Air pollution investigation by organic compounds in the city

Nasyrov I., Mavrin G., Miftahov M. Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2018 Nasyrov et al. In this paper carry out assessment of level of impurity of atmospheric air in the city is executed by light organic compounds. The nature of change of content of these ingredients in atmospheric air in the direction of their possible source is studied. The composition of the organic substances which are present at atmospheric air is investigated. Sampling of air on these components is made. The analysis on the gas chromatograph and processing of the received results is made. Calculation of quantitative content of light organic compounds in tests of atmospheric air is made. The character of a gradient of concentration of light organic compounds towards the city of Nizhnekamsk is defined. For the purpose of assessment of level of impurity of atmospheric air the complex index of impurity of the atmosphere for 23 trial platforms is determined by five priority volatile organic compounds. Offers on decrease in content of light organic compounds in atmospheric air are developed.

Keywords

Atmospheric air, Impurity, Organic compounds, Pollution

References

- [1] Amann M, Gyarfas F, Schopp W, Boudri JC (2000) Prévision d'air-un système de modélisation de la contamination atmosphérique. Emep. 87 p. 170.
- [2] Kajino M (2003) Modelling Liquid Water Content of Atmospheric Aerosols. IIASA IR 03-046.
- [3] Karpenkov SH (2014) Ecology: Textbook. Logos, 399 p.
- [4] Khabibullin RG, Irina Viktorovna Makarova IV, Belyaev EI, Suleimanov IF, Pernebekov SS, Ussipbayev UA, Junusbekov AS, Balabekov ZA (2013) The Study and Management of Reliability Parameters for Automotive Equipment Using Simulation Modeling. Life Science Journal 10(12): 828-831.
- [5] Kovalchuk VK, Ivanov IL, Saenko AG, Kovalchuk VC (2010) Sanitary protection zones for industrial sources of air pollution: study guide. Vladivostok: Far East Medicine, 136 p.
- [6] Sokolovsky AE, Kovalenko NA, Supichenko GN, Radion EV (2002) Chromatographic Methods of Analysis, Minsk, 35 p.
- [7] Suleimanov IF (2013) The assessment of the city air pollution by automobile transportation and industrial enterprises basing on calculation methods. World Applied Sciences Journal, 23(4): 480-485.
- [8] Suleimanov IF, Mavrin GV, Kharlyamov DA, Belyaev EI, Mansurova AI (2015) Pollution of the air basin in the cities by motor transport and the industrial enterprises, quality assessment of atmospheric air with the use of calculation methods and instrumental control. Modern Applied Science 9(4): 12-20.
- [9] Suleimanov IF, Mavrin GV, Kharlyamov DA, Iamaletdinov DV (2015) Assessment of Urban Air Pollution Caused By Motor Vehicle Complex and Industrial Facilities. Research Journal of Pharmaceutical, Biological and Chemical Sciences 6(1): 1605-1609.

[10]	Suleimanov IF, Mavrin GV, Sokolov MP, Suleimanova YE, Ardashirova LR (2016) Reducing the negative impact on the environment through organization of traffic flows considering the emissions of industrial enterprises ARPN Journal of Engineering and Applied 11(15): 9134-9137.	ct s.