

General information

Reference: FLNP JINR-PostDoc-2019-07

Workplace : Frank Laboratory of Neutron Physics JINR (FLNP JINR)

Date of publication : November 1st, 2019

Type of Contract : research fellow

Contract Period : 12 – 36 months taking into consideration the results achieved during the 12 months

Expected date of employment : 15 May 2020

Proportion of work : Full time

Remuneration approximately 30000 USD gross per year payed in rubles. Final amount will be commensurate with qualifications and experience. 13% income tax is applied in accordance with the RF regulations. Social package: see additional information bellow

Desired level of education: PhD

Experience required 2 to 5 years of postdoctoral experience.

Missions

The FLNP JINR has a 60 years experience in development of pulsed neutron sources. A new pulsed neutron source is planned to replace the currently operating source IBR-2. The IBR-2 pulsed fast reactor can be rightly referred to as a record-breaking neutron source both as to the intensity of neutron flux in pulse and as to the engineering solutions allowing us to achieve it. IBR-2 is a fast pulsed reactor with mechanical modulation of reactivity

FLNP JINR has a specialized department for development of neutron spectrometers for condensed matter investigations at IBR-2 reactor and manufacturing components of the spectrometric chain. The research fellow has to become an active part of the work group on development of the new neutron sources at FLNP JINR.

Activities

The design and development of technical systems of the new pulsed neutron source. The technical calculation of different tasks regarding neutron moderation, diffusion, thermal processes in fuels elements, etc. Participation in conferences of the appropriate profile with presenting results and its publication in peer-reviewed journals.

Skills

The candidate should have a PhD in physics and proven experience in neutron physics. The knowledge in neutron scattering methods and methods of mathematical physics are welcome. Software knowledge (office tools, Monte Carlo package for neutron diffusion calculations, computer skills: user level). English proficiency.

Work Context

WORKPLACE: The job will develop in Department of Spectrometers Complex at the Frank Laboratory of Neutron Physics. The Department's total staff is 52. The work is in collaboration with organizations licensed to designing of nuclear facilities.

Constraints and risks

The postdoctoral fellow will be expected to undertake international travel.

Additional Information

Applications should include a detailed CV, a brief statement of research interests, list of publications and at least two letters of reference forwarded to Dr. Otilia Ana Culicov culicov@nf.jinr.ru before February 1st 2020.

Social package offered by JINR:

- The employer offers free health insurance covering medical services in the frame of the Russian compulsory medical insurance system.
- The employer will pay no pension insurance.
- The employer can offer accommodation in its own apartments (one-, two- or three-room flat depending on the number of family members) in the limits of availability and the laboratory can partly offset the rent expenses.
- Half price access to the JINR Olympic-size swimming pool and preferential access to the sport infrastructure of JINR.

Short-listed candidates will be invited to an interview, remotely, or in person.