

A MODERN APPROACH TO THE CONCEPT OF THE NOOSPHERE AND DEVELOPMENT OF ITS THEORY

The authors elaborate on a new critical approach to the assessment of the concept of the “noosphere”. The basic principles of Vernadskiy’s concept of the “noosphere” are assessed from the viewpoint of the current state of the human civilization. It is proven that the key principles of Vernadskiy’s theory cannot serve as the basis for the noosphere. So far, the theory of the “noosphere” does not exist. There are just a few prerequisites for the attainment of the noosphere, due to the limited knowledge and information about the natural environment and the human ability to interact with it without inflicting any damage.

The authors argue the noosphere can only be attained if and when the superiority of the anthropocentrism is overcome and the shift-over to the biocentrism is implemented. The authors insist that the concept of “sustainable development”, which is widely regarded as the primary method for overcoming the global ecological crisis, can be evaluated as a limited and purely pragmatic solution to the environmental problems arising at this phase of the human development; therefore, it may serve as the basis for the modern theory of the “noosphere” to a limited extent.

The basic principles of the method of harmonization used to arrange the conditions needed for the implementation of the noosphere are considered in the article. The authors demonstrate that the co-evolutionary approach to further development of the humanity and the biosphere is the basis for the formation of the noosphere. The conclusion is that both mutualism and competition facilitate evolution. The concept of co-evolution applies to the philosophical principle of harmonization valid both for an individual person and the whole humankind.

A widening gap between the research achievements and the ability of the biosphere to perceive and to assimilate them is the reason for the ecological crisis. The solution consists in the ecologization of science and technology, as well as in the generation by each person and the whole humankind of the noosphere-centered mode of thinking. Compilation of the modern theory of the “noosphere” is a key task of natural sciences to be attained through the employment of technological advancements.

Key words: noosphere, harmonization, co-evolution, ecological crisis, theory of the noosphere, concept of sustainable development, geological force, intelligence, humanity, biosphere, society, technology, ecosystem.

References

1. Vernadskiy V.I. *Biosfera i noosfera* [Biosphere and Noosphere]. Moscow, 1989, 185 p.
2. Le Roye E. L'exigence idealiste et le fait d'evolution. Paris, 1927, 196 p.
3. Teilhard de Chardin P. *Fenomen cheloveka* [Phenomenon of Man]. Moscow, 1988, 224 p.
4. Vernadskiy V.I. *Avtotrofnost' chelovechestva. Russkiy kosmizm*. [Autotrophy of the Humankind. Russian Cosmism]. Moscow, 1993, 368 p.
5. Schweitzer A. *Blagogovenie pered zhizn'yu* [Reverence for Life]. Moscow, Progress Publ., 1992, 572 p.
6. Shmal'gauzen I.I. *Puti i zakonomernosti evolyutsionnogo protsessa* [Routes and Patterns of the Evolutionary Process]. Moscow-Leningrad, Iz-vo AN SSSR Publ., 1939, 232 p.
7. Odum J. Ecology. Springer-Verlag, 1986, vol. 1, 328 p., vol. 2, 376 p.
8. Nietzsche F. *Will for Power. Experience in Revaluation of All Values*. [Volya k vlasti. Opyt pereotsenki vseh tsennostey]. Kul'turnaya revolyutsiya publ., 2005, 880 p.
9. Lovelock J. *Gaia: A New Look at Life on Earth*. Oxford University Press, 2000, 85 p.
10. Gartman N. *K osnovopolozheniyu ontologii* [The Founding Principle of the Ontology]. St.Petersburg, Nauka Publ., 2003, 639 p.
11. Bergson A. *Tvorcheskaya evolyutsiya* [Creative Evolution]. Moscow, 2006, 1408 p.
12. Potapov A.D., Ryabova S.S. *Ekologizatsiya nauki i tekhniki kak metod formirovaniya noosfery* [Ecologization of Science and Technology as the Noosphere Formation Method]. *V.I. Vernadskiy i noosfernaya paradigma razvitiya obshchestva, nauki, kul'tury, obrazovaniya i ekonomiki v XXI veke*. [V.I. Vernadskiy and the Noospheric Paradigm for Development of Society, Science, Culture, Education and Economy in the 21st Century]. *Tr. Mezhdunar. konf.* [Works of International Conference]. March 12—14, 2013, St. Petersburg, vol. 1, pp. 176—190.

About the authors: **Potapov Aleksandr Dmitrievich** — Doctor of Technical Sciences, Professor, Chair, Department of Engineering Geology and Geo-ecology, **Moscow State University of Civil Engineering (MGSU)**, 26 Yaroslavskoe shosse, Moscow, 129337, Russian Federation; adp1946@mail.ru;

Ryabova Svetlana Sergeevna — Senior Lecturer, Department of Management of Regional Development, **Academy of Public Administration of the President of the Republic of Belarus (Academy of Management)**, 17 Moskovskaya st., Minsk, 220007, Republic of Belarus; s-6093981@yandex.ru.

For citation: Potapov A.D., Ryabova S.S. *Sovremennyy podkhod k kontseptsii noosfery i ee teoreticheskomu razvitiyu* [A Modern Approach to the Concept of the Noosphere and Development of Its Theory]. *Vestnik MGSU* [Proceedings of Moscow State University of Civil Engineering]. 2013, no. 6, pp. 139—147.

