

# Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin



Braunschweig, 16 February 2010

Notice until: 30 March 2010

## VACANCY

No. 12/10-6

The Physikalisch-Technische Bundesanstalt (PTB) is the National Metrology Institute of the Federal Republic of Germany with scientific and technical service tasks. It furthers progress and reliability in metrology for society, economy and science.

With its equipment in the field of ionising radiation, Department 6 of PTB is a worldwide unique facility. One of our tasks is the generation of reference radiation fields for neutrons with energies of 24 keV to 19 MeV, high-energy photons (4 MeV to 7 MeV) and ion beams (protons and helium up to 27 MeV). For this purpose, we have an accelerator facility with a 3.75-MV Van de Graaff accelerator and an energy-variable TCC cyclotron available. At these facilities we carry out - among other things - experimental work in the fields of neutron metrology and measurement of neutron-induced cross sections for technical applications.

To support our team, we are looking for an

### **experimental physicist (if possible with a doctor's degree)**

to join us as soon as possible. The post is limited to 3 years. A continuation of employment in a future third-party fund-raising project is possible. Depending on the qualifications, the tasks are in compliance with the characteristics up to Salary Group Ib BAT, the remuneration will be paid according to the regulations of the TVöD.

Within the scope of the project of "transmutation-relevant experiments in nuclear physics by means of modern technological and numerical methods", which is supported by the Federal Ministry of Education and Research (BMBF), you will set up a fluence standard for 14 MeV neutrons based on the method of time-correlated associated particles (TCAP) and carry out investigations for the standardisation of cross section measurements at PTB's time-of-flight spectrometer. The other partners of the BMBF project are the Forschungszentrum Dresden-Rossendorf, the Technical Universities of Dresden and Munich and the Universities of Mainz and Cologne.

As graduated physicist you have a good knowledge of German and English and have profound knowledge in the field of nuclear physics, metrology of nuclear physics and data analysis as well as Monte-Carlo simulations of experiments in nuclear physics (MCNP, Geant4). You are challenged to understand the details of an experiment and to investigate and control as many contributions to the measurement uncertainty as possible. We expect you to be familiar with data processing under Windows.

For further information, please contact Dr F. Wissmann, tel.: +49 531 592-6400,  
e-mail: [frank.wissmann@ptb.de](mailto:frank.wissmann@ptb.de).

For technical questions, please contact Dr. R. Nolte, tel.: +49 531 592-6420,  
e-mail: [ralf.nolte@ptb.de](mailto:ralf.nolte@ptb.de).

The PTB promotes the professional equality of women and men and is thus especially interested in applications from women.

Within the scope of the official feasibilities, PTB offers flexible part-time work schemes in order to support in particular the compatibility of family and profession. For further information see our flyer "Familienfreundliche PTB" (Compatibility of family and profession at PTB) at [www.ptb.de/Jobs/Ausbildung](http://www.ptb.de/Jobs/Ausbildung).

Disabled persons will be given priority if they have the same occupational aptitude.

Are you interested? Then we are looking forward to hearing from you. Please send your detailed application to the address below by **30 March 2010**, quoting the **reference number 12/10-6**:

**Physikalisch-Technische Bundesanstalt**  
**- Personalreferat -**  
**Bundesallee 100**  
**D-38116 Braunschweig**

or e-mail: [Bewerbung@ptb.de](mailto:Bewerbung@ptb.de)

For further information on the tasks and structure of PTB, please visit [www.ptb.de](http://www.ptb.de).