html)

### **Please note:**

In a first step the complete application should submit to the Beijing Office for evaluation by January 4<sup>th</sup>. Please don't contact the professor before. She will get in contact with you after having received the complete application in January.