Call for 2015 CSC Fellowship Applicants

## **Helmholtz Centre: GSI Helmholtz Center for Heavy Ion Research**

## **Department/Institute: Helmholtz Institute Jena**

## **Supervising scientist: Prof. Dr. Thomas Stöhlker**

## **University for Registration (for those looking for a dissertation): Friedrich Schiller University Jena**

## **Research Field: X-Ray Imaging and Spectroscopy**

**Position:** PhD Student **X** Sandwich PhD Student **□** Postdoc **□**

X-ray Spectroscopy and Quantum Electro-Dynamics

Applicants are invited to perform their PhD work on the spectroscopy of hard x-rays (4 keV and beyond) for an experimental investigation of quantum electrodynamics in strong Coulomb fields. For this purpose they will participate in the installation of an electron beam ion trap (EBIT) where even H- and He-like ions with high nuclear charge Z can be produced (Z> 50). Moreover by applying novel micro-calorimeter detectors, atomic transitions will be measured with very high energy resolution and compared with theoretical prediction.

The works will be done at the Helmholtz Institute Jena.

**Research Area:**

**Specific Requirements:**

To prepare a letter of support for your CSC fellowship application we need some information about you. Please submit the material as described on our webpage

<http://www.hi-jena.de/en/helmholtz_institute_jena/rs_aps/application/>

If your profile meets our requirements, we will inform you and provide you two letters of support signed by your future supervisor and the head of the Research School, respectively

Knowledge about one of these areas is highly appreciated:

Ion sources

vacuum technology

photon and x-ray detectors

spectroscopy

atomic physics

**Work Place: Jena/Germany**

**Earliest Start:** as soon as possibe

**Language Requirement:** English for work

**Email Address:** t.stoehlker@uni-jena.de