"8"4019 2019, Dubna

Dear Members of the JINR Scientific Council,

I hereby support the candidature of Doctor of Physical and Mathematical Sciences Alexander Nikolayevich BUGAY, Head of the Mathematical Modeling Sector at the Laboratory of Radiation Biology (LRB), for the position of LRB Director as proposed by the current LRB Director E.A Krasavin, RAS Corresponding Member, for LRB Director elections at the coming Session of the JINR Scientific Council on 19–20 September 2019.

A.N. Bugay completed his university education in the specialty of Theoretical Physics. In June 2019, at M.V. Lomonosov Moscow State University, he defended his Doctoral dissertation, "Nonlinear Interaction of Quasi-Monochromatic and Broadband Pulses in Anisotropic Media."

A.N. Bugay has worked at the LRB for more than 10 years. He has authored original research on mechanisms of the development of molecular damage in cells under exposure to accelerated charged particles and terahertz radiation pulses, genetic damage repair, and formation of mutations. He has elaborated new approaches to the analysis of disorders in the structure of protein complexes involved in interneuron interactions and the influence of these disorders on neural networks' functioning.

In the opinion of leading specialists at the Division of Biology of the Russian Academy of Sciences, these achievements are promising for research on the mechanisms of neurodegenerative diseases and disorders of the central nervous system's integrative functions that are side effects of the radiation therapy of brain tumors, as well as for solving space radiobiology problems.

For these reasons, I find it possible to support his candidature for LRB JINR Director election, which will be held at the  $126^{th}$  Session of the JINR Scientific Council.

V.A. Matveev, Acad. RAS

A Sterlee

JINR Director