

**СВЕДЕНИЯ об официальном оппоненте
(Согласие на оппонирование)**

Я, Дьяконов Владимир Анатольевич,
(Фамилия, имя, отчество)

согласен быть официальным оппонентом

Подтуркиной Александры Владимировны

(Фамилия, имя, отчество)

по кандидатской / докторской (подчеркнуть) диссертации на тему:

« Синтез новых производных и аналогов(4S,5R,6R)-пара-мента-1,8-диен-5,6-диола,перспективных противопаркинсонических агентов»

по специальности 1.4.3. Органическая химия (Химические науки)

О себе сообщаю:

ученая степень доктор химических наук

шифр и наименование специальностей 02.00.03. «Органическая химия», 02.00.15 «Кинетика и катализ»

ученое звание Доцент, Профессор РАН

должность Руководитель группы «Лаборатория металлоорганического синтеза и катализа №25»

место и адрес работы (постоянной) Федеральное государственное бюджетное учреждение науки Институт органической химии им. Н. Д. Зелинского Российской академии наук (ИОХ РАН), 119991, г. Москва, Ленинский проспект, д. 47

место и адрес работы (по совместительству) _____

Я согласен(на) на включение и дальнейшую обработку моих персональных данных, необходимых для процедуры защиты диссертации соискателя, исходя из нормативных документов Правительства РФ, Минобрнауки России и ВАК, в том числе на размещение их в сети Интернет на сайте НИОХ СО РАН, на сайте ВАК, в единой информационной системе.

Перечень опубликованных работ по специальности оппонируемой диссертации (за последние 5 лет):

1. L.U. Dzhemileva, V.A. D'yakonov, I.I. Islamov, M.M. Yunusbaeva, U.M. Dzhemilev, New 1Z,5Z-Diene Macrodiolides: Catalytic Synthesis, Anticancer Activity, Induction of Mitochondrial Apoptosis, and Effect on the Cell Cycle, Bioorg. Chem., 2020, 99, 103832
2. L.U. Dzhemileva, A.A. Makarov, E.N. Andreev, M.M. Yunusbaeva, E.Kh. Makarova, V.A. D'yakonov, U.M. Dzhemilev, New 1,3-Diynoic Derivatives of Natural Lembehynes B: Stereoselective Synthesis, Anticancer and Neuritogenic Activity, ACS Omega, 2020, 5(4), 1974-1981
3. V.A. D'yakonov, G.N. Kadikova, R.N. Nasretudinov, L.U. Dzhemileva, U.M. Dzhemilev, Targeted Synthesis of 9-Azabicyclo[4.2.1]nona-2,4,7-trienes by Cobalt(II)-Catalyzed [6 π +2 π]-Cycloaddition of Alkynes to N-Substituted Azepines and Their Antitumor Activity, Eur. J. Org. Chem., 2020, 5, 623-626
4. V.A. D'yakonov, A.A. Makarov, L.U. Dzhemileva, E.N. Andreev, E.Kh. Makarova, U.M. Dzhemilev, Total Synthesis of Natural Lembehynes C and Investigation of Its Cytotoxic Properties, J. Nat. Prod. 2020, 83(8), 2399–2409
5. A.A. Makarov, L.U. Dzhemileva, A.R. Salimova, E.Kh. Makarova, I.R. Ramazanov, V.A. D'yakonov, U.M. Dzhemilev, New Synthetic Derivatives of Natural 5Z,9Z-Dienoic Acids: Stereoselective Synthesis and Study of the Antitumor Activity, Bioorg. Chem., 2020, 104, 104303

6. V.R. Akhmetova, N.S. Akhmadiev, L.U. Dzhemileva and V.A. D'yakonov, Synthesis of New N,N'-Pd(Pt) bi-Ligand Complexes Based on Sulfanyl Pyrazoles, and Investigation of Their in vitro Anticancer Activity, *RSC Advances*, 2020, 10, 15116-15123
7. G.N. Kadikova, L.U. Dzhemileva, V.A. D'yakonov, U.M. Dzhemilev, Synthesis of Functionally Substituted Bicyclo[4.2.1]nona-2,4-dienes and Bicyclo[4.2.1]nona-2,4,7-trienes by Cobalt(I)-Catalyzed [6+2]-Cycloaddition of 2-Tropylcyclohexanone, *ACS Omega*, 2020, 5(48), 31440–31449
8. Dzhemileva L.U., D'yakonov V.A., Seitkalieva M.M., Kulikovskaya N.S., Egorova K.S., Ananikov V.P. "A large-scale study of ionic liquids employed in chemistry and energy research to reveal cytotoxicity mechanisms and to develop safe design guide", *Green Chem.*, 2021, 23, 6414-6430. <https://doi.org/10.1039/D1GC01520F>
9. Egorova K.S., Galushko A.S., Dzhemileva L.U., D'yakonov V.A., Ananikov V.P. "Building bio-Profiles for common catalytic reactions", *Green Chem.*, 2021, 23, 6373-6391. <https://doi.org/10.1039/D1GC00207D>
10. D'yakonov, V.A., Makarov, A.A., Dzhemileva, L.U., Ramazanov, I.R., Makarova, E.K., Dzhemilev, U.M. Natural Trienoic Acids as Anticancer Agents: First Stereoselective Synthesis, Cell Cycle Analysis, Induction of Apoptosis, Cell Signaling and Mitochondrial Targeting Studies. *Cancers*, 2021, 13, 1808. <https://doi.org/10.3390/cancers13081808>
11. D'yakonov V.A., Tuktarova R.A., Dzhemileva L.U., Ishmukhametova S.R., Dzhemilev U.M. Synthesis and Anticancer Activity of Hybrid Molecules Based on Lithocholic and (5Z,9Z)-Tetradeca-5,9-dienedioic Acids Linked via Mono(di,tri,tetra)ethylene Glycol and α,ω -Diaminoalkane Units. *Pharmaceuticals* 2021, 14, 84. <https://doi.org/10.3390/ph14020084>
12. V.R. Akhmetova, E.M. Bikbulatova, E.S. Mescheryakova, E.N. Gil'manova, L.U. Dzhemileva, V.A. D'yakonov, Synthesis, crystal structure, and in vitro evaluation of the anticancer activity of new Pt (Pd) complexes with 1-[(dimethylamino)methyl]-2-naphthol ligand, *Metallomics*, 2021, 13(11), mfab063, <https://doi.org/10.1093/mtomcs/mfab063>
13. A.R. Tuktarov, L.L. Khuzina, Z.R. Sadretdinova, E.Kh. Makarova, L.U. Dzhemileva, V.A. D'yakonov, U.M. Dzhemilev. Synthesis and cytotoxic activity of unsaturated macrolides and their hybrid molecules with a C60 fullerene, *Org. Biomol. Chem.*, 2021, 19, 1847-1853, <https://doi.org/10.1039/D1OB00023C>
14. A.Yu. Spivak, D.A. Nedopekina, R.R. Gubaidullin, E.V. Davletshin, A.A. Tukhbatullin, V.A. D'yakonov, M.M. Yunusbaeva, L.U. Dzhemileva, U.M. Dzhemilev, Pentacyclic triterpene acid conjugated with mitochondria-targeting cation F16: Synthesis and evaluation of cytotoxic activities, *Medicinal Chemistry Research* 2021, 30, 940–951. <https://doi.org/10.1007/s00044-021-02702-z>
15. G.N. Kadikova, V.A. D'yakonov, U.M. Dzhemilev, Cobalt(I)-Catalyzed $[6\pi + 2\pi]$ Cycloaddition of 1,2-Dienes and 1,3-Diynes to N-Carbocholesteroxyazepine in the Synthesis of Previously Undescribed Heterofunctional 9-Azabicyclo[4.2.1]nonadi(tri)enes, *ACS Omega* 2021, 6(33), 21755–21763. <https://doi.org/10.1021/acsomega.1c03321>
16. Pentsak, Evgeniy O; Dzhemileva, Lilya U; D'yakonov, Vladimir A; Shaydullin, Ruslan R; Galushko, Alexey S; Egorova, Ksenia S; Ananikov, Valentine P; ,Comparative assessment of heterogeneous and homogeneous Suzuki-Miyaura catalytic reactions using bio-Profiles and bio-Factors, *Journal of Organometallic Chemistry*, 965, 122319, 2022, Elsevier
17. Khairullina, Regina R; Dzhemileva, Lilya U; D'yakonov, Vladimir A; Ibragimov, Askhat G; Dzhemilev, Usein M; , "Synthesis of 1, 4, 2, 6-dithiadiazinane 1, 1-dioxide and study of its cytotoxic activity", *Mendeleev Communications*, 32, 2, 178-179, 2022, Elsevier
18. Dzhemileva L.U. Pentacyclic Triterpenoids-Based Ionic Compounds: Synthesis, Study of Structure–Antitumor Activity Relationship, Effects on Mitochondria and Activation of Signaling Pathways of Proliferation, Genome Reparation and Early Apoptosis / L.U. Dzhemileva, R.A. Tuktarova, U.M. Dzhemilev, V.A. D'yakonov, // *Cancers* – 2023. – V. 15. – P. 756. DOI:10.3390/cancers15030756
19. Dzhemileva L.U. Natural Acetogenins, Chatenaytrienins-1, -2, -3 and -4, Mitochondrial Potential Uncouplers and Autophagy Inducers—Promising Anticancer Agents / L.U. Dzhemileva, R.A. Tuktarova, U.M. Dzhemilev, V.A. D'yakonov, // *Antioxidants* – 2023. – V. 12. – P. 1528. DOI:10.3390/antiox12081528
20. Akhmetova V.R. Mono- and binuclear complexes of copper(II) with dimethylaminomethyl derivatives of 2-naphthol and 6-quinolinol: synthesis and in vitro study of antitumor properties / V.R. Akhmetova, E.M. Galimova, E.S. Mescheryakova, L.U. Dzhemileva, R.A. Tuktarova, U.M. Dzhemilev, V.A. D'yakonov, // *Metallomics* – 2023. – V. 15. – P. mfa037. DOI:10.1093/mtomcs/mfa037
21. Makhmudiyarova N.N. Multicomponent Assembly of Bicyclic Aza-peroxides Catalyzed by Samarium Complexes and Their Cytotoxic Activity / N.N. Makhmudiyarova, I.R. Ishmukhametova, T.V. Tyumkina, E.S. Mescheryakova, L.U. Dzhemileva, V.A. D'yakonov, A.O. Terent'ev, U.M. Dzhemilev // *J. Org. Chem.* – 2023. – V. 88. – P. 11473–11485. DOI:10.1021/acs.joc.3c00555

22. Makhmudiyarova N.N. A New Catalytic Method for the Synthesis of Cyclic Azaperoxides with High Cytotoxic Activity / N.N. Makhmudiyarova, I.R. Ishmukhametova, L.U. Dzhemileva, V.A. D'yakonov, A.O. Terent'ev, U.M. Dzhemilev // ChemistrySelect – 2023. – V. 8. – P. e202302044. DOI:10.1002/slct.202302044
23. Dzhemileva L.U. Mechanisms of cytotoxicity in six classes of ionic liquids: Evaluating cell cycle impact and genotoxic and apoptotic effects / L.U. Dzhemileva, V.A. D'yakonov, K.S. Egorova, V.P. Ananikov // Chemosphere. – 2024, V. 364. – P. 142964.
24. Chobanov N.M. Lithocholic Acid's Ionic Compounds as Promising Antitumor Agents: Synthesis and Evaluation of Production of Reactive Oxygen Species (ROS) in Mitochondria, / N.M. Chobanov, L.U. Dzhemileva, U.M. Dzhemilev, V.A. D'yakonov // Antioxidants. – 2024, V. 13. – P. 1448. DOI: 10.3390/antiox13121448
25. Tuktarova R.A. New Synthetic Analogs of Natural 5Z,9Z-Dienoic Acids – Hybrid Molecules Based on Oleanolic Acid: Synthesis and Study of Antitumor Activity, / R.A. Tuktarova, L.U. Dzhemileva, U.M. Dzhemilev, V.A. D'yakonov // Cancers. – 2024, V. 16. – P. 3893.
26. Islamov I.I. New Polyether Macrocycles as Promising Antitumor Agents – Targeted Synthesis and Induction of Mitochondrial Apoptosis, / I.I. Islamov, L.U. Dzhemileva, I.V. Gaisin, U.M. Dzhemilev, V.A. D'yakonov // ACS Omega – 2024, V. 9. – P. 19923–19931.
27. Tuktarova R.A. Synthesis of N-heterocyclic analogs of natural muricadienin – promising antitumor agents, / R.A. Tuktarova, L.U. Dzhemileva, U.M. Dzhemilev, V.A. D'yakonov // Russ. Chem. Bull. – 2024, V. 73. – P. 1408–1416.

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