Smulsky, J.J. (2026) The Main Tasks of Future Fundamental Science. New York: Nova Science Publishers, 197 p. DOI: https://doi.org/10.52305/KGXK0315. https://novapublishers.com/shop/the-main-tasks-of-future-fundamental-science/.

For 100 years now, the method of understanding the world using presumptions and hypotheses has been established in fundamental science. As a result, a world was created in the form of a four-dimensional space-time continuum. Gravitational interactions in it occur due to the curvature of this continuum. In this imaginary world, Black Holes exist, Big Bangs occur, and gravitational waves propagate. At the micro level, this world is populated by exotic particles and objects: neutrinos, bosons, quarks, superstrings, etc. In reality, none of this exists in the surrounding world.

This book is devoted to the non-hypothesis method of understanding the world. For more than half a century, the author has studied various phenomena of the macro- and microworld using this method and obtained real knowledge about them.

Mechanics is the basis of knowledge about the world. This is the science of the movements and interactions of bodies. The main provisions of mechanics are formulated. The structure of the world and its functioning are determined by gravitational interactions. The basic laws and tasks of these interactions are considered. Such space objects as planetary systems, star clusters and galaxies exist due to the interaction of N bodies. Exact solutions of the N-body problem, as well as the results of its numerical solution, are considered.

The structure of the microworld and its existence are due to electromagnetic interactions. A new law for the force of interaction of two charged particles moving relative to each other is substantiated. Gravitational and electromagnetic interactions allow us to know the real world.

Gravitational interactions of the bodies of the Solar system lead to oscillations in the parameters of the orbit and axis of the Earth. They are the cause of long-term climate fluctuations. The monograph shows that these fluctuations determine the changes in the paleoclimate, which were established by geologists in the 19th - 20th centuries.

In the 20th century, imaginary constructions about the world were borrowed for the activities of society. This leads to ugly forms of its existence and instability of society. The path of development of society based on its real needs is considered. It is based on two principles: 1) all achievements of society are obtained by its labor; 2) man has acquired power over the entire living world, therefore he is responsible for its existence and development

This path should be determined and corrected by fundamental science. However, such science should be based on real knowledge about the world. The shortcomings of contemporary science and ways to eliminate them are considered. The principles and objectives of the new fundamental science have been formulated so that it becomes the main authority of society and its guiding star.

In the last chapter of the book, the shortcomings of contemporary fundamental science and the ways of its further development are discussed from various positions.

The book is intended for a wide range of readers of different specialties and different ages.

Information about the book is available on the publisher's website: https://novapublishers.com/shop/the-main-tasks-of-future-fundamental-science/.

Fragments of the book can be viewed in its draft here: https://www.ikz.ru/~smulski/Papers/MTFFS02_1Sh.pdf.