



## PREFACE

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We would like to offer the readers the scientific activity report of the Frank Laboratory of Neutron Physics for 2013. The first part of the report presents a brief review of the experimental and theoretical results achieved in the main scientific directions – condensed matter physics, neutron nuclear physics, applied research and 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 researches carried out on EG-5 facility. A list of publications for 2013, the information regarding the seminars and conferences organized in FLNP and a statistical view on the FLNP personnel structure are presented as well.

In 2013 the main achievements of the Laboratory were resumption of the user program at the modernized IBR-2 spectrometers as well as development of the IREN facility. In 2013 the IBR-2 reactor operated for physical experiments for 2578 hours and the IREN facility about 1050 hours.

In 2013 the Laboratory celebrated the 105th anniversary of I.M. Frank, the founder and first director of FLNP.

FLNP has cooperation agreements in the field of neutron investigations with almost 200 scientific institutes and universities from 39 countries from all over the world. A significant contribution to this cooperation is made by the JINR Member States.

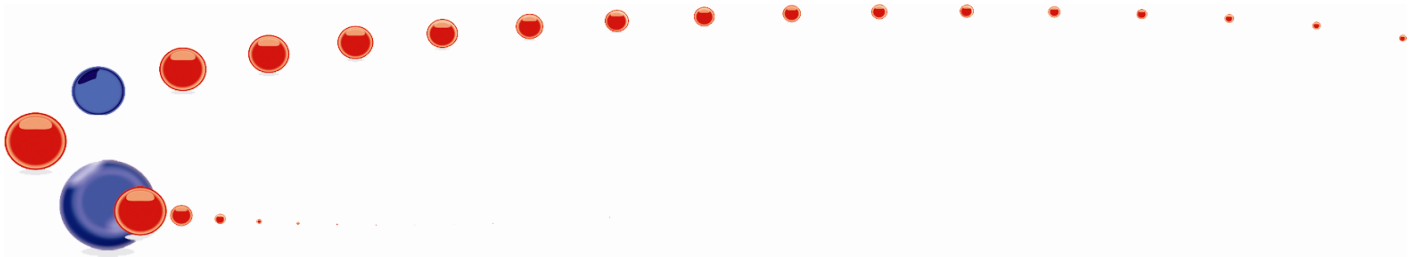
The FLNP staff consists of more than 450 employees. The scientific staff includes 79 Ph.D. and 17 D.Sci. researchers and 70 researchers and specialists from the JINR Member States (besides the Russian Federation) with more than two thirds of them under 35 years of age.

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.

All these facts confirm that the Laboratory continues to develop successfully and dynamically, carrying out investigations in the interests of the JINR Member States.



**V.N. Shvetsov**  
*Director*



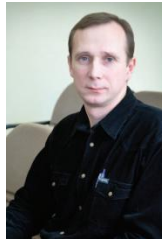
Members of the Directorate of the Frank Laboratory of Neutron Physics:



**SHVETSOV**  
*Valeryi*  
*Nikolaevich*  
**Director**  
*since 2013*

**Deputy Directors for Science**

**CULICOV**  
*Otilia Ana*  
*since 2013*



**LYCHAGIN**  
*Egor Valerievich*  
*since 2013*



**KOZENKOV**  
*Sergey*  
*Vyacheslavovich*  
**Deputy Director**  
**for General Issues**  
*since 1989*



**VINOGRADOV**  
*Alexander*  
*Vital'evich*  
**Chief Engineer**  
*since 2007*



**CHUDOBA**  
*Dorota*  
*Marta*  
**Scientific secretary**  
*since 2013*