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# Foreword

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In this issue of the Paleontological Journal, we publish materials from the Conference "Microbial Communities in the Evolution of the Biosphere from Ancient Times to the Present Day" dedicated to the memory of Georgii Zavarzin (January 28, 1933–September 06, 2011). To commemorate the fifth anniversary of his death, colleagues, students, and followers of Georgii Aleksandrovich organized this successful conference on November 17, 2016 at the Borissiak Paleontological Institute of the Russian Academy of Sciences, within the framework of the Program "Evolution of the Organic World and Planetary Processes."

Zavarzin, in 2004, was one of the pioneers of this comprehensive program on the evolution of the biosphere, which has since been actively developed by many academic institutions under different names and with changing coordinators. Since the organization of this program, which was then called "The Origin and Evolution of the Biosphere," and until his death, he was its coordinator. Georgii Aleksandrovich had a great influence on the development of this program, being a leader in the study of several areas of microbiology, especially natural history, and in the study of many aspects of the function and evolution of the biosphere. His interdisciplinary approach to these problems, which he actively implemented, attached special importance to his scientific school, which was among the leading schools of geological and biological profiles. The conference showed that Zavarzin's school of thought continues to develop after his death thanks to the tremendous momentum of energy and knowledge that Georgii Aleksandrovich invested in his versatile studies of his students and followers. This is also shown by the publication of the conferences and the series of collected works under the general title "Geobiological Systems of the Past."

Georgii Aleksandrovich conceived this series of collected volumes in the now distant 2009, as modern interdisciplinary reports on the main directions of studying the evolution of the biosphere and geobiological processes. This series is growing and expanding in its topics and number of participants due to regular conferences, the work of which it is designed to report on and popularize among a wide circle of researchers. The conferences depending on their specialization are represented by various fields of research: microbiology, paleontology, embryology, biochemistry, astrobiology, genetics, and, of course, classical biological disciplines—botany, zoology, and ecology. The proceedings are first published in these collective volumes and intended not only to narrow specialists in a particular field, but adapted for researchers working in associated fields of science.

These works are important to students, PhD students and young scientists beginning their career in science, to expand their horizons, to choose the right topic of work on and learn about the best ways to disseminate the results of their scientific research among Russian-speaking colleagues. Later, some of these materials, expanded and revised, are published in English in supplements to the *Paleontological Journal*. As a results, materials of the conferences held in Russia become accessible to a wide international readership.

Various ideas in the natural history of microbiology, a science in which Georgii Aleksandrovich laid many of the foundations, through his thoughts and research on the functioning of the biosphere and the evolution of geobiological processes, are actively being used and developed by his numerous students and followers.

A volume of the selected works of G.A. Zavarzin published by the Winogradsky Institute of Microbiology in remembrance of the fifth anniversary of his death is of great value for the further dissemination of Zavarzin's thoughts and ideas. The reader of this volume will be amazed not only by the breadth of Zavarzin's outlook, but by the clarity and originality of his thoughts, and his unique understanding and sensitivity to the scale of the events and processes with worked from fractions of a second in chemical reactions, to the millions or billions of years over which the biosphere developed.

There is no doubt that the reputation of Georgii Aleksandrovich will persist through the research of his students and will be widely discussed at subsequent conferences on various areas of his multifaceted activities.

But we will always feel a lack of live communication with this remarkable scientist and fine thinker, who shared his interest and energy with the people around him.

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