

Сведения об официальном оппоненте

по диссертации Александрова Евгения Викторовича на тему «Топологические закономерности формирования и принципы дизайна координационных полимеров и водородно-связанных органических кристаллов» на соискание ученой степени доктора химических наук по специальности 1.4.4 - Физическая химия.

1. ФИО оппонента: Федин Владимир Петрович

2. Ученая степень, звание: доктор химических наук, профессор, член-корреспондент РАН

3. Специальность: 1.4.1. (02.00.01) – физическая химия

4. Основное место работы и должность: заведующий отделом химии координационных, кластерных и супрамолекулярных соединений ФГБУН Институт неорганической химии имени А. В. Николаева СО РАН

5. Перечень основных публикаций оппонента по теме диссертации за последние 5 лет:

1. P.V. Burlak, D.G. Samsonenko, K.A. Kovalenko, V.P. Fedin Synthesis, structure and luminescent properties of Zn(II) metal–organic frameworks constructed by flexible and rigid ligands. *Polyhedron*, 2022, V. 222, N. 115880.
2. V. Ponomareva, K. Kovalenko, I. Bagryantseva, E. Shutova, V. Fedin CrMIL-53 as a matrix for proton-conducting nanocomposites based on $\text{CsH}_5(\text{PO}_4)_2$. *Materials Letters*, 2022, V. 318, N. 132181.
3. Y. Ma, Z. Zhao, M. Zhu, Y. Zhang, M. Kosinova, V. P. Fedin, S. Wu, E. Gao Rapid detection of lamotrigine by a water stable fluorescent lanthanide metal–organic framework sensor. *Polyhedron*, 2022, V. 220, N. 115803.
4. P.A. Demakov, A.A. Ryadun, V.P. Fedin Zn(II) coordination polymer with π -stacked 4,4'-bipyridine dimers: Synthesis, structure and luminescent properties. *Polyhedron*, 2022, V. 219, N. 115793.
5. A.S. Zaguzina, G. Mahmoudi, T.S. Sukhikh, I.F. Sakhapov, D.A. Zherebtsova, F.I. Zubkov, K.S. Valchuke, M.N. Sokolov, V.P. Fedin, S.A. Adonin 2D and 3D Zn(II) coordination polymers based on 4'-(Thiophen-2-yl)-4,2':6',4"-terpyridine: Structures and features of sorption behavior. *Journal of Molecular Structure*, 2022, V. 1255, N. 132459.
6. X. Yu, E. Gao, W. Yao, V.P. Fedin, A.S. Potapov Zinc(II) and cobalt(II) complexes with unusual coordination of mixed imidazole-1,2,4-triazole ligand in a protonated cationic form. *Polyhedron*, 2022, V. 217, N. 115741.
7. A.S. Zaguzin, T.S. Sukhikh, I.F. Sakhapov, V.P. Fedin, M.N. Sokolov, S.A. Adonin Zn(II) and Co(II) 3D Coordination Polymers Based on 2-Iodoterephthalic

Acid and 1,2-bis(4-pyridyl)ethane: Structures and Sorption Properties. *Molecules*, 2022, V. 27, N. 1305.

8. A.S. Ulikhina, N.F. Uvarov, K.A. Kovalenko, V.P. Fedin Ionic conductivity of tetra-n-butylammonium tetrafluoroborate in the MIL-101(Cr) metal-organic framework. *Microporous and Mesoporous Materials*, 2022, V. 332, N. 111710.

9. D.I. Pavlov, T.S. Sukhikh, A.A. Ryadun, V.V. Matveevskaya, K.A. Kovalenko, E. Benassi, V.P. Fedin, A.S. Potapov A luminescent 2,1,3-benzoxadiazole-decorated zirconium-organic framework as an exceptionally sensitive turn-on sensor for ammonia and aliphatic amines in water. *Journal of Materials Chemistry C*, 2022, V. 10, P. 5567-5575.

10. G.N. Bondarenko, O.G. Ganina, A.A. Lysova, V.P. Fedin, I.P. Beletskaya Cyclic carbonates synthesis from epoxides and CO₂ over NIIC-10 metal-organic frameworks. *Journal of CO₂ Utilization*, 2021, V. 53, N. 101718.

11. P.A. Demakov, A.S. Poryvaev, K.A. Kovalenko, D.G. Samsonenko, M.V. Fedin, V.P. Fedin, D.N. Dybtsev Structural Dynamics and Adsorption Properties of the Breathing Microporous Aliphatic Metal–Organic Framework. *Inorg. Chem.* 2020, V. 59, N. 21, P. 15724–15732

12. V.A. Dubskikh, A.A. Lysova, D.G. Samsonenko, D.N. Dybtsev, V.P. Fedin Topological polymorphism and temperature-driven topotactic transitions of metal–organic coordination polymers. *CrystEngComm*, 2020, V. 22, P. 6295-6301