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Training of chemistry teachers for sustainable development

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Abstract

© Published under licence by IOP Publishing Ltd. Proposed and piloted teacher training plan containing elements of the concept of sustainable development, teacher training plan includes the development of general and specialized courses in chemical disciplines, organization of activities, taking into account the principles of Green Chemistry.

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References

- [1] Yevteev S A and Perelet R A 1989 Our Common Future: Report of the World Comission on Environment and Development (WCED) (Oxford University Press, UK)
- [2] Collins T J 2017 Review of the twenty-three year evolution of the first university course in green chemistry: teaching future leaders how to create sustainable societies Journal of Cleaner Production 140 93-110
- [3] Gilmanshina S I, Sagitova R N and Gilmanshin I R 2016 Innovative Component of Preparation of Bachelors and Masters in The System of University Natural Science Education The European Proceedings of Social &Behavioural Sciences EpSBS XII 55-59
- [4] Gilmanshina S I, Gilmanshin I R, Sagitova R N and Galeeva A I 2016 The Feature of Scientific Explanation in the Teaching of Chemistry in the Environment of New Information of School Students' Developmental Education International Journal of Environmental and Science Education 11 349-58
- [5] Gilmanshina S I, Sagitova R N et al 2015 Professional Thinking Formation Features of Prospective Natural Science Teachers Relying on the Competence-Based Approach Review of European Studies 7 341-49
- [6] Gilmanshina S I and Gilmanshin I R 2015 Building axiological competence of graduate students by means of project-based learning IOP Conference Series: Materials Science and Engineering 86 012029
- [7] Sibgatova K I, Gilmanshina S I, Khalikova F D, Gilmanshin I R et al 2015 Peculiarities of Pupils and Vocational College Students' Career Guidance Modeling in the Integrated System "School - College - Enterprise" Asian Social Science 11 386-91
- [8] Gilmanshin I R, Ferenets A V, Azimov Yu I, Galeeva A I and Gilmanshina S I 2015 Innovative technologies of waste recycling with production of high performance products IOP Conference Series: Materials Science and Engineering 86 12014-16
- [9] Gilmanshin I R, Kashapov N F, Azimov Y I, Gimanshina S I, Ganeeva D A and Valishev R D 2015 Utilization of biogas solid waste landfills by building power complex on the basis of alternative energy installations Kazanskii economicheskii vestnik 2 41-44
- [10] Gilmanshin I R, Kashapov N F, Gilmanshina S I and Galeeva A I 2016 Landfill energy complex based on the renewable energy installations IOP Conference Series: Materials Science and Engineering 134 012007