

Training transport specialists based on a contemporary view of self-organization of sophisticated developing systems

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Abstract

© Published under licence by IOP Publishing Ltd. This paper discusses the problem of how to integrate natural-science, humanist and special technical knowledge in professional university-level training of transport specialists being a rapidly developing sophisticated system. This engages current science concepts of self-organization and self-development of sophisticated natural and man-made systems.

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References

- [1] Arbib M A 2004 *Metaphorical brain: Trans. from English* (M.: Editorial URSS) 304
- [2] Prigogine I and Stengers I 1986 *Order out of Chaos: Man's New Dialogue with Nature: Trans. from English* (M.: Progress) 432
- [3] Haken H. 1980 *Synergetics: Trans. from English. Ph.D in Physics and Mathematics V I Yemelyanov* (M.: Mir) 423
- [4] Gorbachev V V and Bezdenezhnykh V M 2004 *Concepts of modern science* (M.: The Economist) 446
- [5] Ruzavin G I 2007 *Concepts of modern science* (M.: Units) 287
- [6] Khoroshavina S G 2005 *Concepts of modern science* (Rostov-on-Don: Phoenix) 480
- [7] Haken H 2001 *The principle of the brain: The synergetic approach to the activity of the brain, behavior and cognitive performance* (M.: Perce) 351
- [8] Kuzyk B N and Yakovets Y 2006 *Civilizations: Theory, History, Dialogue and the Future: in 2 volumes* (M.: Institute for Economic Strategies) 768
- [9] Khakimov E M 2007 *The dialectic of hierarchy and non-hierarchy in philosophy and scientific knowledge* (Kazan: Published by Feng Academy of Science) 288
- [10] Auhadeeva L A 2006 *Communicative culture of the future teacher as an object of systematic research* (Kazan: Publishing house of KSU) 164
- [11] Korolkov B P 2011 *Thermodynamic fundamentals of self-organization: monograph* (Irkutsk IrGUPS) 120
- [12] Prokhorov I M 1985 *The Soviet encyclopaedic dictionary* (M.: Sov. Encyclopedia) 1632
- [13] Auhadeev E I, Ilyazov R G, Karpov A M and Iksanov H W 2011 *Modern ecological and anthropological methodology of the study and solution of health problems: Book of reports Proceedings of the international conference dedicated to the 25th anniversary of the Chernobyl disaster* 296
- [14] Leontiev A N 1975 *Activity, consciousness, personality* (M.: Politizdat) 304
- [15] Bernstein N A 1990 *The physiology of movements and activity* (M.: Nauka) 496