

Волчо Константин Петрович, доктор химических наук, специальность 02.00.03 – органическая химия, профессор РАН. Федеральное государственное бюджетное учреждение науки Новосибирский институт органической химии им. Н.Н. Ворожцова СО РАН, отдел медицинской химии, главный научный сотрудник.

Список основных публикаций по теме диссертации за последние 5 лет:

1. Kotliarova A., Ponomarev K., Morozova E. A., Suslov E., Pavlova A. V., Tolstikova T. G., Volcho K. P., Salakhutdinov N. F. 3,7-Diazabicyclo[3.3.1]nonanes and 1,3-diazaadamantanes containing monoterpenoid moieties as synthetic adaptogens: synthesis, ADMET predictions, and in vivo biological activity // *Medicinal Chemistry Research*. 2025. Vol. 34. No. 6. pp. 1347-1363.
2. Friberg L. I. M., Kavanagh A., Amado M., Lowe G., Zuegg J., Novais de Paula M., Onawole A., Floyd H. E. E., Kravchenko A. N., Guan D., Elliott A. G., Kuchar J., Mohr F., Luzina O., Salakhutdinov N., Volcho K. P., Farrukh H. S. U. B., Kalsoom U., Shah Zaib Saleem R., Blanchfield J., Blaskovich M. A., Hansford K. A. Organoselenium compounds as an enriched source for the discovery of new antimicrobial agents // *RSC Medicinal Chemistry*. 2025. Vol. 16. No. 7. pp. 3213-3228.
3. Podturkina A. V., Ardashov O. V., Soldatova Y. V., Poletaeva D. A., Smolina A. V., Vasyuchenko E. P., Vyatkin Y. V., Li Zhulanov N. S., Faingold I. I., Salakhutdinov N. F., Volcho K. P. Inhibitory Activity of N- and S-Functionalized Monoterpene Diols Towards Monoamine Oxidases A and B // *International Journal of Molecular Sciences*. 2024. Vol. 26. No. 1. p. 97.
4. Filimonov A. S., Mikhailova M. A., Dyrkheeva N. S., Chernyshova I., Kornienko T. E., Naumenko K. A., Anarbaev R., Nefedov A. A., Achara C., Curtis A. P., Luzina O. A., Volcho K. P., Salakhutdinov N. F., Lavrik O.I., Reynisson J. Sulfide, Sulfoxide, and Sulfone Derivatives of Usnic Acid as Inhibitors of Human TDP1 and TDP2 Enzymes // *Chemistry*. 2024. Vol. 6. No. 6. pp. 1658-1679.
5. O’Flaherty S., Luzina O. A., Dyrkheeva N. S., Krier Y., LePrince J. A., Zakharenko A. L., Pokrovsky M. A., Pokrovsky A. G., Lavrik O.I., Salakhutdinov N. F., Varbanov M., Devocelle M., Volcho K. P. Novel Peptide–Drug Conjugates with Dual Anticancer Activity // *International Journal of Molecular Sciences*. 2024. Vol. 25. No. 22. p. 12411.
6. Salomatina O. V., Kornienko T. E., Zakharenko A. L., Komarova N. I., Achara C., Reynisson J., Salakhutdinov N. F., Lavrik O. I., Volcho K. P. New Dual Inhibitors of

- Tyrosyl-DNA Phosphodiesterase 1 and 2 Based on Deoxycholic Acid: Design, Synthesis, Cytotoxicity, and Molecular Modeling // *Molecules*. 2024. Vol. 29. No. 3. p. 581.
7. Munkuev A. A., Zakharenko A. L., Kornienko T. E., Dyrkheeva N. S., Ilina E. S., Suslov E. V., Issa F., Achara C., Reynisson J., Volcho K. P., Salakhutdinov N. F., Lavrik O. Synthesis of adamantane-monoterpene conjugates with 1,3,4-thiadiazol-2(3H)-imine linker and evaluation of their inhibitory activity against TDP1 // *Medicinal Chemistry Research*. 2024. Vol. 33. No. 2. pp. 324-335.
 8. Aleksandrova Y., Munkuev A. A., Mozhaitsev E. S., Suslov E., Volcho K. P., Salakhutdinov N., E. Neganova M. Hydroxamic Acids Containing a Bicyclic Pinane Backbone as Epigenetic and Metabolic Regulators: Synergizing Agents to Overcome Cisplatin Resistance // *Cancers*. 2023. Vol. 15. No. 20. p. 4985.
 9. Dyrkheeva N. S., Ilyina I. V., Volcho K. P., Salakhutdinov N. F., Lavrik O. I. 3-Oxabicyclo[3.3.1]nonenes: synthesis and investigation as tyrosyl-DNA phosphodiesterase 1 inhibitors // *Russian Chemical Bulletin*. 2023. Vol. 72. No. 10. pp. 2525-2535.
 10. Dolan J. P., Ahmadipour S., Wahart A. J. C., Cheallagh A. N., Sari S., Eurtivong C., Lima M. L., Skidmore M. A., Volcho K. P., Reynisson J., FIELD R. A., Miller G. J. Virtual screening, identification and in vitro validation of small molecule GDP mannose dehydrogenase inhibitors // *RSC Chemical Biology*. 2023. Vol. 4. No. 11. pp. 865-870.
 11. Gibadullina E., E. Neganova M., Aleksandrova Y., Nguyen H. B. T., Voloshina A., Khrizanforov M., Nguyen T. T., Vinyukova E., Volcho K. P., Tsypyshev D., Lyubina A., Amerhanova S., Strelnik A., Voronina J. K., Islamov D., Zhapparbergenov R., Appazov N. O., Chabuka B., Kimberley C., Burilov A., Salakhutdinov N., Sinyashin O., Alabugin I. V. Hybrids of Sterically Hindered Phenols and Diaryl Ureas: Synthesis, Switch from Antioxidant Activity to ROS Generation and Induction of Apoptosis // *International Journal of Molecular Sciences*. 2023. Vol. 24. No. 16. p. 12637.
 12. Khomenko T. M., Zakharenko A. L., Kornienko T. E., Chepanova A. A., Dyrkheeva N. S., Artemova A. O., Korchagina D. V., Achara C., Curtis A. P., Reynisson J., Volcho K. P., Salakhutdinov N. F., Lavrik O. I. New 5-Hydroxycoumarin-Based Tyrosyl-DNA Phosphodiesterase I Inhibitors Sensitize Tumor Cell Line to Topotecan // *International Journal of Molecular Sciences*. 2023. Vol. 24. No. 11. p. 9155.
 13. Ivankin D. I., Kornienko T. E., Mikhailova M. A., Dyrkheeva N. S., Zakharenko A. L., Achara C., Reynisson J., Golyshev V. M., Luzina O. A., Volcho K. P., Salakhutdinov N. F., Lavrik O. I. Novel TDP1 Inhibitors: Disubstituted Thiazolidine-2,4-Diones Containing Monoterpene Moieties // *International Journal of Molecular Sciences*. 2023. Vol. 24. No. 4. p. 3834.

14. Salomatina O. V., Dyrkheeva N. S., Popadyuk I. I., Zakharenko A. L., Ilina E. S., Komarova N. I., Reynisson J., Salakhutdinov N. F., Lavrik O. I., Volcho K. P. New Deoxycholic Acid Derived Tyrosyl-DNA Phosphodiesterase 1 Inhibitors Also Inhibit Tyrosyl-DNA Phosphodiesterase 2 // *Molecules*. 2021. Vol. 27. No. 1. p. 72.
15. Dyrkheeva N. S., Filimonov A. S., Luzina O. A., Zakharenko A. L., Ilina E. S., Malakhova A. A., Medvedev S. P., Reynisson J., Volcho K. P., Zakian S. M., Salakhutdinov N. F., Lavrik O. I. New Hybrid Compounds Combining Fragments of Usnic Acid and Monoterpenoids for Effective Tyrosyl-DNA Phosphodiesterase 1 Inhibition // *Biomolecules*. 2021. Vol. 11. No. 7. p. 973.