
A.L. Chizhevsky about rhythm as a general biological and philosophical principle

© G.I. Lovetskiy¹, N.A. Gavrikova²

¹Bauman Moscow State Technical University, Kaluga Branch, Kaluga, 248000, Russia

²JSC “Kaluga Regional Research and Production Environmental Center

“Region - Center – Ecology”, Kaluga, 248000, Russia

Exploring the solar-terrestrial relations, the great Russian scientist-biophysicist A.L. Chizhevsky showed that the radiant energy of the sun is a powerful biological actor and fluctuations in its amount cause changes in the Earth's organic nature, including intellectual and social life of a man and society. He was the first to give a justification of life as a cosmic phenomenon, to point to the leading role of the philosophical principles of harmony and rhythm in the knowledge of the Universe, to apply such concepts as cycle, period, and rhythm for describing the phenomena both of a cosmic order, and at the deepest level of atomic and molecular processes occurring in the human body, he laid the foundations of rhythmodynamics.

Keywords: A.L. Chizhevsky, life as a cosmic phenomenon, harmony and rhythm, rhythmodynamics.

REFERENCES

- [1] Penrose R. *Cycles of Time: An Extraordinary New View of the Universe*. Bodley Head Publ., 2010, 301 p. [In Russ.: Penrose R. Tsikly vremeni. Novyy vzglyad na evolutsiyu Vselennoy. Moscow, BINOM. Laboratory of knoledge Publ., 2014, 333 p.].
- [2] Vladimirskiy B.M. *Solnechnaya aktivnost i obshchestvennaya zhizn. Kosmicheskaya istoriometriya: ot pervykh rossiyiskikh kosmistov do nashikh dney* [Solar activity and social life. Space istoriometriya: from the first Russian cosmists to the present day]. Moscow, URSS Publ., 2013, 192 p.
- [3] Afanasin E.V. *Filosofiya nauki — Philosophy of science*, 2015, no. 2 (65), pp. 99–118.
- [4] Davies P. *Superforce*. New York, Simon and Schuster Inc. Publ., 1985, 264 p. [In Russ.: Devis P. Supersila. Moscow, Mir Publ., 1989, 272 p.].
- [5] Lovetskiy G.I. A.L. Chizhevskiy: zhizn pod znakom Solntsa i elektrona. Vybrannye mesta iz nauchnogo naslediya uchenogo [AL Chizhevsky : life under the sign of the Sun and the electron. Selected passages from the scientific heritage of the scientist]. In: *Nauka i filosofiya nauki in 3 ch. Ch. 3* [Science and philosophy of science in 3 parts. Part 3]. Moscow, BMSTU Publ., 2014, 336 p.
- [6] Chizhevsky A.L. *Zemlya v obyatiyakh Solntsa* [The Earth embraced by the Sun]. Moscow, Eksmo Publ., 2004, 928 p.
- [7] Chizhevsky A.L. *Zemnoe ekho solnechnykh bur* [Earth's echo of solar storms], Moscow, Mysl Publ., 1973, 350 p.
- [8] Chizhevsky A.L. *Elektricheskie i magnitnye svoystva eritroцитов* [Electric and magnetic properties of red blood cells]. Kiev, Naukova dumka Publ., 1973, 92 p.

Lovetskiy G.I., Dr. Sci. (Philos), Professor, Head of the Department of Philosophy and Political Sciences, Bauman Moscow State Technical University, Kaluga Branch. Research interests: social philosophy, philosophy of science and technology.
e-mail: ce3@bmstu-kaluga.ru

Gavrikova N.A., Specialist, JSC “Kaluga Regional Research and Production Environmental Center “Region – Center – Ecology”. Research interests: industrial ecology and information security.