



## PREFACE

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We are pleased to offer our readers the scientific Activity Report of the Frank Laboratory of Neutron Physics for 2014. Its first part presents a brief review of the experimental and theoretical results achieved in the main research areas – condensed matter physics, neutron nuclear physics, applied research and in the development and creation of elements of neutron spectrometers for condensed matter investigations. The second part includes the reports on the operation of the modernized IBR-2 pulsed reactor, the development of the IREN neutron source and investigations carried out at the EG-5 accelerator. A list of publications in 2014, the information about seminars and conferences organized in FLNP and statistical data on the FLNP personnel structure are presented as well.

In 2014 the main achievements of the Laboratory were:

- successful fulfillment of the user program at the IBR-2 spectrometers;
- construction of a full-scale stand of a pelletized cryogenic moderator for the central IBR-2 reactor beamlines and the successful conduct of experiments to study the possibilities of feeding moderating material.

In 2014 the IBR-2 reactor operated for physical experiments for 2492 hours, the IREN facility – for 1358 hours and EG-5 – for 665 hours.

FLNP has cooperation agreements in the field of neutron investigations with almost 200 scientific institutes and universities from 42 countries from all over the world. A significant contribution to this cooperation is made by the JINR Member States.

The FLNP personnel include more than 450 employees. Among them are 79 Ph.D. and 17 D.Sci. researchers. 64 scientists and specialists are from the JINR Member States (besides the Russian Federation) with more than two thirds of them being under 35 years of age.

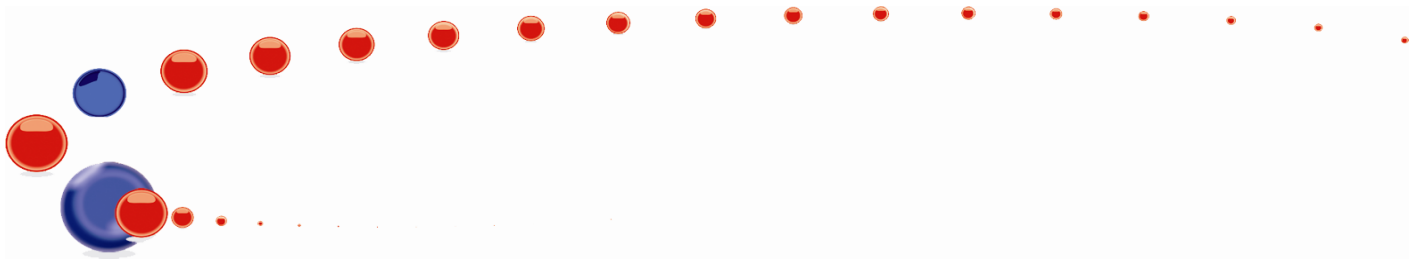
The organization of annual conferences and schools covering all FLNP research fields helps to recruit young specialists — one of the top priority tasks of the FLNP Directorate.

We can state with assurance that the Laboratory continues to develop successfully and dynamically, carrying out investigations for the benefit of the JINR Member States.



**V.N. Shvetsov**

**Director**



Members of the Directorate of the Frank Laboratory of Neutron Physics:

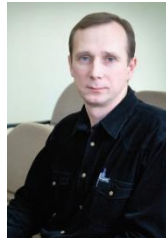


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**Deputy Directors for Science**



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