
TO THE 50TH ANNIVERSARY OF JINR



The Joint Institute for Nuclear Research (JINR) was established through the Convention signed on 26 March 1956 in Moscow by representatives of 11 founding states to unite their scientific and material potential in order to study fundamental properties of matter.

The USSR gratuitously transferred the Institute of Nuclear Problems of the USSR Academy of Sciences (INP) with the then largest accelerator of charged particles — the synchrocyclotron (680 MeV), and the Electrophysical Laboratory of the USSR Academy of Sciences with the Synchrophasotron in the adjustment condition (10 GeV) with the then record parameters to the Joint Institute for Nuclear Research. Those two large scientific organizations made the basis of the Joint Institute at the start of its operation. Research was launched here in a wide range of nuclear physics trends that attracted the interests of scientific centres of JINR Member States.

Professor D. I. Blokhintsev was elected the first director of the Joint Institute. He had been the leader of the project to develop the world's first atomic electric power station in Obninsk. The first JINR vice-directors became Professors M. Danysz (Poland) and V. Votruba (Czechoslovakia).

The history of JINR establishment is associated with such eminent scientists and science organizers as N. N. Bogoliubov, L. Infeld, I. V. Kurchatov, H. Niewodniczanski, A. M. Petrosiants, E. P. Slavsky, I. E. Tamm, A. V. Topchiev, H. Hulubei, L. Janossy, and many others.

The Institute and the main scientific branches were developed at different times by the following outstanding physicists: A. M. Baldin, V. P. Dzhelepov, D. Ebert, G. N. Flerov, I. M. Frank, M. Gmitro, N. N. Govorun, H. Hristov, A. Hryniewicz, J. Janik, V. G. Kadyshevsky, D. Kiss, N. Kroo, J. Kožešnik, K. Lanus, Le Van Thiem, A. A. Logunov, M. A. Markov, V. A. Matveev, M. G. Meshcheryakov, I. N. Meshkov, G. Nadjakov, Nguyen Van Hieu, Yu. Ts. Oganessian, L. Pal, H. Pose, B. M. Pontecorvo, A. Săndulescu, V. P. Sarantsev, F. L. Shapiro, D. V. Shirkov, A. N. Sissakian, N. Sodnom, R. Sosnowski, A. N. Tavkhelidze,

Ș. Țițeica, I. Todorov, I. Ulehla, I. Ursu, V. I. Veksler, Wang Ganchang, I. Zlatev, I. Zvara. Scientists and specialists of highest qualification have been trained at JINR for the Member States. Among them are presidents of national Academies of Sciences, leaders of large institutions and universities in many JINR Member States.

JINR has at present 18 Member States: Armenia, Azerbaijan, Belarus, Bulgaria, Cuba, Czech Republic, Georgia, Kazakhstan, D. P. Republic of Korea, Moldova, Mongolia, Poland, Romania, Russia, Slovakia, Ukraine, Uzbekistan, and Vietnam. Participation of Germany, Hungary, Italy, and the Republic of South Africa in JINR activities is based on bilateral agreements signed on the governmental level.

The supreme governing body is the Committee of Plenipotentiaries of all the 18 Member States. The research policy of JINR is determined by the Scientific Council, which consists of eminent scientists from the Member States, as well as famous researchers from the European Organization for Nuclear Research (CERN), Belgium, France, Germany, Greece, India, Italy, the Netherlands, the USA, and other countries. The research programme of the Institute is aimed at achieving significant scientific results in elementary particle physics, nuclear physics and condensed matter physics.

There are eight Laboratories at JINR, by the scope of scientific activities each being compatible with a large research institution. JINR staff totals about 6000 people, including more than 1200 scientists, about 2000 engineers and technicians. Available at the Institute is a unique choice of experimental facilities: the only in Russia superconducting accelerator for nuclei and heavy ions — the Nuclotron, the U400 and U400M cyclotrons with record beam parameters to conduct experiments in the synthesis of heavy and exotic nuclei, the unique neutron pulsed reactor IBR-2, the proton accelerator — the Phasotron, which is specifically used for ray therapy, and other unprecedented facilities.

Dubna scientists enjoy the leadership in the synthesis of superheavy nuclei. By the decision of the General Assembly of the International Union of Pure and Ap-

plied Chemistry, the name «Dubnium» was awarded to element 105 of the Mendeleev Periodic Table. Lately, JINR scientists have synthesized successfully new elements with atomic numbers 116, 118, 115 and 113.

Dubna theorists have made a basic contribution to the discovery of quantum chromodynamics, statistical mechanics and a number of other trends in theoretical and mathematical physics.

Splendid conditions for training talented young specialists have been established at JINR. Its University Centre organizes a practicum annually at the Institute facilities for the students from higher education institutions of Russia and other countries.

JINR collaborates with more than 700 research centres and universities in 60 countries of the world. In Russia, the largest JINR partner, the cooperation is conducted with 150 research centres, universities, industrial enterprises and firms in 40 Russian cities.

JINR maintains mutually beneficial contacts with IAEA, UNESCO, the European Physical Society, and the International Centre of Theoretical Physics in Trieste. Annually, above a thousand scientists from the centres cooperating with JINR visit Dubna.

JINR is well known in the world not only due to its achievements in fundamental science but also because of its contribution to the cause of bringing nations together and promoting mutual understanding among nations. The exhibition «Science Bringing Nations Together», which was held jointly by JINR and CERN in Oslo, Paris, Geneva, Brussels, Moscow, Bucharest, Dubna, Yerevan, and Thessaloniki, brightly illustrates cooperation of scientists and reflects this wonderful feature of science to consolidate the efforts of people from different countries for the sake of Progress.