

## **The Journal “Uspekhi Fizicheskikh Nauk” is now 75 years old**

The journal “Uspekhi Fizicheskikh Nauk” is celebrating its 75th birthday. This date prompts us to look back and evaluate what has been achieved by “Uspekhi” during the elapsed time. The best characteristic of a journal are the papers appearing in it. Therefore, in celebrating the jubilee of “UFN” we decided to collect in this issue the most interesting articles by leading Soviet physicists published before the war and not appearing abroad. These articles are not only of historical interest. Many of the fields of physics that are now included in textbooks are presented by specialists who were creating them. Therefore the analysis and the arguments of the authors presented in the articles enable one to recreate the depth of the problem which is often lost in modern textbooks. A number of the articles are pioneering publications which laid the foundations of the then new, but by now already well established fields of physics. Becoming acquainted with them enables one to understand more deeply the concepts of these fields of physics and the connections of these concepts with the concepts that existed at the time from which they emerged. Thus, the material presented here will be useful for specialists and at the same time will illustrate the role that our journal has played in the development of physics in our country.

*The Editorial Board*

### **To the Editorial Board of the Journal “Uspekhi Fizicheskikh Nauk”**

The Presidium of the Russian Academy of Sciences congratulates the editorial board, all the staff members and the readers of the journal “Uspekhi Fizicheskikh Nauk” on the occasion of the seventy-fifth anniversary of the day of publication of the first issue of the journal.

The initiation of a new journal in physics in those years of difficulty for the entire country was without any doubt an act of civic wisdom, an expression of the deep understanding by the Russian intellectuals of their duty before science and before the nation, a testimony to their great intellectual potential, which enabled them to comprehend the great changes occurring in physics at the beginning of the century, to evaluate them and to predict their deepest consequences. It was necessary to educate the young scientists, to acquaint them with the latest achievements in physics and in adjacent fields of science both in our country and abroad. The journal “Uspekhi Fizicheskikh Nauk” made a weighty contribution to the creation and development of strong schools of physics in our country which have achieved world-wide recognition due to their high-level achievements in science. The path that it has traversed during three quarters of a century graphically demonstrates the international nature of science, and the close connection of research carried out in different countries.

The period of great changes occurring in our country noticeably affects science and its printed publications. Not to dissipate the potential that has been achieved, to preserve and extend the scientific traditions is one of the most important problems in the solution of which an essential role will have to be played by our leading scientific journals including “Uspekhi Fizicheskikh Nauk.” In paying homage to its jubilee the Presidium of the Russian Academy of Sciences greatly esteems the efforts of the editorial board, of the staff members and the authors of the journal toward a further increase in the level of physics investigations in our country, the transfer of their results into practical applications, and the strengthening of international relations.

*The Presidium of the Russian Academy of Sciences*