

Volodymyr V. Nesterov

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CURRICULUM VITAE

Professional Background

UNIVERSITY OF NORTH TEXAS Graduate Assistant	Denton, TX, USA 08/2015 – present
SANTA FE IT SERVICES IT Programmer	Santa Fe, NM, USA 08/2013 – 05/2015
NEW MEXICO HIGHLANDS UNIVERSITY Adjunct Professor Graduate Assistant	Las Vegas, NM, USA 01/2010 – 12/2012 08/2008 – 12/2009
BRADBURY SCIENCE MUSEUM CS Student Intern	Los Alamos, NM, USA 06/2009 – 05/2010
THE UNIVERSITY OF OKLAHOMA Graduate Assistant	Norman, OK, USA 08/2006 – 05/2008
THE UNIVERSITY OF TEXAS AT AUSTIN Graduate Assistant	Austin, TX, USA 08/2003 – 05/2006
NEW MEXICO HIGHLANDS UNIVERSITY Graduate Assistant	Las Vegas, NM, USA 08/2001 – 07/2003

Education

UNIVERSITY OF NORTH TEXAS Ph.D. level courses in Chemistry (GPA 4.0)	Denton, TX, USA 08/2015 – present
NEW MEXICO HIGHLANDS UNIVERSITY Master of Science in Computer Science (GPA 4.0)	Las Vegas, NM, USA 08/2008 – 07/2014
THE UNIVERSITY OF OKLAHOMA Ph.D. level courses in Chemistry (GPA 4.0)	Norman, OK, USA 08/2006 – 05/2008
THE UNIVERSITY OF TEXAS AT AUSTIN Ph.D. level courses in Chemistry (GPA 4.0)	Austin, TX, USA 08/2003 – 05/2006
NEW MEXICO HIGHLANDS UNIVERSITY Master of Science in Chemistry (GPA 4.0)	Las Vegas, NM, USA 08/2001 – 07/2003
MOSCOW STATE UNIVERSITY Bachelor of Science in Chemistry (GPA 3.67)	Moscow, Russia 09/1996 – 07/2001

Awards

MOSCOW STATE UNIVERSITY International Soros Science Education Program Award	2001
THE UNIVERSITY OF TEXAS AT AUSTIN Teaching Assistant of the Semester Award	2004

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Research Publications

- 1.** Sviridova, L. A.; Golubeva, G. A.; Dlinnykh, I. V.; Leshcheva, I. F.; Ashkinadze, L. D.; Nesterov, V. V.; Antipin, M. Yu.

Reactions of hydroxyazolidines with π -donor heterocycles. 2. Reaction of 1-acetyl-5-hydroxypyrazolidines with pyrazol-5-ones on the surface of adsorbents.

Chemistry of Heterocyclic Compounds (Translated from Khimiya Geterotsiklicheskikh Soedinenii) **1998**, 34(8), 929–936.

- 2.** Akimova, T. I.; Nesterov, V. V.; Antipin, M. Yu.; Vysotsky, V. I.

Structure of “dimethylenetricyclohexanone”.

Chemistry of Heterocyclic Compounds (Translated from Khimiya Geterotsiklicheskikh Soedinenii) **1999**, 35(11), 1299–1304.

- 3.** Khvostov, A. V.; Nesterov, V. V.; Bulychev, B. M.; Sizov, A. I.; Antipin, M. Yu.

ansa-Ytterbocene(III) chloride and borohydride with a short bridge and bulky substituents: synthesis and crystal structures of $[meso\text{-}(\text{CH}_3)_2\text{Si}[3\text{-}(\text{CH}_3)_3\text{SiC}_5\text{H}_3]_2\text{Yb}(\mu_2\text{-Cl})_2]$ and $meso\text{-}(\text{CH}_3)_2\text{Si}[3\text{-}(\text{CH}_3)_3\text{SiC}_5\text{H}_3]_2\text{Yb}[(\mu_2\text{-H})_3\text{BH}](\text{THF})$.

Journal of Organometallic Chemistry **1999**, 589(2), 222–225.

- 4.** Sidorov, A. A.; Fomina, I. G.; Nesterov, V. V.; Nefedov, S. E.; Eremenko, I. L.; Moiseev, I. I.

Oxydative dehydrogenation of diaminomaleonitrile coordinated on the nickel and platinum atoms. Synthesis and the structure of $M[\text{HNC}(\text{CN})\text{C}(\text{CN})\text{NH}]_2$ ($M = \text{Ni}$ or Pt).

Russian Chemical Bulletin (Translated from Izvestiya Akademii Nauk, Seriya Khimicheskaya), **1999**, 48(3), 573–577.

- 5.** Sivaev, I. B.; Bruskin, A. B.; Nesterov, V. V.; Antipin, M. Yu.; Bregadze, V. I.; Sjoberg, S.

Synthesis of Schiff bases derived from the ammoniaundecahydro-*clos*o-dodecaborate(1-) anion, $[\text{B}_{12}\text{H}_{11}\text{NH}=\text{CHR}]^-$, and their reduction into monosubstituted amines $[\text{B}_{12}\text{H}_{11}\text{NH}_2\text{CH}_2\text{R}]^-$: A new route to water soluble agents for BNCT.

Inorganic Chemistry **1999**, 38(25), 5887–5893.

- 6.** Shidlovskii, A. F.; Sizov, A. Yu.; Kuleshova, L. N.; Nesterov, V. V.; Antipin, M. Yu.; Peregudov, A. S.; Chkanikov, N. D.

Synthesis and X-ray diffraction studies of 3-cyano-2-trifluoromethyl-4*H*-pyrido[1,2-a]pyrimidine derivatives.

Russian Chemical Bulletin (Translated from Izvestiya Akademii Nauk, Seriya Khimicheskaya) **2000**, 49(7), 1257–1260.

7. Bregadze, V. I.; Sivaev, I. B.; Bruskin, A. B.; Sjoberg, S.; Nesterov, V. V.; Antipin, M. Yu.

Synthesis of Schiff bases and monoalkylamino derivatives of closo-dodecaborate(2-) anion.

Royal Society of Chemistry Special Publication **2000**, 253 (*Contemporary Boron Chemistry*), 163–166.

8. Anjaneyulu, V.; Makarieva, T. N.; Ilyin, S. G.; Dmitrenok, A. S.; Radhika, P.; Subbarao, P. V.; Nesterov, V. V.; Antipin, M. Yu.; Stolnik, V. A.

Two new diterpenoids, Sarcophytins B and C, from the Indian Ocean soft coral *Sarcophyton* species.

Journal of Natural Products **2000**, 63(1), 109–111.

9. Bogolyubov, A. A.; Chernysheva, N. B.; Nesterov, V. V.; Antipin, M. Yu.; Semenov, V. V.

1-Oxa-3-azapentalen-2-ones as precursors of *cis*-2-amino alcohols: synthesis from acetylenic alcohols, carbon dioxide and amines via intramolecular amidoalkylation of oxazolidinones.

ARKIVOC **2000**, 1(4), 497–511.

10. Nesterov, V. V.

6-Ethyl-5,7-dimethyl-6*H*-1,4-diazepine-2,3-dicarbonitrile.

Acta Crystallographica, Section E: Structure Reports Online **2002**, E58(12), o1458–o1459.

11. Chernysheva, N. B.; Bogolyubov, A. A.; Nesterov, V. V.; Antipin, M. Yu.; Semenov, V. V.

1-Oxa-3-azapentalen-2-ones as precursors of *cis*-2-amino alcohols: Synthesis from propargyl alcohols, CO₂, and amines using an intramolecular amidoalkylation reaction of oxazolidin-2-ones.

Chemistry of Heterocyclic Compounds **2003**, 39(7), 925–936.

12. Bogolyubov, A. A.; Chernysheva, N. B.; Nesterov, V. V.; Antipin, M. Yu.; Semenov, V. V.

Structure of the products of the reaction of 4-methylene-1,3-dioxolan-2-ones with hydrazines.

Chemistry of Heterocyclic Compounds **2003**, 39(8), 1065–1071.

13. Timofeeva, T. V.; Kuhn, G. H.; Nesterov, V. V.; Nesterov, V. N.; Frazier, D. O.; Penn, B. G.; Antipin, M. Yu.

Cocrystal of 1,1-dicyano-2-(4-hydroxyphenyl)ethene with L-proline and induced conformational polymorphism of 1,1-dicyano-2-(4-hydroxy-3-methoxyphenyl)ethene.

Crystal Growth and Design **2003**, 3(3), 383–391.

14. Kurkin, A. V.; Nesterov, V. V.; Karchava, A. V.; Yurovskaya, M. A.

Synthesis of nonracemic 9-(1-methoxycarbonylethyl)-1,2,3,4-tetrahydrocarbazole.

Chemistry of Heterocyclic Compounds **2003**, 39(11), 1466–1477.

15. Nesterov, V. V.; Suina, A.; Antipin, M. Yu.; Timofeeva, T. V.; Barlow, S.; Marder, S. R.

N,N-dimethyl-N'-(1E,2E)-3-(4-nitrophenyl)prop-2-enylidene]benzene-1,4-diamine and N,N-dimethyl-4-[(1E,3E)-4-(4-nitrophenyl)buta-1,3-dienyl]-1-naphthylamine.

Acta Crystallographica, Section C: Crystal Structure Communications **2003**, C59(11), o625–o628.

16. Sviridova, L. A.; Vertelov, G. K.; Nesterov, V. V.; Antipin, M. Yu.

Structure of ethyl 2-(1'-acetyl-3'-methyl-2-phenyl-pyrazolidine-5'-yl)amino-3-indolyl-3-propionate.

Vestnik Moskovskogo Universiteta, Seriya 2: Khimiya **2003**, 44(5), 334–336.

17. Bogolyubov, A. A.; Chernisheva N. B.; Nesterov V. V.; Antipin, M. Yu.; Semenov, V. V.

Reactions of amidines with 5-methylene-1,3-dioxolan-2-ones.

Chemistry of Heterocyclic Compounds **2004**, 40(8), 992–1001.

18. Dlinnykh, I. V.; Golubeva, G. A.; Leshcheva, I. F.; Nesterov V. V.; Antipin, M. Yu.; Sviridova, L. A.

Reactions of hydroxyazolidines with π -donor heterocycles. 3. Reaction of 1-acetyl-5-hydroxypyrazolidines with oxindoles.

Chemistry of Heterocyclic Compounds **2004**, 40(9), 1142–1149.

19. Bogolyubov, A. A.; Chernisheva, N. B.; Nesterov, V. V.; Antipin, M. Yu.; Semenov, V. V.

Dehydration of 4-hydroxy-4-methyl-3-phenylamino-oxazolidin-2-ones.

Chemistry of Heterocyclic Compounds **2004**, 40(10), 1305–1309.

20. Nesterov, V. V.; Antipin, M. Yu.; Nesterov, V. N.; Penn, B. G.; Frazier, D. O.; Timofeeva, T. V.

Thermally stable imines as new potential nonlinear optical materials.

Crystal Growth and Design **2004**, 4(3), 521–531.

21. Yakunina, I. E.; Shakhkeldyan, I. V.; Atroshenko, Yu. M.; Borbulevich, O. Ya.; Nesterov, V. V.;

Kopshev, M. B.; Troitskii, N. A.; Efremov, Yu. A.; Alifanova, E. N.; Subbotin, V. A.

Synthesis and structure of derivatives of 9-(2-oxopropyl)-1,5-dinitro-7,8-benzo-3-azabicyclo[3.3.1]non-7-en-6-ones.

Russian Journal of Organic Chemistry (Translated from Zhurnal Organicheskoi Khimii) **2004**, 40(2), 239–246.

22. Nesterov, V. V.; Antipin, M. Yu.; Nesterov, V. N.; Moore, C. E.; Cardelino, B. H.; Timofeeva, T. V.

Thermally stable heterocyclic imines as new potential nonlinear optical materials.

Journal of Physical Chemistry B **2004**, 108(25), 8531–8539.

23. Nesterov, V. N.; Nesterov, V. V.

Polymorphism and solvolysis of 2-cyano-3-[4-(N,N-diethylamino)phenyl]prop-2-enethioamide.

Acta Crystallographica, Section C: Crystal Structure Communications **2004**, C60(11), o781–o785.

24. Shvekhgeimer, M. G. A.; Ushakova, O. A.; Nesterov, V. V.; Antipin, M. Yu.

Reaction of 1-aryl-3-methylpyrazol-5-ones with 2-cyanoaryldiazonium bisulfates.

Chemistry of Heterocyclic Compounds (Translation of Khimiya Geterotsiklicheskikh Soedinenii) **2005**, 41(2), 181–186.

25. Morozova, Yu. V.; Nesterov, V. V.; Yashunsky, D. V.; Antipin, M. Yu.; Ponomarev, G. V. Porphyrins. 40. Chemistry of oximes of metal complexes of *meso*-formyloctaalkylporphyrins. Synthesis, molecular and crystal structure of nickel complexes of “Tripyrrolylisoxazoles”.

Chemistry of Heterocyclic Compounds (Translation of Khimiya Geterotsiklicheskikh Soedinenii) **2005**, 41(5), 598–605.

26. Nesterov, V. N.; Kislyi, V. P.; Sabutis, J. L.; Nesterov, V. V.; Wiedenfeld, D. J.; Semenov, V. V. 2-Amino-4-(2-methoxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4*H*-chromene-3-carbonitrile and 2-amino-4-(2-methoxyphenyl)-7,7-dimethyl-3-nitro-4,6,7,8-tetrahydro-5*H*-chromen-5-one hemihydrate.

Acta Crystallographica, Section C: Crystal Structure Communications **2005**, C61(12), o741–o744.

27. Nesterov, V. V.; Antipin, M. Yu.; Nesterov, V. N.; Timofeeva, T. V. Search for new potential NLO crystalline materials: Chiral derivatives of (2*S*)-2-(methoxymethyl)pyrrolidine.

Journal of Molecular Structure **2007**, 831(1), 18–25.

28. Nesterov, V. V.; Sarkisov, S. S.; Shulaev, V.; Nesterov, V. N.

3,5-Bis(4-chlorobenzylidene)-1-methylpiperidin-4-one.

Acta Crystallographica, Section E: Structure Reports Online **2011**, 67(4), o760–o761.

29. Nesterov, V. V.; Sarkisov, S. S.; Shulaev, V.; Nesterov, V. N.

1-Benzyl-3,5-bis(4-chlorobenzylidene)piperidin-4-one.

Acta Crystallographica, Section E: Structure Reports Online **2011**, 67(6), o1505–o1506.

30. Nesterov, V. V.; Nesterov, V. N.; Richmond, M. G.

Structural characterization of *cis*-2,6-(E,E)-bis(ferrocenylidene)-N-methyl-4-piperidone and DFT evaluation of alternative polymorphic modifications via ferrocene rotation.

Polyhedron **2012**, 35(1), 124–129.

31. Nesterov, V. V.; Yang, L.; Nesterov, V. N.; Richmond, M. G.

Structural and computational features of four highly polar quinolin-2(1*H*)-ylidene derivatives: Equilibrium preference for enaminothione, enamine, and enaminone tautomeric structures.

Journal of Molecular Structure **2013**, 1054-1055(1), 262–270.

32. Nesterov, V. V.; Zakharov, L. N.; Nesterov, V. N.; Shulaev, V.

Crystal structure of (3*E*,5*E*)-3,5-bis[4-(diethylazaniumyl)benzylidene]-1-methyl-4-oxopiperidin-1-i um trichloride dihydrate: a potential biophotonic material.

Acta Crystallographica, Section E: Crystallographic Communications **2015**, 71(12), 1513–1515.

33. Nesterov, V. V.; Zakharov, L. N.; Nesterov, V. N.; Calderon, J. G.; Longo, A.; Zaman, K.; Choudhury, F. K.; Farrell, W.; Shulaev, V.; Richmond, M. G.

5,7-Dihydroxy-2-(4-hydroxyphenyl)chroman-4-one (naringenin): X-ray diffraction structures of the naringenin enantiomers and DFT evaluation of the preferred ground-state structures and thermodynamics for racemization.

Journal of Molecular Structure **2016**, *1130*, 994–1000.

34. Atim, S.; Yang, L.; Nesterov, V. V.; Wang, X.; Richmond, M. G.

Synthesis of the labile rhenium(I) complexes fac-Re(CO)₃(L)[κ²-O,O-FcC(O)CHC(O)Me] (where Fc = ferrocenyl; L = THF, H₂O, alkyne) and alkyne addition to the diketonate ligand.

Submitted to *Journal of Organometallic Chemistry*.

Participation at Scientific Conferences

1. Sivaev, I. B.; Bruskin, A. B.; Nesterov, V. V.; Antipin, M. Yu.; Bregadze, V. I.; Sjoberg, S.

Syntheses of Schiff bases and monoalkylamino derivatives on the base of amino-closo-dodecaborate(1-) anion [B₁₂H₁₁NH₃]⁻.

Frontiers in Neutron Capture Therapy, [Proceedings of the International Symposium on Neutron Capture Therapy for Cancer], September **1998**, Los Angeles, CA, USA.

2. Nesterov V. V., Antipin M. Yu., Chernysheva N. B., Bogolyubov A. A., Semenov V. V.

X-ray analysis of the derivatives of oxazolidinone-2.

Second National Conference on Crystal Chemistry, May **2000**, Chernogolovka, Moscow Region, Russia.

3. Averkiev B. B., Nesterov V. V., Timofeeva T. V., Antipin M. Yu., Clark R. D.

Combinatorial chemistry approach to new materials for nonlinear optics. Structures of Schiff bases.

Second National Conference on Crystal Chemistry, May **2000**, Chernogolovka, Moscow Region, Russia.

4. Nesterov V. V.

Preparation of acentric NLO organic compounds by co-crystallization technique.

Alliance for Nonlinear Optics: 12th Semi-Annual Project Review Meeting, August **2000**, Huntsville, AL, USA.

5. Nesterov V. V., Suina A.

Imine derivatives as new potential NLO materials.

Alliance for Nonlinear Optics: 14th Semi-Annual Project Review Meeting, November **2001**, El Paso, TX, USA.

6. Nesterov V. V., Kuhn G., Antipin M. Yu., Nesterov V. N., Clark R. D., Timofeeva T. V.

Arylidene derivatives of diaminomaleonitrile: synthesis and structures of new acentric NLO compounds.

6th International Conference on Organic Nonlinear Optics (ICONO'6), December **2001**, Tucson, AZ, USA.

7. Nesterov V. V., Sloan A., Antipin M. Yu., Nesterov V. N., Clark R. D., Timofeeva T. V.

Chiral (S)-(+)-2-(methoxymethyl)pyrrolidine polar derivatives for NLO materials.

6th International Conference on Organic Nonlinear Optics (ICONO'6), December **2001**, Tucson, AZ, USA.

8. Nesterov V. V., Sloan A., Antipin M. Yu., Timofeeva T. V., Nesterov V. N., Clark R. D.

Synthesis and structural investigations of arylidenecyanothioacetamides and thiazole derivatives on their basis.

20th International Symposium on the Organic Chemistry of Sulfur (ISOCS XX), July **2002**, Flagstaff, AZ, USA.

9. Nesterov V. V., Kuhn G., Timofeeva T. V., Nesterov V. N., Clark R. D., Antipin M. Yu.

Synthesis, structure and crystal growth of new potential NLO materials.

The International Symposium on Optical Science and Technology. SPIE's 47th Annual Meeting, July **2002**, Seattle, WA, USA.

10. Nesterov V.V., Antipin M.Yu., Timofeeva T.V.

Synthesis and structural investigations of arylidenecyanothioacetamides and thiazole derivatives on their basis.

17th Rocky Mountain Regional Meeting of the American Chemical Society, October **2002**, Albuquerque, NM, USA.

11. Nesterov, V. N.; Wiedenfeld, D.; Nesterov, V. V.

Synthesis and structural investigations of 2-amino-4-[(E)-2-(4-methoxyphenyl)vinyl]-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile and 2-amino-4-[(E)-2-(4-methoxyphenyl)vinyl]-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile. *Joint Regional Meeting of the Northwest and Rocky Mountain Sections of the American Chemical Society*, June **2004**, Logan, UT, USA.