Information on the Resolution of the 121st session of the JINR Scientific Council (February 2017) and on the decisions of the JINR Committee of Plenipotentiaries (March 2017)

### **121st session of the Scientific Council**

The 121st session of the JINR SC took place on 23–24 February 2017.

It was chaired by JINR Director V. Matveev and co-chaired by Professor M. Waligórski (INP, Kraków, Poland).



### **121st session of the Scientific Council**

### Agenda

- Director's report (V. Matveev)
- Results of implementation of the Seven-year plan for the development of JINR for 2010–2016 and plans for 2017–2023 (R. Lednický, M. Itkis)
- □ Recommendations of the PACs (I. Tserruya, M. Lewitowicz, O. Belov)
- Memberships of the PACs (M. Itkis)
- Reports by young scientists as recommended by the PACs (N. Sidorov, A. Gridin, V. Rachkov, L. Bayarchimeg)
- □ Proposed amendments to the "Regulation for the JINR PACs" (N. Russakovich)
- Scientific report "Status of the FAIR project at the end of 2016 and prospects for the FAIR–JINR cooperation" (B. Sharkov)
- Election of the Director of BLTP and announcement of vacancies of positions in the directorates of JINR Laboratories
- Awards and prizes

#### **General considerations**

The SC took note of the comprehensive report presented by JINR Director **V. Matveev** which concerned the decisions taken at the session of the CP in November 2016, the scientific results produced in 2016 and the major events in the activities of JINR and its international cooperation.

The SC appreciated the approval by the CP of the Seven-year plan for the development of JINR for 2017–2023 which will determine the strategy of JINR in the coming period and which will be updated on a yearly basis with the actual financial situation taken into account.



#### **General considerations**

The SC was pleased to note the establishment of a Supervisory Board of the NICA project, which is an important step taken after the recent signing of the Agreement between the Government of the Russian Federation and JINR on the construction and exploitation of the NICA complex of superconducting rings for heavy-ion colliding beams.

The SC congratulated the JINR Directorate for the successful realization of the idea of an All-Russia Open Lesson on the NICA Project on 8 February 2017 and suggested its wider distribution.



#### **General considerations**

The SC recognized the significant progress in implementing the priority projects within the JINR scientific programme and the high-quality organizational work being done by the JINR Directorate.

The SC highly congratulated the Institute for the approval by IUPAC of the names of the new superheavy elements moscovium, tennessine and oganesson synthesized at the Flerov Laboratory of Nuclear Reactions.



The SC supported the development of a long-range strategy for JINR beyond the approved Seven-year plan at least up to the year 2030.

#### Results of the previous Seven-year plan and plans for 2017–2023

The SC highly appreciated the results of implementation of the Seven-year plan for the development of JINR (2010–2016) and the plans of activities for 2017–2023 in the fields of particle physics and high-energy heavy-ion physics, and Information Technology presented by Vice-Director **R. Lednický** and in the fields of low-and intermediate-energy nuclear physics, nuclear physics with neutrons, and condensed matter physics presented by Vice-Director **M. Itkis**.



#### Results of the previous Seven-year plan and plans for 2017–2023

The SC wished the Directorate and staff of JINR success in realizing the ambitious plans aimed at constructing unique basic facilities (NICA, SHE Factory, Baikal-GVD), upgrading the existing facilities of JINR, integrating them into the European and global research infrastructures, and at accomplishing an extensive programme of fundamental and applied research in the various fields of modern physics based on broad international cooperation.



#### **Recommendations in connection with the PACs**

The SC concurred with the recommendations on issues of particle physics, nuclear physics, and condensed matter physics taken by the PACs at the sessions in January 2017, as reported by Professors I. Tserruya (PAC for Particle Physics), M. Lewitowicz (PAC for Nuclear Physics), and O. Belov (PAC for Condensed Matter Physics).

The SC proposed that the JINR Directorate should take into account these recommendations in preparing the JINR Topical Plan of Research and International Cooperation for 2018.

### **Memberships of the PACs**

As proposed by the JINR Directorate, the SC appointed **M. Lewitowicz** (GANIL, Caen, France) as Chairperson of the PAC for Nuclear Physics for a term of three years.

The SC also appointed **R. Hall-Wilton** (ESS, Lund, Sweden) as a new member of the PAC for Condensed Matter Physics for a term of three years.

The SC thanked the outgoing member **A. Ceccucci** (CERN, Geneva, Switzerland) for his successful work as a member of the PAC for Particle Physics.

### Scientific reports by young scientists

The SC appreciated the following reports by young scientists, which were selected by the PACs for presentation at this session:

- "Multimedia educational resources",
- "Charmonium-like states at COMPASS",

- "Fusion reactions with light neutron-rich nuclei: a pathway to synthesize new heavy nuclei",

 - "Simulation of radiation damage to different neuronal structures with Geant4-DNA toolkit" "TPC MPD/NICA readout electronics",

### Scientific reports by young scientists

The SC thanked the respective speakers: **N. Sidorov** (VBLHEP), **A. Gridin** (DLNP), **V. Rachkov** (FLNR), **L. Bayarchimeg** (LRB), and welcomed similar reports in the future.









#### Scientific reports by leading scientists

The SC highly appreciated the report "Status of the FAIR project at the end of 2016 and prospects for the FAIR–JINR cooperation", and thanked JINR Deputy Director **B. Sharkov** for his informative presentation. Based on the reported FAIR time schedule, the SC emphasized the need for a timely and successful completion of the NICA project with broad international cooperation. This will enable complementarity among the projects.

### **Regulation for the JINR PACs**

The SC took note of the amendments to the "Regulation for the JINR Programme Advisory Committees" proposed for consideration by Chief Scientific Secretary N. Russakovich.

The updated version of the Regulation provides an extended description of the PAC functions, enabling the PACs to establish their operating procedures and develop specific methods of the evaluation of projects.

The revised Regulation also encourages the PACs to appoint one or two of its members to perform continuous monitoring of a specific project, allows the PAC members to carry out the evaluation of projects by means of electronic communications and includes a number of minor corrections suggested by the JINR Directorate and PACs.

The SC approved the amended text of this document.



### **Prizes and awards**



The SC congratulated **Professor F. Dydak** (Austria) on the award of the diploma "Honorary Doctor of JINR", in recognition of his outstanding contributions to the advancement of science and the education of young scientists.

The SC congratulated **Professor Ju. Budagov** (JINR) on the award of the V. Dzhelepov Prize for the development and construction of a unique laser metrology system for measuring the angular oscillation of the Earth's surface.



#### **Prizes and awards**

The SC approved the Jury's recommendations on the award of the B. Pontecorvo Prize to a group of authors including: **Professor Yifang Wang** (IHEP, Beijing, China), **Professor Soo-Bong Kim** (Seoul National University, South Korea) and **Professor Koichiro Nishikawa** (KEK, Tsukuba, Japan), for their outstanding contributions to the study of the neutrino oscillation phenomenon and to the measurement of the  $\theta_{13}$  mixing angle in the Daya Bay, RENO and T2K experiments.

The SC approved the Jury's recommendations on the award of JINR annual prizes for best papers in the fields of scientific research, instruments and methods, and applied research.

# Elections and appointment of vacancies in the directorates of JINR Laboratories

The election of the Director of the Bogoliubov Laboratory of Theoretical Physics took place at the session. Since none of the candidates obtained the required majority of votes, the SC announced new elections for this position to be held at the next session in September 2017.

The SC announced the vacancies of positions of the Director of the Frank Laboratory of Neutron Physics and of the Director of the Laboratory of Information Technologies. The elections for these positions will take place at the 123rd session of the Scientific Council in February 2018.

## Session of the JINR Committee of Plenipotentiaries (CP)

A regular session of the CP of the Governments of the JINR Member States was held on 27–28 March 2017. It was chaired by the Plenipotentiary of the Republic of Bulgaria, **L. Kostov**.



### CP Session (March 2017) Agenda

- Results of JINR activities in 2016. Recommendations of the 121st session of the JINR Scientific Council (February 2017) (V. Matveev)
- Execution of the JINR budget in 2016 (S. Dotsenko)
- Implementation of the Seven-Year Plan for the Development of JINR for 2010–2016 (N. Russakovich)
- Results of the meeting of the JINR Finance Committee held on 24–25 March 2017 (A. Khvedelidze)
- Proposals of the Finance Committee for the selection of a company for auditing the financial activities of JINR for the year 2016 (A. Khvedelidze)
- Endorsement of the appointment of the Vice-Directors, the Chief Scientific Secretary and the Chief Engineer of JINR (V. Matveev)
- By-election to the membership of the Scientific Council (N. Russakovich)
- Scientific report "New arrivals from the stability island of superheavy elements" (Yu. Oganessian)

### **Director's report**

The CP took note of the recommendations of the 121st session of the JINR SC as well as of the information presented by the JINR Directorate on the implementation of the JINR Plan for Research and International Cooperation in 2016 and on the plans for JINR activities in 2017.



### **Director's report**

The CP recognized the significant progress in implementing the priority projects of the JINR scientific programme, in particular:

– the progress in the civil construction work of the NICA collider building, the successful commissioning of the linear accelerator of heavy ions HILac, the official start of the assembly and testing line for superconducting magnets; the active effort towards the preparation of the technical design reports and mass production of the MPD detector elements;

 the approval by IUPAC of the names of the new superheavy elements moscovium, tennessine and oganesson synthesized at the Flerov Laboratory of Nuclear Reactions;

 the good progress of the installation of the DC-280 cyclotron with its major technological systems in the building under construction of the Factory of Superheavy Elements;

 the high-quality scientific results obtained at the spectrometers of the IBR-2 research facility and the progress of implementation of the User Programme at the Frank Laboratory of Neutron Physics and its further development;

- the new results achieved in the field of Information Technology and the achievements in the development of the JINR educational programme.

### **Director's report**

The CP expressed concern about the tendency in recent years towards an annual reduction in the level of actual revenues of the JINR budget, which jeopardizes the implementation of the Institute's scientific programme.

It appealed to the Plenipotentiaries of the Member States to take measures for the timely payment of contributions in full as prescribed by the Charter and the Financial Protocol of JINR.



#### Implementation of the previous seven-year plan

The CP took note of the information about the major scientific results obtained in implementing the Seven-year plan for the development of JINR for 2010–2016 and about its financial support.

The CP recognized that the objectives of the seven-year plan in the area of major facilities had been achieved by JINR, in particular:

 the stable operation of the modernized IBR-2 reactor and the increased number of spectrometers now available for experiments at this facility;

 the ongoing construction of the Factory of Superheavy Elements with an expectation to put it into operation in 2017;

 the recent signature of important contracts which provide timely realization of the NICA project;

the commissioning of the Dubna cluster of the BAIKAL-GVD facility;

-the start-up of the CMS Tier1 centre.



#### **Financial issues**

The CP noted the balanced execution of the budget in 2016 in conditions of incomplete and unstable receipt of budget revenues.

The CP resolved to continue improving the procurement activities of JINR, which should facilitate efficient work and timely fulfillment of obligations for the implementation of projects.

The CP discussed the situation with industrial return to Member States in 2016. It commissioned the JINR Directorate to continue work towards securing the right of industrial return for each Member State in an amount of at least 20% of its contribution on the basis of JINR competitive procedures.



#### **Financial issues**

The CP approved the Protocol of the meeting of the Finance Committee held on 24–25 March 2017.

The CP appealed to the Plenipotentiaries of the Governments of the JINR Member States which have debts in the payment of contributions to the JINR budget to take urgent measures for their repayment and in the future to ensure the timely delivery of contributions.

The CP suspended, beginning in 2017, the increase of the arrears of Ukraine in the payment of its contribution to the JINR budget due to force majeure and deferred the consideration of the issue of Ukraine's arrears in the payment of its contribution to the budget to the session of the CP in March 2018.

The CP asked the CP Chairman to address the Ministry of Foreign Affairs of Ukraine with a request to ensure the participation of Ukraine's official representative in the meetings of the Finance Committee and the Committee of Plenipotentiaries.

The CP set up a working group of representatives of several Member States of JINR and of the JINR Directorate to develop proposals for the redemption of Ukraine's arrears in the payment of its contribution to the JINR budget.

### **Financial issues**

As proposed by the Finance Committee, the CP approved the company "Korsakov and Partners" (Moscow) as JINR's auditor and authorized it to conduct an audit of the Institute's financial activities for the year 2016.



#### Appointment of members of the JINR Directorate

Based on the results of secret ballot, the CP endorsed the appointment of **A. Sorin** as Chief Scientific Secretary of JINR and **B. Gikal** as Chief Engineer of JINR, until the completion of the term of office of the JINR Director **V. Matveev** on 1 January 2022.



#### Appointment of members of the JINR Directorate

Based on the results of open vote, the CP:

 postponed the appointment of new candidates for the positions of three Vice-Directors of JINR until the session of the CP in March 2018;

– allowed the JINR Director to extend the term of office of JINR Vice-Director **R. Lednický** until 31 March 2018 and to grant the right to extend the powers or assign temporary duties of JINR Vice-Directors, including to other persons, until their official approval by the CP.

In accordance with the Charter of JINR, the CP allowed the JINR Director to introduce the position of a fourth Vice-Director at JINR.

The CP commissioned the Director to send the material on this position to the Plenipotentiaries of the Member States, substantiating the goals, tasks, duties and requirements for the candidates, for the subsequent endorsement of the appointment as Vice-Director of one of the candidates, nominated by the Member States, at the session of the CP in March 2018.

#### Appointment of members of the JINR Directorate

The CP thanked JINR Chief Scientific Secretary **N. Russakovich** and Chief Engineer **G. Shirkov** for many years of their successful work as members of the JINR Directorate, for their contributions to the results achieved by the Institute and to the development of international scientific cooperation.





### **By-election to the Scientific Council**

The CP elected Professor Li Jiangang (Institute of Plasma Physics of the Chinese Academy of Sciences, Hefei, PRC) as a new member of the JINR SC.



### **Scientific report**

The CP highly appreciated the report "New arrivals from the stability island of superheavy elements" presented by **Yu. Oganessian**, Scientific Leader of the Flerov Laboratory of Nuclear Reactions.



# Thank you for your attention.