

The 70th Birthday of Professor A. M. Boronin

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Dear colleagues!

On September 30, 2007, Professor Alexander Mikhailovich Boronin, corresponding member of the Russian Academy of Sciences, Director of the Skryabin Institute of Biochemistry and Physiology of Microorganisms, Russian Academy of Sciences, and President of Pushchino State University, celebrated his 70th birthday.

Alexander Mikhailovich Boronin is a specialist in the field of microbiology, microbial genetics, and biotechnology of environmental protection, an author and co-author of more than 400 scientific publications. The works of his research group have made great contributions to the establishment and development of the field of modern microbiological science presently called “plasmid biology.” Under his guidance, fundamental studies have been carried out on plasmid distribution, ecology, classification, genetic and molecular structure, functional significance for cells and populations, and their role in bacterial microevolution.

An important and voluminous line of research headed by A.M. Boronin is devoted to the study of microbial degradation and detoxification of various organic compounds, including xenobiotics. Unique plasmids controlling the degradation of naphthalene, phenanthrene, caprolactam, chlorobenzoic acids, and other xenobiotics resistance to antibiotics and heavy metals have been studied over the course of this research. A system for assessing strains degrading crude oil and petroleum products has been developed, which makes it possible to create efficient biopreparations to ameliorate the effect of environmental pollution.

The study of the properties of rhizosphere pseudomonads capable of plant growth stimulation (as a result of synthesis of siderophores, phosphate dissolution, and suppression of soil phytopathogens due to antibiotics production) has made it possible to develop technology for the production and practical application of biopesticide preparations containing living cells of

rhizosphere pseudomonads; these preparations are now extensively used in agriculture. These investigations provided the basis for the concept of combining plants and rhizosphere pseudomonads in bioremediation processes. Strains have been constructed which combine the capacities for plant growth promotion, degradation of oil hydrocarbons and other pollutants, resistance to heavy metals and arsenic, and bioremediation of mixed contaminations. These works have been awarded an MAIK Nauka/Interperiodica prize.

A.M. Boronin is one of the principal organizers of Pushchino State University, established in 1992 by the Russian Federation Government regulation. He contributed to the establishment of the University as an experimental institution of higher education, the first one in Russia to train students for master's degrees in biology. A.M. Boronin has been Chancellor of the University for 12 years and President of the University for the last two years. Under his direction, the University has developed into an integrated scientific and educational complex that includes most of the Academy Institutes at the Pushchino Research Center, Russian Academy of Sciences and, since last year, the State Research Center for Applied Microbiology and Biology as well. Under the guidance of A.M. Boronin, the University has trained 600 holders of an MS degree, which is equivalent to the staff of a large research institute. In 2001, A.M. Boronin was awarded a Prize of the

President of the Russian Federation for his achievements in the field of education.

A.M. Boronin is a member of Presidium of the Pushchino Research Center and a member of editorial boards of the journals *FEMS Microbiology Reviews*, *Mikrobiologiya (Microbiology)*, *Genetika (Russian Journal of Genetics)*, *Biotekhnologiya (Russian Journal of Biotechnology)*, and *Prikladnaya Biokhimiya i Mikrobiologiya (Applied Biochemistry and Microbiology)*.

A.M. Boronin actively participates in the organization of international cooperation. He was an initiator of the Russian–American Consortium at the Center for Ecological Research and BioResources Development, which aspires to mobilize scientific and educational potential for economic development. A.M. Boronin, a corresponding member of the Russian Academy of Sciences, has been an organizer, co-chairman, and invited speaker at many domestic and international symposia and a member of a number of International Committees and organizations (SCOPE/COGENE, UNEP, EERO, IUPAC, WFS, CIP).

The personnel of Skryabin Institute of Biochemistry and Physiology of Microorganisms, Russian Academy of Sciences and the Editorial Board of *Microbiology* wish Alexander Mikhailovich many more years of happy life and successful research.

Editorial Board