Engineering elite in Postnonclassical Era: Activity paradigm shift

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Rationality of engineering elite in postnonclassical era is being transformed. It is required that a modern engineer has interdisciplinary, comprehensive knowledge, social design competence and problem-oriented engineering research skills, constructivism and pragmatism. The area of engineering activity is expanding, knowledge is being diversified, the term "engineer" is getting fuzzy.

Keywords: engineering elite, engineering rationality, postnonclassical era, interdisciplinary knowledge.

REFERENCES

- [1] Atlas novykh professiy [The Atlas of new professions]. Moscow, Skolkovo Moscow School of Management Publ., 2013, 168 p.
- [2] Gukovskiy M.A. *Mekhanika Leonardo da Vinchi* [The mechanics of Leonardo da Vinci]. Moscow, USSR Academy of Sciences Publ., 1947, p. 815.
- [3] Lektorskiy V.A. Vestnik Rossiyskogo filisofskogo obshchestva Bulletin of the Russian Philosophical Society, 2013, no. 3, pp. 19–24.
- [4] Stepin V.S. Scientific Rationality in Technogenic Culture: Types and Historical Evolution. Proceedings of the International Scientific Conference "Rationality and its Limits" during the International Institute of Philosophy Meeting in Moscow (September 15–18, 2011). A. Guseynov, V. Lektorskiy, eds. Moscow, IFRAN Publ., 2012.
- [5] Shukhova E.M. Nashe nasledie Our Heritage, 2004, no. 70, pp. 113–119.
- [6] Auyang Sunny Y. *Knowledge in Science and Engineering*. Synthese, 2009, vol. 168, no. 3, pp. 319–331.
- [7] Gorokhov V.G. Ot prostogo k slozhnomu: ot klassicheskogo estestvoznaniya k tekhnicheskim naukam [From simple to complex, from classical science to the engineering sciences]. *Filosofiya nauki* [Philosophy of Science]. Institute of Philosophy, RAS, 2013, issue 18, pp.10–29.
- [8] Bagdasaryan N.G., Gavrilina E.A. Pervyy inzhener v rossiyskoy istorii [The first engineer in the Russian history]. *Proceedings of the Congress The genius of Shukhov and the modern era April 17–18*. Moscow, Bauman Moscow State Technical University, 2015, pp. 6–15.
- [9] Olsen J., Christiansen F. Technology and science epistemology, rationality and the empirical turn. *Synthese*, 2009, vol. 168, no. 3, pp. 313–318.
- [10] Bagdasaryan N.G., Gavrilina E.A. *Vysshee obrazovanie v Rossii Higher education in Russia*, 2010, no. 6, pp. 23–28.
- [11] Prayd V., Medvedev D.A. Filisofskie nauki Philosophical sciences, 2008, no. 1, pp. 97–116.
- [12] Rozov M.A. Filisofskie nauki Philosophical sciences, 2008, no. 3, pp. 21–34.
- [13] Stepin V.S. *Klassika, neklassika, postneklassika: kriterii razlicheniya.* [Classics, no classics, post no classics: criteria for distinguishing]. *Postneklassika: filosofiya, nauka, kultura* [Post No Classics: Philosophy, Science, Culture]. Collective monograph. Mir Publ., 2010, pp. 249–295.

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