

P R E F A C E

I would like to offer the reader the following report on the scientific activity of the Frank Laboratory of Neutron Physics (FLNP) of the Joint Institute for Nuclear Research (JINR) in 1998. The report consists of two parts. The first is a brief review of the results of experimental and theoretical investigations in condensed matter physics, nuclear physics and applied research. The second contains experimental reports with more information about particular studies. The list of 1998 publications closes the book.

The 1998 year is one of the most difficult years in the history of FLNP. The 1998 heaviest financial crisis in Russia, the host country of JINR, is the cause of that only 7 of 10 planned reactor cycles were conducted. In addition, the absence of financing actually froze work on the modernization of the IBR-2 reactor and the IREN project and delays in salaries were up to three months. Nevertheless, in the reported year a number of most interesting scientific results were obtained, the SPN spectrometer was modernized, a complex test of the KOLKHIDA spectrometer was carried out, work to assembly a neutron guide for the FSD spectrometer started, and stability of IBR-2 operation essentially increased.

Although the economical situation is extremely hard in the host country, FLNP JINR continues to be one of the leading neutron centers in Europe thanks to continued effort aimed at development of new and improvement of the existing experimental and theoretical facilities.



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Director

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