

4.6. THE CENTRE OF EDUCATION AND SCIENCE

The Centre of Education and Science (CES) affiliated with the Joint Institute for Nuclear Research and based on the departments of the Moscow State University and of the Moscow Physics Technics Institute admits, for continuation of studies, undergraduate students of the last two years of study at higher education institutions who have attended introductory specialized courses of lectures in the following topics: particle physics, nuclear physics, investigation of condensed matter at nuclear reactors and accelerators, radiation biology. The second and third specializations are quite in line with research performed at FLNP, which has at its disposal, for both sectors, a good experimental base comprising pulsed neutron sources - the IBR-2 reactor and the IBR-30 booster.

The education courses and practical training for the students affiliated with FLNP have been organized, to a large extent, for preparing specialists in neutron physics both for the Laboratory and for other Russian neutron centers. As an example illustrating this claim we present the list of courses in the physics of condensed matter:

- *theoretical methods in condensed matter physics;*
- *methods of investigation of condensed matter at nuclear reactors and accelerators;*
- *the fundamentals of neutron physics and neutron sources;*
- *experimental physics and low-temperature techniques;*
- *physics of high-temperature superconductors;*
- *the influence of radiation on solid-state properties;*
- *methods of experimental data processing.*

A number of leading FLNP scientists take part in delivering these courses. Each student is allowed access to the computer Laboratory network. For example, an obligatory condition for successful completion of the 4th year is the capability of using modern personal computers. Earlier, students were included in the research groups led by their instructors which made it possible for undergraduate students working on their theses, to take part in preparing or performing experiments.

In 1993 the first group of nine students graduated from the Centre of Education and Science in FLNP topics: seven in the physics of condensed matter and two in nuclear physics. FLNP has concluded contracts for work with three of the former students. The experience accumulated during the relatively short functioning time of the CES reveals that a group of 8-10 persons is just the optimum size.