

7. Water recovery and on-site reuse of laundry wastewater by a facile and cost-effective system: Combined biological and advanced oxidation process / K. Z. Benis, A. Behnami, E. Aghayani, S. Farabi, M. Pourakbar // Science of the Total Environment. 2021. Vol. 789. (148068) – 13 p.
8. Fathi Aloui, S., Kchaou S., & Sayadi S. Physicochemical treatments of anionic surfactants wastewater: Effect on aerobic biodegradability // Journal of Hazardous Materials. 2009. Vol. 164. P. 353–359.
9. Kinetic, equilibrium and thermodynamic studies for sorption of 2,4-dichlorophenol onto surfactant modified fuller's earth / J. Shah, Jan M. Rasul, M. Zeeshan, & M. Imran // Applied Clay Science. 2017. Vol. 143. P. 227–233.
10. Senthil R.B., & Senthil K.P. Application of adsorption process for effective removal of emerging contaminants from water and wastewater // Environmental Pollution. 2021. Vol. 280. (116995) – 19 p.
11. Evaluating the properties of organic and mineral sludge as a raw material for the production of sorption material / Zh.A. Sapronova, Yu.L. Makridina, I.V. Starostina, M.N. Spirin & E.V. Fomina // IOP Conf. Series: Earth and Environmental Science. 2021. Vol. 624. No. 012211. P. 7.
12. Sapronova, Zh.A. Sravnenie sorbcionnyh svojstv organomineral'nyh othodov razlichnyh modifikacij pri ochistke model'nyh vod ot SPAV // Bezopasnost', zashchita i ohrana okruzhayushchej prirodnoj sredy: fundamental'nye i prikladnye issledovaniya: Materialy Vserossijskoj nauch. konf./Zh.A. Sapronova, A.V. Svyatchenko.– Belgorod, 2021. – S. 302–306.
13. PND F 14.1:2:4.15–95 Kolichestvennyj himicheskij analiz vod. Metodika izmerenij massovoj koncentracii anionnyh poverhnostno-aktivnyh veshchestv v pit'evyh, poverhnostnyh i stochnyh vodah ekstrakcionno-fotometricheskim metodom. – FBU FCAO. – 2011
14. Svyatchenko, A.V. Analiz osobennostej ochistki model'nyh vod ot ionov medi i nikelya termoobrabotannym cellululosoderzhashchim materialom / A.V. Svyatchenko, Zh.A. Sapronova, S.V. Sverguzova // Izvestiya Samarskogo nauchnogo centra Rossijskoj akademii nauk. – 2023. – T. 25. – № 6(116). – S. 174–180.
15. Sapronova Zh.A., Starostina I.V., & Bomba I.V. Purification of Model Waters from the Congo Red Dye with Organomineral Sorption Material Based on Sludge Waste // Lecture Notes in Civil Engineering. 2021. Vol. 147. P. 273–278.
16. Commission on Colloid and Surface Chemistry Including Catalysis Reporting Physisorption Data For Gas/Solid Systems with Special Reference to the Determination of Surface Area and Porosity / K. S. W. Sing, D. H. Everett, R. A. Haul, L. Moscou, I. J. Pierott, R. A. Rouquerol, T. Siemieniewska // Pure & App. Chem. 1985. Vol. 57, No. 4. P. 603–619.
17. Sverguzova, S.V. Ispol'zovanie biomassy abrikosovyh kostochek v kachestve materiala dlya izvlecheniya metilenovogo golubogo iz vodnyh sred / S.V. Sverguzova, Yu.A. Vinogradenko, I.G. Shajhiev, R.Z. Galimova, E.S. Antyufeeva, R.R. Gafarov // Ekologiya i Promyshlennost' Rossii. – 2020. – T. 24. – № 11. – S. 36–40.
18. Galimova, R.Z. Adsorbciya ionov medi (II) na modifitsirovannoj kore akacii ushkovidnoj (Acacia Auriculiformis) / R.Z. Galimova, I.G. Shajhiev, T.K.T. Nguen // Ekologicheskaya himiya. – 2020. – T. 29. – № 4. – S. 196–200.
19. Galimova, R.Z. Vliyanie rN sredy na protekanie processov adsorbciyi ionov medi, nikelya i cinka igolkami listvennicy sibirskoj (LARIX SIBIRICA) / R.Z. Galimova, I.G. Shajhiev, N.A. Kamalova, S.V. Sverguzova // Sorbcionnye i hromatograficheskie processy, 2020. – № 20(3). – S. 400–407.
20. Nimibofa A., Augustus N. E., Donbebe W. H. Modelling and Interpretation of Adsorption Isotherms // Journal of Chemistry. 2017. Article 3039817. – 11 p.
21. Alekseeva, A.A. Primenenie listovogo opada v kachestve osnovy sorbcionnogo materiala pri likvidacii avariynyh razlivov nefti s poverhnosti vody: dis.... kand. tekhn. nauk / A.A. Alekseeva. – Kazan', 2017. – 159 s.
22. Quantification of the limitation of Langmuir model used in adsorption research on sediments via site energy heterogeneity / Q. Jin, L. Huang, A. Li et al. // Chemosphere. 2017. Vol. 185. P. 518–528.
23. Aziziana S., Erisa S., & Lee D. Re-evaluation of the century-old Langmuir isotherm for modeling adsorption phenomena in solution // Wilson Chemical Physics. 2018. Vol. 513. P. 99–104.
24. Latour R.A. The Langmuir isotherm: A commonly applied but misleading approach for the analysis of protein adsorption behavior // Journal of Biomedical Materials Research. 2015. Vol. 103A. P. 949–958.
25. Guo X., & Wang J. Comparison of linearization methods for modeling the Langmuir adsorption isotherm // Journal of Molecular Liquids. 2019. Vol. 296. Article 111850.

Anastasia Svyatchenko, Candidate of Sciences in Technology, Associate Professor at the Industrial Ecology Department.

E-mail: sv.anastasiaa@mail.ru

Zhanna Sapronova, Doctor of Sciences in Technology, Associate Professor, Head at the Industrial Ecology Department.

E-mail: sapronova.2016@yandex.ru

Yan Murzhanov, Postgraduate Student, Industrial Ecology Department. E-mail: murzhanov94@mail.ru

Известия Самарского научного центра Российской академии наук

Учредитель: федеральное государственное бюджетное учреждение науки

Самарский федеральный исследовательский центр Российской академии наук

Журнал зарегистрирован в Роскомнадзоре, свидетельство ПИ № ФС77-61347 от 07.04.2015

Главный редактор: академик РАН Ф.В. Гречников

Том 27, номер 4 (126), 29.08.2025

Индекс: 36622. Распространяется бесплатно

Адрес учредителя, издателя и редакции – 443001, Самарская область,
г. Самара, Студенческий пер., 3а. Тел. 8 (846) 340-06-20

Издание не маркируется

Сдано в набор 16.08.2025 г.

Офсетная печать

Подписано к печати 29.08.2025 г.

Усл. печ. л. 25,808

Формат бумаги А4

Тираж 200 экз.

Зак. 40

Отпечатано в типографии ООО "Инсома-пресс".

Адрес типографии: 443080, Самарская обл., г. Самара, ул. Санфировой, 110А, офис 22А. Тел. 8 (846) 222-92-40