

CURRICULUM VITAE

Name Last/First/Patronic **Timofeeva Maria Nikolaevna**

Date of Birth (M/D/Y) 04/17/64



Education

1981.09 – 1986.06 Novosibirsk state University, Department of Chemistry, specialist of chemistry

Place of Work

1986.06 – 1992.09 Junior Research Fellow in Boreskov Institute of Catalysis SB RAS, Russia

1992.06 - Ph.D. Degree in Catalysis “Bulk and supported heteropoly acids as catalyst for alkylation and dealkylation of phenols”

1992.09 – 2012.10 Research Fellow in Boreskov Institute of Catalysis SB RAS, Russia.

2011.01 - Sc.D. Degree in Catalysis “Effect of acidity on catalytic properties of homogeneous and heterogeneous systems based on polyoxometallates”

2012.10 – Present Leading Research Fellow at the Boreskov Institute of Catalysis SB RAS, Russia

<http://catalysis.ru/>

2011.09 – Present Professor at the Novosibirsk Technical University, Department of Problems of Ecological Engineering, Russia

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Research Interest

Synthesis and investigation physicochemical and catalytic properties of homogeneous and heterogeneous systems based on polyoxometallates, zeolites, zeotype and clay materials

Teaching activity

Professor at the Novosibirsk Technical University, Department of Ecological problems of Technosphere Safety

Lectures: “Nanotechnology and ecology problems” (postgraduate, 72 h), “Technosphere Safety” (postgraduate, 72 h), “Organic chemistry” (bachelor, 216 h), "Scientific seminar" (postgraduate, 34 h), “Green Chemistry” (postgraduate, 36 h)

1. Matrosova M.M - PhD dissertation «Acidic and catalytic properties of heteropoly acids ($H_nPW_{11}XO_{40}$, где X = W(VI), Ti(IV) and Zr(IV)), (α -H₆P₂W₁₈O₆₂), H₆P₂W₂₁O₇₁(H₂O)₃, H₆As₂W₂₁O₆₉(H₂O) and H₂₁B₃W₃₉O₁₃₂)»(2009, SB RAS)

2. Orlov A.A. - Diploma project of postgraduate «Synthesis and investigation of physicochemical and catalytic properties of systems based on ionic liquids » (2013, Novosibirsk state university)
3. Abel A.A. - Diploma project of postgraduate «Investigation of alfa-pinene isomerisation in the presence of zeotype materials based on Fe and Al ions » (2013, Novosibirsk state university)
4. Vasilishina O.G. - Diploma project of postgraduate «Isomerisation of terpene compounds in the presence of systems based on magnetic particles» (2015, Novosibirsk state technical university)
5. Gorina A.A. - Diploma project of bachelor «Synthesis of 1-methoxypropanol-2 in the presence of systems based on clays » (2014, Novosibirsk state technical university)
6. Kochegarova K. V. - «Investigation of reaction vanillin with isopulegol in the presence of clay modified by acids » (2015, Novosibirsk state technical university)
7. Karimova L.K. - Diploma project of bachelor «Synthesis of solketal from acetone and glycerol in the presence of acid catalysts » ((2016, Novosibirsk state technical university))
8. Makarova K.N. - Diploma project of bachelor « Synthesis of oxygen- and nitrogen-containing heterocyclic compounds the presence of systems based on natural clays » ((2017, Novosibirsk state technical university))
9. Lukoyanov I.A. - Diploma project of bachelor « Synthesis of solketal from acetone and glycerol in the presence of zeotype catalytic systems » ((2017, Novosibirsk state technical university))

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Publications

Review article

1. **Acid-Base Properties and Catalytic Activity of Metal-Organic Frameworks: A View from Spectroscopic and Semiempirical methods (Review Article)**, V. N. Panchenko, **M. N. Timofeeva**, S. H. Jhung, *Catalysis Reviews: Science and Engineering*, 58(2) (2016) 209-307
2. **Catalytic potential of the wonderful chameleons: nickel phosphate molecular sieves**, **M.N. Timofeeva**, V.N. Panchenko, Zubair Hasan and Sung Hwa Jhung, *Applied Catalysis A: General*, 455 (2013) 71– 85,
3. **Design and Application of Iron-Containing Mesoporous Molecular Sieves for Peroxide Oxidation of Pollutants: Effect of Iron Environment on Textural, Physicochemical and Catalytic Properties: In: Mesoporous Materials**. Editor: Lynn T. Burness., Nova Science Publishers, Inc Chapter 10, **M. N. Timofeeva** and M. S. Mel'gunov, pp. 1-28, 2009
4. **Acid catalysis by heteropoly acids**, **M.N. Timofeeva**, *Appl. Catal A: General* 256 (2003) 19-35

Articles

5. **Metal-organic frameworks as efficient catalytic systems for the synthesis of 1,5-benzodiazepines from 1,2-phenylenediamine and ketones**, **M.N. Timofeeva**, V.N. Panchenko, S.A. Prikhod'ko, A.B. Ayupov, Yu.V. Larichev, N. A. Khan, S. H. Jhung, *Journal of Catalysis* 354 (2017) 128–137, (IF 6.844) DOI information: 10.1016/j.jcat.2017.08.009
6. **Two synthesis approaches of Fe-containing intercalated montmorillonites: Differences as acid catalysts for the synthesis of 1,5-benzodeazepine from 1,2-phenylenediamine and acetone**, B. González, R. Trujillano, M. A. Vicente, A. Gil, V. N. Panchenko, E. A. Petrova, **M. N. Timofeeva**, *Applied Clay Science*, 146 (2017) 388-396 (IF 3.101)
7. **Iron-containing materials as catalysts for synthesis of 1,5-benzodiazepine from 1,2-phenylenediamine and acetone**, **M.N. Timofeeva**, S.A. Prikhod'ko, K O. Makarova, M.E. Malyshev, V.N. Panchenko, A.B. Ayupov, S. H. Jhung, *Reaction Kinetics, Mechanisms and Catalysis*, 121 (2) (2017) 689-699 (IF 1.264) DOI: 10.1007/s11144-017-1190-2
8. **Железосодержащие мезопористые мезофазные силикатные материалы как эффективные катализаторы синтеза 1,5-бензодиазепина из о-фенилендиамина и ацетона**, К.Н. Макарова, М.Е. Малышев, В.Н. Панченко, А.Б. Аюпов, **М.Н. Тимофеева**, *Вестник Томского государственного университета. Серия Химия*, 7 (2017) 62-70 DOI: 10.17223/24135542/7/6
9. **Experimental Study of Montmorillonite Structure and Transformation of Its Properties under Treatment with Inorganic Acid Solutions**, Victoria V. Krupskaya , Sergey V. Zakusin, Ekaterina A. Tyupina , Olga V. Dorzhieva, Anatoliy P. Zhukhlistov, Petr E. Belousov. **Maria N. Timofeeva**, *Minerals*, 2017, 7(4), 49-64; doi:10.3390/min7040049

10. **Effect of nitric acid modification of montmorillonite clay on synthesis of solketal from glycerol and acetone**, M.N. Timofeeva, V.N. Panchenko, V.V. Krupskaya, A. Gil, M.A. Vicente, *Catalysis Communications*, 90 (2017) 65-69, (IF 3.699) DOI information: 10.1016/j.catcom.2016.11.020
11. **Isostructural metal-carboxylates MIL-100(M) and MIL-53(M) (M: V, Al, Fe and Cr) as catalysts for condensation of glycerol with acetone**, Maria N. Timofeeva, Valentina N. Panchenko, Nazmul Abedin Khan, Zubair Hasan, Igor P. Prosvirin, Sergey V. Tsybulya, Sung Hwa Jung, *Applied Catalysis A: General*, 529 (2017) 167-174, (IF 4.339) DOI information: 10.1016/j.apcata.2016.11.006 (IF 3.410)
12. **Photoreactivity of metal-organic frameworks in decolourization of methylene blue in aqueous solution**, E. A. Kozlova, V. N. Panchenko, Z. Hasan, N. A. Khan, M. N. Timofeeva, S. H. Jung, *Catalysis Today*, 266 (2016) 136-143, DOI information: 10.1016/j.cattod.2015.07.026
13. **Synthetic and natural materials with the brucite-like layers as high active catalyst for synthesis of 1-methoxy-2-propanol from methanol and propylene oxide**, M. N. Timofeeva, A. E. Kapustin, V. N. Panchenko, E. O. Butenko, V. V. Krupskaya, A. Gil, M. A. Vicente, *Journal of Molecular Catalysis A: Chemical*, 423 (2016) 22-30
14. **Effect of acid modification of kaolin and metakaolin on Brønsted acidity and catalytic properties in the synthesis of octahydro-2H-chromen-4-ol from vanillin and isopulegol**, M. N. Timofeeva, V. N. Panchenko, K. P. Volcho, S. V. Zakusin, V. V. Krupskaya, A. Gil, O. S. Mikhailchenko, M. A. Vicente, *Journal of Molecular Catalysis A: Chemical*, 414 (2016) 160-166
15. **Photoreactivity of metal-organic frameworks in decolourization of methylene blue in aqueous solution**, E. A. Kozlova, V. N. Panchenko, Z. Hasan, N. A. Khan, M. N. Timofeeva, S. H. Jung, *Catalysis Today*, 266 (2016) 136-143
16. **Effect of structure and acidity of acid modified clay materials on synthesis of octahydro-2H-chromen-4-ol from vanillin and isopulegol**, M. N. Timofeeva, Valentina N. Panchenko, Antonio Gil, Sergey V. Zakusin, Victoria V. Krupskaya, Konstantin P. Volcho, Miguel A. Vicente, *Catalysis Communication* 69 (2015) 234-238,
17. **Fenton degradation of sulfanilamide in the presence of Al,Fe-pillared clay: Catalytic behaviour and identification of the intermediates**, S. Ts. Khankhasaeva, D. V. Dambueva, E. Ts. Dashinamzhilova, A. Gil, M. A. Vicente, M. N. Timofeeva, *Journal of Hazardous Materials*, 293 (2015) 21-29
18. **Synthesis of octahydro-2H-chromen-4-ol from vanillin and isopulegol over acid modified montmorillonite clays: Effect of acidity on the Prins cyclization**, Maria N. Timofeeva, Konstantin P. Volcho, Oksana S. Mikhailchenko, Valentina N. Panchenko, Victoria V. Krupskaya, Sergey V. Tsybulya, Andoni Gil, Miguel A. Vicente, Nariman F. Salakhutdinov, *J. Mol. Catal. A: Chem.*, 398 (2015) 26-34
19. **Factors affecting the catalytic performance of Zr,Al-pillared clays in the synthesis of propylene glycol methyl ether**, M.N. Timofeeva, V.N. Panchenko, M.M. Matrosova, A. S. Andreev, S.V. Tsybulya, Antonio Gil, Miguel Angel

Vicente, *Industrial & Engineering Chemistry Research*, 53 (2014) 13565–13574 (IF 2.206) ISSN: 0888-5885

20. **Catalytic behavior of metal-organic frameworks in the Knoevenagel condensation reaction**, V. N. Panchenko, M. M. Matrosova, J. J., Jong, W. Jun, M. N. Timofeeva, S. H. Jung, *J. Catal.*, 316 (2014) 251-259 DOI: 10.1016/j.jcat.2014.05.018 (IF 5.787)
21. **Effects of linker substitution on catalytic properties of porous zirconium terephthalate UiO-66 in acetalization of benzaldehyde with methanol**, M.N. Timofeeva, V.N. Panchenko, Jong Won Jun, Zubair Hasan, M.M. Matrosova, Sung Hwa Jung, *Appl.Catal.A: Gen.*, 471 (2014) 91-97, DOI: 10.1016/j.apcata.2013.11.039, ISSN 0926-860X (IF 3.410)
22. **Rearrangement of α -pinene oxide to campholenic aldehyde over the trimesate metal-organic frameworks MIL-100, MIL-110 and MIL-96**, M.N. Timofeeva, V.N. Panchenko, A.A. Abel, Nazmul Abedin Khan, Imteaz Ahmed, A.B. Ayupov, K.P.Volcho, Sung Hwa Jung, *J. Catal.*, 311 (2014) 114-120, DOI: 10.1016/j.jcat.2013.11.006 (IF 5.787)
23. **Effect of iron content on selectivity in isomerization of alpha-pinene oxide to campholenic aldehyde over Fe-MMM-2 and Fe-VSB-5**, M. N. Timofeeva, V. N Panchenko; Z Hasan; N. A Khan; M. S Mel'gunov; A A Abel; M M Matrosova; K. P Volcho; S.H. Jung, *Appl. Catal. A: Gen.*, 469 (17) (2014) 427-433, DOI: 10.1016/j.apcata.2013.10.016, ISSN 0926-860X (IF 3.410)
24. **Laser Flash Photolysis Study of Photocatalytic Properties of Pillared Interlayered Clays and Fe,Al-Silica Mesoporous Catalysts**, E.M. Glebov, I.P. Pozdnyakov, V.P. Grivin, V.F. Plyusnin, N.M. Bazhin, Xu Zhang, Feng Wu, M.N. Timofeeva, *Photochem. Photobiol. Sci.*, 12(11) (2013) 1939-1947
25. **Effect of the acid-base properties of metal phosphate molecular sieves on the catalytic performances in synthesis of propylene glycol methyl ether from methanol and propylene oxide**, M.N. Timofeeva, V.N. Panchenko, Jong Won Jun, Zubair Hasan, O. V. Kikhtyanin, I. P. Prosvirin, Sung Hwa Jung, *Micropor. Mesopor. Mater.*, 165 (2013) 84-91
26. **Каталитические свойства Fe/Cu/Al-монтмориллонитов в реакции окисления пероксидом водорода азакрасителя «кислотный хром темно-синий» (Catalytic properties of Fe/Cu/Al-montmorillonites in oxidation of monoazo dye acid chrome dark-blue with H₂O₂)**, С. Ц. Ханхасаева, Э. Ц. Дашинамжилова, Д. В. Дамбуева, М. Н. Тимофеева, *Кинетика и катализ*, 54 № 3 (2013) 320-327 (*Kinetics and Catalysis* – in Russian)
27. **Vanadium-containing nickel phosphate molecular sieves as catalysts for α -pinene oxidation with molecular oxygen: a study of the effect of vanadium content on activity and selectivity**, M.N. Timofeeva, Zubair Hasan, V.N. Panchenko, I.P.Prosvirin, Sung Hwa Jung, *J. Mol. Catal. A: Chem.*, 363-364 (2012) 328-334, ISSN 1381-1169
28. **Nickel phosphate molecular sieves VSB-5 as heterogeneous catalysts for synthesis of monosaccharides from formaldehyde and dihydroxyacetone**, I. V. Delidovich, M. N. Timofeeva, A. Yu. Orlov, V. N. Panchenko, Z. Hasan, S. H.

- Jhung, O. P. Taran, V. N. Parmon, *New J. Chem.*, 36 (11) (2012) 2201 - 2204, DOI:10.1039/C2NJ40363C
29. **Synthesis of propylene glycol methyl ether from methanol and propylene oxide over alumina-pillared clays**, M. N. Timofeeva, V. N. Panchenko, A. Gil, Yu. A. Chesalov, T. P. Sorokina, V. A. Likholobov, *Appl. Catal. B: Environmental*, 102 (2011) 433 – 440, : 0926-3373
 30. **Effect of the acid-base properties of Zr,Al-pillared clays on the catalytic performances in the reaction of propylene oxide with methanol**, M.N. Timofeeva, V.N. Panchenko, A. Gil, V.P. Doronin, A.V. Golovin, A.S. Andreev, V.A. Likholobov, *Appl. Catal. B: Environmental*, 104 (2011) 54-63, ISSN: 0926-3373
 31. **Fe-containing nickel phosphate molecular sieves as heterogeneous catalysts for phenol oxidation and hydroxylation with H₂O₂**, M.N. Timofeeva, Zubair Hasan, A.Yu. Orlov, V.N. Panchenko, Yu. A. Chesalov, I.P. Soshnikov, Sung Hwa Jung, *Appl. Catal. B: Environmental*, 107 (1-2) (2011) 197-204, ISSN: 0926-3373
 32. **FeAl₁₂-Keggin type cation as an active site source for Fe,Al-silica mesoporous catalysts**, M. N. Timofeeva, M. E. Malyshev, V. N. Panchenko, A. N. Shmakov, A. G. Potapov, M. S. Mel'gunov, *Appl. Catal. B: Environmental*, 95 (2010) 110-119, ISSN: 0926-3373
 33. **Amine modified silica NH₂-(CH₂)_x-SiO₂ (x = 0, 1 and 3) as support for cobalt-substituted polyoxometalate TBA₄HPW₁₁CoO₃₉: effect of the nature of the support on the oxidation activity**, V. N. Panchenko, I. Borbáth, M. N. Timofeeva, S. Göbölös, *J.Mol. Catal. A: Chem.*, 319(1-2) (2010) 119-125, ISSN 1381-1169
 34. **Synthesis of Fe,Al-pillared clays starting from the Al,Fe-polymeric precursor: effect of synthesis parameters on textural and catalytic properties**, M. N. Timofeeva, S.Ts. Khankhasaeva, Yu.A. Chesalov, S.V. Tsibulya, V.N.Panchenko, E.Ts. Dashinamzhilova, *Appl. Catal. B: Environmental*, 88 (1-2) (2009) 127-134, ISSN: 0926-3373
 35. **Методы и подходы к регулированию физико-химических и каталитических свойств слоистых алюмосиликатов**, М. Н. Тимофеева, С. Ц. Ханхасаева, *Кинетика и катализ*, 50 (2009) 1-9, ISSN 0453-8811
 36. **The effect of Fe/Cu ratio in the synthesis of mixed Fe,Cu,Al-clays used as catalysts in phenol peroxide oxidation**, M. N. Timofeeva, S. Ts. Khankhasaeva, E.P. Talsi, V. N. Panchenko, A.V. Golovin, E. Ts. Dashinamzhilova, S.V. Tsybulya, *Appl. Catal. B: Environmental*, 90 (2009) 618-627, ISSN: 0926-3373
 37. **Titanium and cerium-containing mesoporous silicate materials as catalysts for oxidative cleavage of cyclohexene with H₂O₂: a comparative study of catalytic activity and stability**, M. N. Timofeeva, O.A. Kholdeeva, S. H. Jung, J.-S. Chang, *Applied Catalysis A: General*, 345(2) (2008) 195-200, ISSN 0926-860X
 38. **Novel Zirconocene Hydride Complexes in Homogeneous and in SiO₂-Supported Olefin-Polymerization Catalysts Modified with Diisobutylaluminum Hydride or Triisobutylaluminum.**, D. E. Babushkin, V.

- N. Panchenko, **M. N. Timofeeva**, V. A. Zakharov, Hans H. Brintzinger, *Macromol. Chem. Phys.*, 209(12) (2008) 1210-1219
39. **Heterogeneous selective oxidation catalysts based on coordination polymer MIL-101 and transition metal substituted polyoxometalates**, N. V. Maksimchuk, **M. N. Timofeeva**, M. S. Melgunov, A. N. Shmakov, Yu. Chesalov, D. N. Dybtsev, V. P. Fedin, O. A. Kholdeeva, *J. Catalysis*, 257(2) (2008) 315-323
40. **Синтез и физико-химическое исследование гетерополианиона $\text{PMo}_{11}(\text{TiO})\text{O}_{39}^{5-}$** , Т.А.Свинаренко, Б.А.Вишникин, **М.Н.Тимофеева**, *Журнал неорганической химии*, 53(9) (2008) 1457-146 (journal of inorganic chemistry – in Russian)
41. **Ce-silica mesoporous SBA-15 type materials for oxidative catalysis: synthesis, characterization and catalytic application**, **M. N. Timofeeva**, S. H. Jung, Y. K. Hwang, D. K. Kim, V. N. Panchenko, A.S. Mel'gunov, Yuri A. Chesalov, J. S. Chang, *Appl. Catal. A: General*, 317 (2007) 1-10. ISSN 0926-860X
42. **Full phenol peroxide oxidation over Fe-MMM-2 catalysts with enhanced hydrothermal stability**, **M. N. Timofeeva**, M. S. Mel'gunov, O. A. Kholdeeva, M. E. Malyshev, A. N. Shmakov, V. B. Fenelonov, *Appl. Catal. B: Environmental*, 75 (3-4) (2007) 290-297.
43. **Dititanium-Containing** **19-**
Tungstodiarсенate(III)[Ti₂(OH)₂As₂W₁₉O₆₇(H₂O)]⁸⁻:Synthesis, Structure, Electrochemistry, and Oxidation Catalysis, Firasat Hussain, Bassem S. Bassil, Ulrich Kortz, O. A. Kholdeeva, **M. N. Timofeeva**, Pedro de Oliveira, Bineta Keita, Louis Nadjo, *Chem. Eur. J.*, 13 (2007) 4733-4742
44. **Catalytic Aerobic Oxidation of Formaldehyde under Mild Conditions**, O.A. Kholdeeva, **M. N. Timofeeva**, G. M. Maksimov, R. I. Maksimovskaya, W. A. Neiwert, C. L. Hill, *Inorg. Chem.*, 44 (2005) 666-672.
45. **Synthesis, characterization and catalytic application for wet oxidation of phenol of iron-containing clays**, **Timofeeva M. N.**, Khankhasaeva S.C., Badmaeva S.V., Chuvilin A. L., Burgina E.B., Ayupov A. B., Panchenko V.N., Kulikova A.V., *Applied Catalysis B: Environmental*, 59 (2005) 243-248.
46. **Aerobic Formaldehyde Oxidation under Mild Conditions Mediated by Ce-Containing Polyoxometalates**, Kholdeeva, O. A.; **Timofeeva, M. N.**; Maksimov, G. M.; Maksimovskaya, R. I.; Rodionova, A. A.; Hill, C. L. In *Catalysis of Organic Reactions*, Sowa, J. R., Jr., Ed.; Taylor & Francis Group, Boca Raton, 2005, 429-433.
47. **Surface Acid Sites of H₃PW₁₂O₄₀ as studied by the adsorption of stable nitroxyl radicals.**, **M. N. Timofeeva**, A. B. Ayupov, A. M. Volodin, Yu. R. Pak, G. G. Volkova, G. V. Echevskii, *Kinetics and Catalysis*, Vol. 46, No. 1, 2005, pp. 123–127. Translated from *Kinetika i Kataliz*, Vol. 46, No. 1, 2005, pp. 131–136, ISSN 0453-8811
48. **The role of protons in cyclohexene oxidation with H₂O₂ catalysed by Ti(IV)-monosubstituted Keggin polyoxometalate**, O.A. Kholdeeva, T.A.Trubitsina, **M. N. Timofeeva**, G. M. Maksimov, R. I. Maksimovskaya, V.A.Rogov, *J.Mol. Catal. A: Chem.*, 232 (2005) 173-178. ISSN 1381-1169

49. **Isomerization of *n*-hexane on the Pt-promoted Keggin and Dawson tungstophosphoric heteropoly acids supported on zirconia**, A. V. Ivanov, T. V. Vasina, V. D. Nissenbaum, L. M. Kustov, **M. N. Timofeeva** and J. I. Houzvicka, *Appl. Catal A: General* 259 (2004) 65-72, ISSN 0926-860X
50. **New fluorinated carbon a support for catalyst**, **M. N. Timofeeva**, A.B. Ayupov, V.N. Mitkin, A.V. Volodin, E.B. Burgina, A. L. Chuvilin, G. V. Echevsky, *J.Mol.Catal A: Chemical* 217 (2004) 155-160. ISSN 1381-1169
51. **Solid superacids for halide-free carbonylation of dimethyl ether to methyl acetate**, G.G. Volkova, L.M. Plyasova, L.N. Shkuratova, A.A. Budneva, E.A. Paukshtis, **M.N. Timofeeva**, V.A. Likholobov, *Stud. Surf. Sci. and Catal.*, Vol. 147 (2004) 403-408. ISBN 0444502386
52. **Filamentous carbons as a support for heteropoly acids**, **M.N. Timofeeva**, M.M. Matrosova, T.V. Reshchenko, L.B. Avdeeva, A.A. Budneva, A.B. Ayupov; E. A. Paukshtis, A. L. Chuvilin, A.V. Volodin; V. A. Likholobov, *J.Mol.Catal A: Chemical* 211 (2004) 131-137. ISSN 1381-1169
53. **Co-containing polyoxometalate-based heterogeneous catalysis for the selective aerobic oxidation of aldehydes under ambient conditions**, O.A. Kholdeeva, M.P. Vanina, **M.N. Timofeeva**, R.I. Maksimovskaya, T.A. Trubitsina, M.S. Melgunov, E.B. Burgina, J. Mrowiec-Bialon, A.B. Jarzebski, C.L. Hill, *J. Catalysis*, 226(2) 363-371 (2004)
54. **Aerobic Formaldehyde Oxidation under Mild Conditions Mediated by Ce-Containing Polyoxometalates**. O. A. Kholdeeva, **M. N. Timofeeva**, G. M. Maksimov, R. I. Maksimovskaya, A. A. Rodionova, and C. L. Hill. In *Catalysis of Organic Reactions* (Ed. J.R. Sowa), Marcel Dekker, NY, 2004.
55. **Влияние модифицирования на кислотно-каталитические свойства слоистого алюмосиликата (Effect of clay modification on their acid-base properties)**, Ханхасаева С.Ц., Бадмаева С.В., Дашинамжилова Э.Ц., **Тимофеева М.Н.**, Бургина Е.Б., Буднева А.А., Паукштис Е.А., *Kinetics and Catalysis Кинетика и катализ* (Translation of Kinetika i Kataliz), 45(5) (2004) 708-714 (English). ISSN 0453-8811
56. **Epoxidation of cycloolefins with hydrogen peroxide in the presence of heteropoly acids combined with these transfer catalyst**, **Timofeeva M. N.**, Pai Z.P., Tolstikov A.G., Kustova G.N., Selivanova N.V., Berdnikova P.V., Brulyakov K.P., Shangina A.B.; Utkin V.A., *Russian Chemical Bulletin* (Translation of Izvestiya Akademii Nauk, Seriya Khimicheskaya), 52(2) (2003) 480-486 (English). ISSN 1066-5285/03/5202-480
57. **Esterification of *n*-Butanol with Acetic Acid in the Presence of H₃PW₁₂O₄₀ Supported onto Mesoporous Carbon Materials**. **M. N. Timofeeva**, M. M. Matrosova, G. N. Il'inich, T. V. Reshchenko, L. B. Avdeeva, R. I. Kvon, A. L. Chuvilin, A. A. Budneva, E. A. Paukshtis, and V. A. Likholobov, *Kinetics and Catalysis* (Translation of Kinetika i Kataliz), 44(6) (2003) 778-788 (English). ISSN 0453-8811
58. **Adsorption of H₃PW₁₂O₄₀ by porous carbon materials**, **Timofeeva M. N.**, Matrosova M. M., Reshchenko T.V., Avdeeva L.B., Budneva A.A., Paukshtis E. A., Chuvilin A. L., Likholobov V. A., *Russian Chemical Bulletin* (Translation of

Izvestiya Akademii Nauk, Seriya Khimicheskaya), 51(2) (2002) 243-248 (English). ISSN 1066-5285/03/5202-480

59. **Acidity of solutions of heteropoly acids with various structures and compositions, Timofeeva, M. N.**; Maksimov, G. M.; Likholobov, V. A., *Kinetics and Catalysis* (Translation of Kinetika i Kataliz), 42(1) (2001) 30-34 (English). ISSN 0453-8811
60. **Esterification of n-butanol with acetic acid in the presence of heteropoly acids with different structures and compositions, Timofeeva, M. N.**; Matrosova, M. M.; Maksimov, G. M.; Likholobov, V. A.; Golovin, A. V.; Maksimovskaya, R. I.; Paukshtis, E. A., *Kinetics and Catalysis* (Translation of Kinetika i Kataliz), 42(6) (2001) 791-795 (English). ISSN 0453-8811
61. **A study of complexation of chloral hydrate with heteropoly anions having various structures, Maksimov, G. M.; Timofeeva, M. N.**; Likholobov, V. A., *Russian Chemical Bulletin* (Translation of Izvestiya Akademii Nauk, Seriya Khimicheskaya), 50(9) (2001) 1529-1532 (English). ISSN 1066-5285/03/5202-480
62. **A study of the acid properties of structurally and compositionally different heteropoly acids in acetic acid, Timofeeva, M. N.**; Matrosova, M. M.; Maksimov, G. M.; Likholobov, V. A., *Kinetics and Catalysis* (Translation of Kinetika i Kataliz), 42(6) (2001) 785-790 (English). ISSN 0453-8811
63. **Coupling of phenol with ketones in the presence of heteropoly acids with different structures and compositions, Timofeeva, M. N.**; Maksimov, G. M.; Utkin, V. A.; Likholobov, V. A., *Kinetics and Catalysis* (Translation of Kinetika i Kataliz), 41(6) (2000) 767-770 (English). ISSN 0453-8811
64. **¹²⁹Xe NMR study of 12-tungstophosphoric heteropoly acid supported on silica, Terskih V.V., Mastikhin V.M., Timofeeva M.N., Okkel' L.G., Fenelonov V.B.,** *Catalysis Letter*, 42 (1996) 99-104. ISSN 1011-372X
65. **¹H, ³¹P NMR MAS, infrared and catalytic studies of heteropolyacid H₃PW₁₂O₄₀ supported on MgF₂, Mastikhin V.M., Terskih V.V., Timofeeva M.N., Krivoruchko O.P.,** *J.Mol.Catal A:Chemical*, 95 (1995) 135-140. ISSN 1381-1169
66. **Acetonation of L-sorbose in the presence of heteropoly acids, Maksimov G.M., Timofeeva M.N.,** *React. Kinet. Catal. Lett.*, 56(1) (1995) 191-196. ISSN 0133-1736
67. **Alkylation of hydroquinone with isobutene catalyzed by heteropoly acids in a two-phase system, Timofeeva M.N.,** Kozhevnikov I.V., *React. Kinet. Catal. Lett.*, 54(2) (1995) 413-417. ISSN 0133-1736
68. **Esterification of 2,6-pyridinedicarboxylic acid with n-butanol catalyzed by heteropoly acid H₃PW₁₂O₄₀ or its Ce(III) salt, Timofeeva M.N.,** Maksimovskaya R.I., Paukshtis E.A., Kozhevnikov I.V., *J. Mol. Catal A: Chemical* 102 (1995) 73-77. ISSN 1381-1169
69. **UV-Vis and ESR spectroscopic studies of the adsorption of arenes on the heteropoly acid H₃PW₁₂O₄₀, Timofeeva M.N.,** Demidov A.V., Davydov A.A., Kozhevnikov I.V., *J.Mol.Catal*, 79 (1993) 21-28. ISSN 0304-5102

70. **Alkylation of p-substituted phenols by heteropoly acids**, Kozhevnikov I.V., Tsyganok A.I., Timofeeva M.N., Kulikov S.M., Sidelnikov V.N., *React. Kinet. Catal. Lett.*, 46(1) (1992) 17-23. ISSN 0133-1736
71. **De-tert-butylation of phenols catalyzed by bulk and supported heteropoly acid**, Kozhevnikov I.V., Timofeeva M.N., *J. Mol. Catal*, 75 (1992) 179-186. ISSN 0304-5102
72. **Esterification and acetalization of steroids in the presence of the heteropoly acid $H_3PW_{12}O_{40}$** , Kozhevnikov I.V., Timofeeva M.N., Demchenko B.I., Grosheva V.M., *React. Kinet. Catal. Lett.*, 45(2) (1991) 215-219. ISSN 0133-1736
73. **Transalkylation of phenol over heteropoly acids**, Kozhevnikov I.V., Kulikov S.M., Timofeeva M.N., Krysin A.P., Titova T.F., *React. Kinet. Catal. Lett.*, 45(2) (1991) 257-263. ISSN 0133-1736
74. **Изучение кислотности гетерополикислот**, Капустин Г.И., Бруева Т.Р., Клячко А.Л., Тимофеева М.Н., Куликов С.М., Кожевников И.В., *Кинетика и катализ*, 31 (1990) 1017-1020. (*Kinetics and Catalysis* (Translation of *Kinetika i Kataliz*)) ISSN 0453-8811
75. **1H and ^{31}P MAS NMR studies of solid heteropolyacids and $H_3PW_{12}O_{40}$ supported on SiO_2** , Mastikhin V.M., Kulikov S.M., Nosov A.V., Kozhevnikov I.V., Mudrakovskii I.L., Timofeeva M.N., *J. Mol. Catal*, 60 (1990) 65-70. ISSN 0304-5102
76. **Деалкилирование производных 2,6-ди-трет-бутилфенола в присутствии гетерополикислот**, Куликов С.,М., Кожевников И.В., **Фомина (Тимофеева М.Н.)**, Крысин А.П., *Кинетика и катализ*, 27 (1986) 750-753. (*Kinetics and Catalysis* (Translation of *Kinetika i Kataliz*)) ISSN 0453-8811
77. **Адсорбция пористыми носителями гетерополикислоты $H_4SiW_{12}O_{40}$ из растворов**, Куликов С.М., Тимофеева М.Н., Кожевников И.В., Зайковский В.И., Плясова Л.М., Овсяникова И.А., *Russian Chemical Bulletin* (Translation of *Izvestiya Akademii Nauk, Seriya Khimicheskaya Izv. Akad. nauk, seriya khimicheskaya*), 4 (1989) 763-769. ISSN 1066-5285/03/5202-480
78. **Катализ гетерополикислотами деалкилирования производных 2,6-ди-трет-бутилфенола**, Куликов С.,М., Кожевников И.В., **Фомина (Тимофеева М.Н.)**, Крысин А.П., *Russian Chemical Bulletin* (Translation of *Izvestiya Akademii Nauk, Seriya Khimicheskaya Izv. Akad. nauk, seriya khimicheskaya*), 4 (1987) 751-756. ISSN 1066-5285/03/5202-480

Patents filed

1. **A process for preparation of para-substituted phenols**, Kulikov S.M., Krysin A.P., Timofeeva M.N., Titova T.F., Kozhevnikov I.V. (Russia) SU 1609067 (1990)
2. **Process for the preparation of 2-tert-butyl-4-methylphenol**, Nesterova V.A., Kozhevnikov I.V., Timofeeva M.N., (Russia) SU 1833505 A3 (1993)
3. **A catalyst for the preparation of 2,3:4,6-diisopropylidene- α -L-sorbofuranose**, Maksimov G.M., Molchanov V.V., Goidin V.V., Timofeeva M.N., Maksimovskaya R.I., (Russia) SU 2080923 (1997)

4. **Catalytic composition, method for manufacturing thereof and method for the purification of terephthalic acid**, Romanenko A.V., Likholobov V.A., Timofeeva M.N., Jhung Sung Hwa, Pak Yun Seok, № PTC/RU 99/00477 (27.07.99)
5. **Catalytic composition, method for manufacturing thereof and method for the purification of terephthalic acid**, Romanenko A.V., Likholobov V.A., Timofeeva M.N., Jhung Sung Hwa, Pak Yun Seok, RU 99116348/04(017487) 2000
6. **Catalytic composition, method for manufacturing thereof and method for the purification of terephthalic acid**, Romanenko A.V., Likholobov V.A., Timofeeva M.N., Jhung Sung Hwa, Pak Yun Seok, US6753290 (2004. 06. 22)
7. **Catalyst and method formaldehyde oxidation**, Kholdeeva O.A., Timofeeva M.N., Maksimov G.M., Hill K., (Russia) SU 2254920 (2005)
8. **Catalyst and method phenol oxidation**, Timofeeva M.N., Badmaeva S.V., Khankhasaeva S.Ts., Ryazantsev A.A., (Russia) SU 2256498 (2005)
9. **Benzene alkylation using acidic ionic liquids**, Mark G. Riley, Aleksandra Bhattacharyya, Nikolay Yu. Adonin, Mariya N. Timofeeva, Sergey Prikhodko, Bair S. Bal'zhinimaev, Pat. US 2016/0009612A1