



Postdoctoral Programme in Radiation Biology – Analytical Chemistry

12-month contract, renewable for another max. 24 months

Your mission

One of the research areas in the Laboratory of Radiation Biology is an investigation of radiomodifiers – chemical and biological compounds that are able to change the response of organisms to the exposure to ionizing radiation. The main objective of the proposed position is providing support to this area of research by studying physicochemical properties of these compounds, validating their structure and purity, preparing experimental formulation. The activities will also include the investigation of the stability, pharmacokinetics and metabolism of these compounds in vivo, employing a range of techniques such as liquid chromatography, mass-spectrometry, drug extraction, spectrophotometry etc.

Your tasks

You will work in close interaction with the researchers in the Department of Radiation Biology and Physiology. Your research programme will focus on:

- Assessment of purity and validation of the structures of radiomodifier compounds.
- Cooperation with research radiobiologists in preparation of experimental formulations of compounds of interest for radiobiological experiments in cell and animal models.
- Extraction, analysis and identification of compounds and the products of their metabolism from cell cultures and tissue samples.
- Participation in drug-activity relationship studies and optimization of radiomodifiers.

Constraints and risks

The candidate is expected to undertake work in cooperation with other researchers, therefore work in shifts and work on the weekends may be necessary for experimental timelines to be implemented.

Depending on your citizenship, you may need to obtain a visa and this process can last several months. JINR offers all the necessary support for obtaining the entry permit for the Russian Federation.

Your profile

- Highly motivated candidate with a PhD (obtained less than 5 years ago) in analytical chemistry, biology or another relevant field.
- Age under 40, have not had more than 3 temporary positions.
- Strong background in chemistry and/or biochemistry and/or biology, either academic or through previous employment is a prerequisite.
- Practical experience in working in a chemical and biological laboratory and handling chemical substances.
- Knowledge and experience in analytical techniques such as HPLC, MS etc.
- As an international intergovernmental research organization, we are particularly keen to ensure that we also attract applicants from outside of Russia. You must have good knowledge of English and be willing to learn Russian (a language course will be provided by JINR).

What we offer

High quality of life

Called the "Island of Stability", the city of Dubna is ideally located on the bank of Europe's largest waterway — the Volga River (only 2.5 hours from Moscow by train or bus and 1.5 hours by car from Sheremetyevo International Airport). It is important for us that our employees quickly and easily adapt to the new living conditions and have a healthy work-life balance. Therefore, we offer accommodation in comfortable guest-house rooms (for singles), or fully furnished flats owned by JINR, and annual paid leave.

Prospects

We guarantee you a **12-months postdoctoral contract, renewable for another max. 24 months (36 month in total)**, in a multicultural scientific environment.

Remuneration

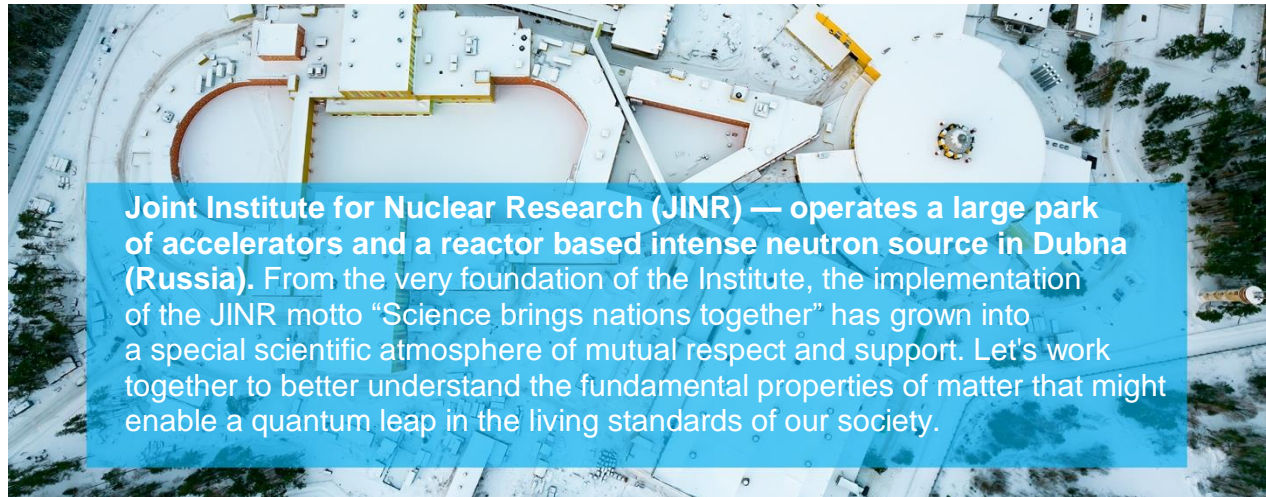
2300 USD per month, paid in Russian rubles at the planned exchange rate (forecasted year-average), which is adopted with the JINR budget for the current year. In 2023, the exchange rate is 69.2 Russian rubles per 1 USD.

Income tax of 13% is applied. The employer shall pay no pension insurance.

Benefits

We offer generous social benefits (settling-in allowance, free health insurance for you and your family members), relocation assistance (under certain conditions), free school or kindergarten attendance for children. We also offer free language courses and subsidies for the use of JINR sports infrastructure (Olympic swimming pool, stadium, gym, etc.), as well as access to a variety of cultural activities.

[Apply now](#)



Joint Institute for Nuclear Research (JINR) — operates a large park of accelerators and a reactor based intense neutron source in Dubna (Russia). From the very foundation of the Institute, the implementation of the JINR motto “Science brings nations together” has grown into a special scientific atmosphere of mutual respect and support. Let's work together to better understand the fundamental properties of matter that might enable a quantum leap in the living standards of our society.

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