

---

# Social and philosophical aspects of contemporary engineering and technology training

© G.I. Lovetskiy

Bauman Moscow State Technical University, Kaluga branch,  
Kaluga, 248000, Russia

*We have conducted a social and philosophical analysis of the dominant trends in technological university evolution. The study shows that their future is determined by the main subject of science, which today starts to be dominated by life as the supreme object in the hierarchy of objects and phenomena studied by sciences. New education content means innovative engineering and technology training methods, based on theoretical and applied models of instruction.*

**Keywords:** *engineering and technology training methods, main subject of science, theoretical and applied models of instruction.*

## REFERENCES

- [1] Sidnyaev N.I. *Alma mater (Vestnik vysshey shkoly) — Alma mater (High School Herald)*, 2014, no. 9, pp. 9–16.
  - [2] Shitov S.B. *Alma mater (Vestnik vysshey shkoly) — Alma mater (High School Herald)*, 2014, no. 3, pp. 30–34.
  - [3] Kolesnikov A.S. *Vestnik SPbGU — Vestnik of Saint-Petersburg University*, 2015, no. 4, pp. 41–47.
  - [4] Karpov A.O. *Obshchestvennyye nauki i sovremennost — Social studies and modernity*, 2015, no. 5, pp. 86–101.
  - [5] Kraevskiy V.V., Berezhnova E.V. *Osnovy uchebno-issledovatel'skoy deyatel'nosti studentov* [Foundations of the self-study and research student activity]. Moscow, Akademiya Publ., 2008, 128 p.
  - [6] Romanov E.V. *Alma mater (Vestnik vysshey shkoly) — Alma mater (High School Herald)*, 2014, no. 9, pp. 17–26.
  - [7] Kovalchuk M.V., Naraykin O.S., Yatsishina E.B. *Voprosy Filosofii — Problems of Philosophy*, 2013, no. 3, pp. 3–11.
  - [8] Klyachko T.L., Mau V.A. *Obshchestvennyye nauki i sovremennost— Social studies and modernity*, 2015, no. 3, pp. 5–18.
  - [9] Coombs F.H. *The World Educational Crisis: A Systems Analysis*. Oxford University Press, 1968, 241 p. [In Russ.: Coombs F.H. *Krizis obrazovaniya v sovremennom mire (sistemnyy analiz)*. Moscow, Progress Publ., 1970, 256 p.].
  - [10] Lyotard J.-F. *The Postmodern Condition: A Report on Knowledge*. Minneapolis, University of Minnesota Press, 1984, 110 p. [In Russ.: Lyotard J.-F. *Sostoyaniye postmoderna*. Moscow, Aleteyya, 1998, 156 p.].
  - [11] Klyachko T.L., Mau V.A. *Obshchestvennyye nauki i sovremennost — Social studies and modernity*, 2015, no. 4, pp. 5–25.
  - [12] Ivanov V.G., Kaybiyaynen A.A., Gorodetskaya I.M. *Vysshee obrazovanie v Rossii — Higher Education in Russia*, 2015, no. 12, pp. 60–69.
  - [13] Kostylev S.Yu., Petrova S.V. *Alma mater (Vestnik vysshey shkoly) — Alma mater (High School Herald)*, 2016, no. 2, pp. 5–12.
  - [14] Lavrenev M.M. Ad disputandum. *Poiski matematicheskikh zakonomernostey Mirozdaniya: fizicheskie idei, podkhody, kontseptsii* [Searching for mathematical laws of the Universe: physical ideas, approaches, concepts]. Novosibirsk, Sobolev Institute of Mathematics Publ., 2004, 172 p.
-

- [15] Plebanek O.V. *Voprosy Filosofii — Problems of Philosophy*, 2015, no. 4, pp. 68–78.
- [16] Chuprunov E.V., Strongin R.G., Grudzinskiy A.O. *Vysshee obrazovanie v Rossii — Higher Education in Russia*, 2013, no. 8–9, pp. 11–17.
- [17] Abdullin I.A., Dresvyannikov A.F. *Vysshee obrazovanie v Rossii — Higher Education in Russia*, 2015, no. 5, pp. 74–80.
- [18] Shestak V.P. *Vysshee obrazovanie v Rossii — Higher Education in Russia*, 2015, no. 2, pp. 49–58.
- [19] Nikitaev V.V. *Voprosy Filosofii — Problems of Philosophy*, 2013, no. 3, pp. 68–79.
- [20] Smirnykh L.N. Nauka v novom mire: geoplanetarnaya sushchnost nauki i nauchnogo mirovozzreniya [Science in the new world: the geoplanetary essence of science and the scientific outlook]. In: *Poisk matematicheskikh zakonomernostey mirozdaniya: fizicheskie idei, podkhody, kontseptsii* [Searching for mathematical laws of the Universe: physical ideas, approaches, concepts]. Novosibirsk, Geo Publ., 2006, 203 p.
- [21] Gagaev A.A., Skipetrov V.P. *Filosofiya A.L. Chizhevskogo* [The philosophy of A.L. Chizhevskiy]. Saransk, Mordovian State University Publ., 1999, 286 p.
- [22] Vladimirov Yu.S. *Mezhdru fizikoy i metafizikoy* [Between physics and metaphysics]. In 5 vols. Vol. 5: *Kosmofizika Chizhevskogo: XX vek* [Chizhevskiy's space physics: the 20th century]. Moscow, LIBROKOM Publ., 2013, 280 p.
- [23] Penrose R. *The Emperor's New Mind: Concerning Computers, Minds and The Laws of Physics*. Oxford University Press, 1989, 480 p. [In Russ.: Penrose R. *Novyy um korolya: O kompyuterakh, myshlenii i zakonakh fiziki*. Moscow, Editorial URSS, 2003, 384 p.].
- [24] Penrose R. *Cycles of Time: An Extraordinary New View of the Universe*. London, Bodley Head, 2010, 288 p. [In Russ.: Penrose R. *Tsikly vremeni. Novyy vzglyad na evolyutsiyu Vseennoy*. Moscow, BINOM Publ., Laboratoriya znaniy Publ., 2014, 333 p.].
- [25] Shnedelbakh G. *Logos — The Logos Journal*, 2002, no. 5–6 (35), pp. 87–95.
- [26] Scheler M. *Ressentiment*. New York, Schocken, 1972, 201 p. [In Russ.: Scheler M. *Resentiment v strukture moraley*. Saint-Petersburg, Nauka Publ., Universitetskaya kniga Publ., 1999, 231 p.].
- [27] Klepach A.N., Kuranov G.O. *Voprosy Ekonomiki — Problems of Economics*, 2013, no. 11, pp. 4–33.
- [28] De Riedmatten E. *XXIe siècle : Les innovations qui vont changer notre vie* [21st century: the innovations that will change our life]. L' Archipel, 2005, 413 p. [In Russ.: de Riedmatten E. *Izobreteniya XXI veka, kotorye izmenyat nashu zhizn*. Moscow, Eksmo Publ., 2009, 336 p.].
- [29] Lovetskiy G.I., Detyuk V.I., Lovetskiy N.G. *Metodologiya innovatsionnogo razvitiya sistemy professionalnogo obrazovaniya regiona. Miroobrazovatika* [Methodology of innovative development of the regional system of professional education. The world-educatorics]. Kaluga, Poligraf-Inform Publ., 2005, 292 p.
- [30] Artamonov A.D., Lovetskiy G.I. *Tekhnicheskie universitety v informatsionnom obshchestve* [Technological universities in the information society]. Moscow, Bauman Moscow State Technical University Publ., 2004, 288 p.

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