

4.4. CONFERENCES and MEETINGS

1992

1. International seminar on studies of biological and lipid membranes, amphiphyls using neutrons (17-20 May 1992, Dubna)

At the seminar methods were considered for studying the structure and dynamics of membranes and molecules composing amphiphyls with the aid of neutron and γ -ray scattering. Issues were discussed of further improvement of experimental installations for studying these objects at IBR-2. Original works were heard on studies of biological and lipid membranes and of lipid monolayers.

2. International seminar on structural investigations at pulsed neutron sources (1-4 September 1992, Dubna)

At the seminar discussions were held of the latest achievements of scientific and methodological nature in investigations of the structure of condensed matter with the aid of diffraction and small-angular scattering of slow neutrons. The main goal of the seminar was to draw the attention of specialists to the possibilities opening up of diffraction investigations at a qualitatively new level and to hold discussions of the program of studies with the high-resolution Fourier diffractometer (HRFD). At the seminar, also, information was presented on the course of work on the construction of a new cold moderator at IBR-2, which will extend significantly, when put in operation, the possibilities of studying the structure of matter with the aid of small-angle scattering. The seminar was held in commemoration of Yu.M. Ostanevich.

3. International workshop on the application of activation analysis in the protection of the environment (15-18 September 1992, Dubna)

The workshop was held for determining the place and role of neutron activation analysis in solving the problem of environment monitoring. Issues were considered that were related to requirements of analytic quality control of environmental objects when relative and absolute methods of analysis are applied.

1993

1. International Workshop on Time Reversal Invariance and Parity Violation in Neutron Reactions (May 4-7, 1993, Dubna)

International Workshop was organized by JINR and sponsored by Triangle Universities Nuclear Laboratory (TUNL) and Los Alamos National Laboratory (LANL).

The workshop focused on the study of parity violation and time reversal invariance in neutron physics. Emphasis was placed on measurements with polarized neutron beams and polarized targets as well as on the implication of recent theoretical developments for future progress in this intensively developing field of research. A special session on experimental possibilities and new directions of research at the new Dubna intense resonance neutron pulsed source, IREN, took place for two last days of the workshop. The aim of the workshop was to discuss the results of theoretical and experimental investigations obtained since the 1st Workshop at Chapel Hill, USA, in 1987. Over 100 participants came to Dubna. In addition to scientists from Russia (30 participants) and JINR (39 participants) there were physicists from USA (13 participants), Germany (5 participants), Japan (3 participants), Israel (2 participants), as well as scientists from Australia, Belarus, Belgium, Canada, Poland, the Netherlands, South Africa and the Ukraine.

2. 3rd International Conference on Surface X-Ray and Neutron Scattering (SXNS-3) (June 24-29, 1993, Dubna)

This conference was organized by FLNP and sponsored by the Commission of European Communities.

Attending the Conference were 120 scientists from Bulgaria, UK, Germany, Denmark, the Netherlands, Poland, Russia, USA, the Ukraine and France. The main topics of the Conference were investigations of physical and chemical properties of thin films and multilayer structures, semiconductors, polymers and biological materials. These investigations had been carried out at the IBR-2 reactor by the method of polarized neutron reflection for several years.

3. International Seminar on Superprotonic Conductors (ISSPC) (September 7-11, 1993, Dubna)

Participants of the Seminar were physicists from the JINR, USA, UK, Germany, Italy, Poland, Russia, CIS members, Sweden and Yugoslavia. About 10 years ago, a new class of crystals was discovered at the Institute of Crystallography, Russian Academy of Sciences. A specific feature of these crystals is intrinsic superproton conduction, i.e., it is not caused by defects or impurities. Studying this type of crystal involves the most important fields of condensed matter physics: the physics of ferroelectric, ferroelastic and related phenomena, physics of structural phase transitions, superion state physics, hydrogen bond physics, etc. These issues were the subject of discussions at the seminar.

4. VI Trilateral German - Russian - Ukrainian Seminar on High-Temperature Superconductivity (September 14-18 1993, Dubna)

A wide scientific program of the Seminar embraced the issues of the theory of high temperature superconductivity, production of new materials, application of superconducting materials, growth mechanisms of films and crystals, application of nuclear physics methods to HTSC investigations, etc. More than 50 invited and 80 poster reports were contributed. The Seminar was attended by many well-known scientists, representatives of the Academy of Sciences, Ministry of Atomic Power and Ministry of Science of the Russian Federation as well as representatives of the Federal Ministry of Research and Technology of Germany.

PLANS FOR 1994

1. International Seminar "Neutron Spectroscopy, Nuclear Structure, Applications", Dubna, 26-28 April.

2. International Seminar "Present and Future of the IBR-2 High-Flux Pulsed Reactor", Dubna, 14-16 June.

3. 30th Russian Conference on Low Temperature Physics, Dubna, 6-9 September.

4. International Seminar "Neutron Scattering at High Pressures", Dubna, 4-8 October.