PREFACE

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 1999. 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 the 1999 publications closes the

book.

In 1999 the IBR-2 reactor operated according to the approved working schedule,

all of the 8 planned IBR-2 cycles were conducted. In the autumn cycles of the IBR

reactor a physical startup of a solid methane-based cryogenic moderator was

accomplished and all its rated regimes tested. This completed successfully many-year

work of the technical departments of the laboratory.

In 1999 we succeeded in carrying out the IBR-2 modernization project to a large

extent. A JINR-MINATOM (Ministry of Atomic Energy of Russia) agreement was

signed. Following its terms MINATOM will take part in the reactor modernization

project. A new working schedule of the project is elaborated.

A positive tendency in the financing of the IREN project is noted.

V.L.Aksenov

Vic. Albrenor

Director

1 March 2000

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