| **PROF. ALEXANDR ALEXEYEVICH SPASOV** | M. SC. MEDICINE (VOLGOGRAD STATE MEDICAL INSITUTE, VOLGOGRAD, RUSSIA), PH.D. IN PHARMACOLOGY (VOLGOGRAD STATE MEDICAL INSTITUTE, VOLGOGRAD, RUSSIA), DR. SCI. MED. IN PHARMACOLOGY (VOLGOGRAD STATE MEDICAL INSTITUTE, VOLGOGRAD, RUSSIA) |
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## 1. CURRICULUM VITAE

**NAME:** ALEXANDER ALEXEEVICH SPASOV

**BORN:** SEPTEMBER 23, 1945, BAKU, REPUBLIC OF AZERBAIJAN

**CITIZENSHIP / NATIONALITY:** RUSSIAN FEDERATION / RUSSIAN

**PLACE OF WORK:**

STATE-FUNDED EDUCATIONAL ESTABLISHMENT OF HIGER PROFESSIONAL EDUCATION UNDER THE MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION, VOLGOGRAD STATE MEDICAL UNIVERSITY, 1, PAVSHIKH BORTSOV SQ., VOLGOGRAD, 400131, RUSSIA

**CURRENT POSITIONS:**

ACADEMICIAN OF THE RUSSIAN ACADEMY OF SCIENCES, RECTOR'S ADVISOR OF THE VOLGOGRAD STATE MEDICAL UNIVERSITY, HEAD OF PHARMACOLOGY DEPARTMENT, DOCTOR OF MEDICAL SCIENCES, PROFESSOR

**WEB LINKS:**
Russian Science Citation Index Author ID: 79154
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6, Kommunisticheskaya St., Volgograd, 400130, Russia

**Tel:** +79023612930 (H/P in Russia)

| **EDUCATION** | | **ADDRESS AND CURRENT NAME OF THE UNIVERSITY** |
|---|---|---|
| 6/1970 | **Degree in Medicine**, Faculty of General Medicine, General Physician, Volgograd Medical Institute, (Russia), Volgograd<br><br>(Russian: *Волгоградскаий Медицинский Институт, Волгоград* – *Volgográdskiy Meditsínskiy Institut*) | Volgograd State Medical Institute<br><br>1, PAVSHIKH BORTSOV SQ., VOLGOGRAD, 400131, RUSSIAN FEDERATION |
| 1975 | Postgraduate Study (PhD), **Ph.D. degree in Medicine** (*candidate of medical sciences* – name of the academic degree as used in Russia), «Biochemical aspects of selected vasoactive substances»<br><br>(Russian: *Волгоградскаий Медицинский Институт, Волгоград* – *Volgográdskiy Meditsínskiy Institut*) | Volgograd State Medical Institute<br><br>1, PAVSHIKH BORTSOV SQ., VOLGOGRAD, 400131, RUSSIAN FEDERATION |
| 1984 | Dr.Sci. Med. Degree in Pharmacology (*doctor of medical sciences* – name of the academic degree as used in Russia) «Imidazo(1,2-α) benzimidazoles, a new class of cardiotropic medications»<br><br>(Russian: *Волгоградскаий Медицинский Институт, Волгоград* – *Volgográdskiy Meditsínskiy Institut*) | Volgograd State Medical Institute<br><br>1, PAVSHIKH BORTSOV SQ., VOLGOGRAD, 400131, RUSSIAN FEDERATION |
| 12/2011 | Full member of the Russian Academy of Medical Sciences | |
| 2013 | Academician of the Russian Academy of Sciences | |

| **PROFESSIONAL BACKGROUND** | | **ADDRESS** |
|---|---|---|
| 12/1980 | Senior Research Fellow (Biochemistry), Volgograd Medical Institute, (Russia), Volgograd<br><br>(Russian: *Волгоградскаий Медицинский Институт, Волгоград* – *Volgográdskiy Meditsínskiy Institut*) | Volgograd State Medical Institute<br><br>1, PAVSHIKH BORTSOV SQ., VOLGOGRAD, 400131, RUSSIAN FEDERATION |
| 07/1985 | Associate professor, Department of Pharmacology, Volgograd Medical Institute, (Russia), Volgograd<br><br>(Russian: *Волгоградскаий Медицинский Институт, Волгоград* – *Volgográdskiy Meditsínskiy Institut*) | Volgograd State Medical Institute<br><br>1, PAVSHIKH BORTSOV SQ., VOLGOGRAD, 400131, RUSSIAN FEDERATION |
| 05/87 | Professor, Department of Pharmacology, Volgograd Medical Institute, (Russia), Volgograd<br><br>(Russian: *Волгоградскаий Медицинский Институт, Волгоград* – *Volgográdskiy Meditsínskiy Institut*) | Volgograd State Medical Institute<br><br>1, PAVSHIKH BORTSOV SQ., VOLGOGRAD, 400131, RUSSIAN FEDERATION |

**RESEARCH INTERESTS**

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| **Neuropsychopharmacology** | (*neurobiological basis of medicine that affects the psychological/mental/cognitive/neurological behavior of the brain*) |
| **Drug toxicology** | |
| **Magnesium research** | (*pathological conditions associated with magnesium deficiency*) |
| **Stereopharmacology** | (*the importance of chirality in drug action*) |
| **Experimental pharmacology** | *(the study of condensed benzimidazole derivatives as useful molecules for new drugs; the direct search and study of the pharmacological effects of novel biologically active natural substances and their synthetical derivatives (purines, pyrimidines, benzimidazoles, neuroactive amino acids, magnesium salts, etc.)*<br><br>*Preclinical studies of kappa-opioid receptor agonist activity on the imidazo benzimidazole derivative*<br><br>*The direct search, design and study of the pharmacological effects of substances that are considered a potential treatment for metabolic disorders which can occur in a wide variety of general medical conditions*<br><br>*The direct search and study of novel antiplatelet agents for the thrombosis prevention*<br><br>*The direct search and study of novel glucokinase activators for the treatment of streptozotocin+nicotinamide induced diabetes mellitus*<br><br>*The direct search and study of novel inhibitors and breakers of Advanced Glycation Endproducts (AGEs) for the prevention of long-term complications in diabetes mellitus* |

**AWARDS**

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| 02/2011 | **The Russian Federation Government Prize 2010** for Achievements in Science and Technology for "The Research and Industrial Development of Know-How Biocatalysis Technology of L-Aspartic Acid and Innovative Medical Products on the Basis of its Salts", The Government of Russian Federation, Moscow, Executive order No. 285-r of February 25, 2011, "On Awarding Government Prizes for Achievements in Science and Technology in 2010". | **The Government of Russian Federation**, Moscow, Russian Federation |

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| 9/10/2012 | **The Volgograd Region Government Prize 2012** for Achievements in Science and Technology in nomination "The development and application of new teaching methods in education, publication of high-quality books and implementation of new teaching aids": 1st Prize for Monograph "PHARMACOLOGY OF DRUG STEREOISOMERS" (Eds.: A.A. Spasov, A.A. Ozerov, I.N. Iezhitsa and P.M. Vasiliev). Executive order of the Head of Administration of the Volgograd region № 1091 of November 9, 2012. | **Administration of the Volgograd Region**, Volgograd, Russian Federation |
| 14/08/2013 | **The Russian Federation Presidential Certificate of Honour** for many years of dedicated service and significant contributions to supporting social activities | **The Government of the Russian Federation**, Moscow, Russian Federation |

## MEMBERSHIPS

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| Russian Pharmacology Society | Board Member |
| Dissertation Committee of the Volgograd State Medical University | Deputy chairman |
| RUSSIAN ACADEMY OF SCIENCES | (full membership from 2013 till present) |
| ACADEMIC JOURNALS: | Member of the Editorial Board |
| «Clinical and Experimental Pharmacology» | |
| «Bulletin of the Volgograd State Medical University » | |
| «Volgograd Science and Medicine Journal» | |
| «Bioethics» | |

## RESEARCH PROJECTS (COMPLETED AND ON-GOING) OVER THE PERIOD OF THE LAST 5 YEARS

| TITLE | SOURCE | TOTAL FUNDS | ROLE (PRINCIPLE/CO-RESEARCHER) | YEARS, DURATION |
|---|---|---|---|---|
| **RUSSIAN FEDERATION** | | | | |
| 1. The study of reproductive function in male rats with experimentally-induced Mg deficiency | Government Contract of the Russian Federation | *300 000.00 Russian Roubles* | Project leader | 2014 – completed |
| 2. The study of the pharmacological effects of novel biphenyl derivatives | Government Contract of the Russian Federation | *900 000.00 Russian Roubles* | Project leader | 2014 – completed |
| 3. The study of Mg deficiency in pathogenesis of cardiovascular disease and methods of its correction | The Russian Federation President's PhD Scholarship | *900 000.00 Russian Roubles* | Project leader | 2014 – completed |
| 4. Developing a system of target-oriented discovery of biologically active compounds that affect the pathogenetically important links of | Russian Science Foundation | *52 805 000.00 Russian Roubles* | Project leader | 2014-2017 completed |

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| | carbohydrate metabolism disorder in type 2 diabetes mellitus, using the technology of in silico modeling and medicinal chemistry (Volgograd State Medical University, Russian Federation). | | | | |
| 5. | Preclinical studies of an antithrombotic drug with a combined mechanism of action-the P2Y12 receptor antagonist and the thromboxane A2 synthesis inhibitor, based on the 9-dihydro-phenacyl-dihydroimidazobenzimidazole derivative | Government Contract of the Russian Federation | *44 000 000.00 Russian Roubles* | Project leader | 2017 – 2019 completed |
| 6. | Preclinical studies of an anti-migraine drug that improves cerebral blood flow with a 5-HT2 antagonistic effect, a derivative of 2-methoxyphenyl-imidazobenzimidazole | Government Contract of the Russian Federation | *44 000 000.00 Russian Roubles* | Project leader | 2017 – 2019 completed |
| 7. | Preclinical studies of a drug acting on collagen glycation end products (AGE) and their receptors (RAGE) for the prevention and treatment of diabetes mellutis complications | Government Contract of the Russian Federation | *21200000 Russian Roubles* | Project leader | 2017-2018 completed |
| 8. | Development of systemic multifunctional multi-target glycation end-product receptor inhibitors for the treatment of pathia in diabetes mellitus and Alzheimer's disease | Government Contract of the Russian Federation -RFFI | *2100000 Russian Roubles* | | 2018-2020-on going |

**POSTGRADUATE SUPERVISION (INCLUDES CO-SUPERVISION)**

| **STUDENT** (NAME AND MATRIC NO.) | **TITLE** | **LEVEL OF STUDY, COURSE CODE** | **SUPERVISORY STATUS** (MAIN/CO-SUPERVISOR) | **PROJECT STATUS** (*COMPLETED, *ON-GOING) |
|---|---|---|---|---|
| 1. Poroshin A.V. | Hypomagnesemia in pathogenesis of pain and psychovegetative disorders in patients with primary fibromyalgia | PhD dissertation | Scientific advisor | |
| 2. Leschankina N.Yu. | The study of antiarrhythmic effects of ritmidazole | PhD dissertation | Scientific advisor | Kazan – 1996 completed |
| 3. Chobanu N.T. | Pharmaceutical technology and biopharmaceutical study of mucoadhesive fenibut tablets | PhD dissertation | Scientific advisor | Kishinev – 1995 completed |

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| 4. | Galenko-Yaroshevsky A.P. | «Imidazo [1,2-*a*] benzimidazole derivatives: a new class of local anaesthetics» | Doctoral dissertation | Scientific advisor | Krasnodar – 2009, completed |
| 5. | Khropova T.N. | The effects of imidazo benzimidazole derivatives with anioxidant and hemorheological activity on skin regeneration in reduced blood supply | PhD dissertation | Scientific advisor | Krasnodar – 2004 completed |
| 6. | Tegai A.V. | Skin protective properties of 2,3-dehydro imidazo[1,2-α] benzimidazole derivatives with hypoglycemic activity in reduced blood flow | PhD dissertation | Scientific advisor | Krasnodar – 2004 completed |
| 7. | Prikhodko A.K. | Local anaesthetic effects of 1- and 9- diethylaminoethyl -2-aril imidazo [1,2-α]benzimidazoles | PhD dissertation | Scientific advisor | Krasnodar – 2005 completed |
| 8. | Dudchenko G.P. | «The direct search and study of compounds showing anti-diabetic activity among new benzimidazole derivatives» | PhD dissertation | Scientific advisor | Leningrad – 1989, completed |
| 9. | Kuleshova S.A. | The effects of verapamil, foridon and ritmidazole on blood supply and parameters of ischemic brain metabolism | PhD dissertation | Scientific advisor | Pyatigorsk – 1993 completed |
| 10. | Solovieva N.V. | Comparison of pharmacological and toxicological activity of K, Mg aspartate stereoisomers | PhD dissertation | Scientific advisor | Pyatigorsk – 2004 completed |
| 11. | Speranskaya A.S. | Pharmacodynamic and pharmacokinetic properties of the N9- imidazo [1,2-α]benzimidazole derivative that exhibits antiulcer activity | PhD dissertation | Scientific advisor | Pyatigorsk – 2004 completed |
| 12. | Motov A.A. | An experimental study of pharmacological properties of hydrophilic bischofite-based ointments | PhD dissertation | Scientific advisor | Pyatigorsk – 2006 completed |
| 13. | Stukovina A. Yu. | The direct search and study of purine receptor antagonists for inhibition of platelet aggregation among condensed benzimidazole derivatives | PhD dissertation | Scientific advisor | Pyatigorsk – 2006 completed |
| 14. | Orlova A.A. | The study of pharmacological activity of antioxidants and antiradicals, such as hindered phenols, a class of benzimidazole derivatives | PhD dissertation | Scientific advisor | Pyatigorsk – 2007 completed |
| 15. | Agarkov D.Yu. | The study of anti-diabetic activity of a multicomponent dietary supplement that includes Gymnema sylvestre extract | PhD dissertation | Scientific advisor | Pyatigorsk – 2008 completed |
| 16. | Goryagin I.I. | The search and study of compounds with anti-serotonin 5-HT2 activity among condensed imidazole derivatives | PhD dissertation | Scientific advisor | Pyatigorsk – 2008 completed |
| 17. | Kravchenko M.S. | Pharmacological activity of Mg salts of organic acids | PhD dissertation | Scientific advisor | Pyatigorsk – 2008 completed |
| 18. | Gretskaya I.B. | The direct search and study of novel antiarrhythmic compounds among nitrogen-containing heterocyclic derivatives | PhD dissertation | Scientific advisor | Rostov – 1987, completed |
| 19. | Panchenko T.I. | Antiarrhythmic effects of novel condensed benzimidazole | PhD dissertation | Scientific advisor | Rostov-on-the-Don – 1990 completed |

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| | derivatives exhibiting antioxidant activity | | | |
| 20. Ponomarev V.V. | Local anaesthetic effects of imidazo[1,2-*a*]benzimidazole derivatives | PhD dissertation | Scientific advisor | Rostov-on-the-Don – 1998 completed |
| 21. Avakimyan A.A. | Local anaesthetic effects of b - amino - g –hydroxybutanoic acid derivatives | PhD dissertation | Scientific advisor | Rostov-on-the-Don – 1999 completed |
| 22. Dmitrenko G.D. | Local anaesthetic effects of 2-tert-butyl imidazole benzimidazole salts | PhD dissertation | Scientific advisor | Rostov-on-the-Don – 1999 completed |
| 23. Rybakov B.V. | Local anaesthetic effects of condensed tricyclic benzimidazole systems | PhD dissertation | Scientific advisor | Rostov-on-the-Don – 1999 completed |
| 24. Erokhina L.V. | Local anaesthetic effects of 1,2-disubstituted imidazo [1,2-a] benzimidazole | PhD dissertation | Scientific advisor | Rostov-on-the-Don – 2000 completed |
| 25. Vasilieva S.V. | Local anaesthetic effects of N-amino methyl substituted 2-aril imidazo[1,2- a] benzimidazole | PhD dissertation | Scientific advisor | Rostov-on-the-Don – 2000 completed |
| 26. Semakova S.A. | Pharmaceutical technology and biopharmaceutical study of efcobut and mefebut tablets | PhD dissertation | Scientific advisor | St. Petersburg – 1992 completed |
| 27. Martynova L.A. | The use of polycatan in comprehensive treatment of acute and chronic nasal mucosa and paranasal sinus diseases | PhD dissertation | Scientific advisor | St. Petersburg – 1998 completed |
| 28. Lobzov M.S. | The effectivenss of the combined use of electrostimulation and policatan in comprehensive treatment of sensorineural hearing loss | PhD dissertation | Scientific advisor | St. Petersburg – 1998 completed |
| 29. Timofeeva A.S. | Pharmacological properties of cyclic guanidine derivatives of $Na^+/H^+$ exchange inhibitors | PhD dissertation | Scientific advisor | Volgograd – 2015 completed |
| 30. Chernov A.V. | Antiarrhythmic effects of novel pyrazolo-(1,5-a)-benzimidazoles | PhD dissertation | Scientific advisor | Volgograd – 1990 completed |
| 31. Bakumov P.A. | The direct search and study of antiulcer compounds among novel condensed benzimidazole derivatives | PhD dissertation | Scientific advisor | Volgograd – 1991 completed |
| 32. Tsybanev A.V. | The search for compounds boosting recovery and performance after exercising among imidazo (1,2- a ) benzimidazoles exhibiting anti-oxidant activity | PhD dissertation | Scientific advisor | Volgograd – 1991 completed |
| 33. Pankov N.B. | Comparative study of toxicity of vasoactive substances, a new class of GABA derivatives, in intact and hypertensive rats | PhD dissertation | Scientific advisor | Volgograd – 1992 completed |
| 34. Likhodeeva V.A. | The effects of novel GABA analogues on recovery and performance | PhD dissertation | Scientific advisor | Volgograd – 1993 completed |
| 35. Seredintseva N.V. | The search and study of novel hypotensive drugs among azacrown ether derivatives | PhD dissertation | Scientific advisor | Volgograd – 1993 completed |
| 36. Shipov A.A. | Hepatoprotective properties of new condensed derivatives of benzimidazoles exhibiting anti-oxidant activity | PhD dissertation | Scientific advisor | Volgograd – 1994 completed |
| 37. Kosolapov V.A. | Protective properties of anti-oxidant substances during and after hypoxia | PhD dissertation | Scientific advisor | Volgograd – 1995 completed |

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| 38. Sibiryakova T.B. | Pharmacological properties of novel calmodulin inhibitors, a new class of benzimidazole derivatives | PhD dissertation | Scientific advisor | Volgograd – 1995 completed |
| 39. Smirnova L.A. | Pharmacodynamic and pharmacokinetic properties of bischofite mineral | PhD dissertation | Scientific advisor | Volgograd – 1995 completed |
| 40. Turchaeva A.F. | The search and study ofantiplatelet compounds among novel condensed benzimidazole derivatives | PhD dissertation | Scientific advisor | Volgograd – 1995 completed |
| 41. Kirillov O.V. | Comparison of clinical and electrophysiological effects of ritmidazole, nocainamide, cordarone and verapamil for the treatment of supraventricular tachyarrhythmia | PhD dissertation | Scientific advisor | Volgograd – 1996 completed |
| 42. Gavrilova E.S. | Pharmacotoxicity of diabenol, a novel hypoglycemic drug | PhD dissertation | Scientific advisor | Volgograd – 1997 completed |
| 43. Ivakhnenko I.V. | The direct search and study of anti-platelet agents among novel heterocyclic compounds exhibiting anti-oxidant activity | PhD dissertation | Scientific advisor | Volgograd – 1997 completed |
| 44. Shabasheva I.G. | Antiarrhythmic effects and pharmacokintetics of ritmidazole | PhD dissertation | Scientific advisor | Volgograd – 1997 completed |
| 45. Kuame Konan | Intravenous blood irradiation therapy of chronic diffuse liver disease | PhD dissertation | Scientific advisor | Volgograd – 1998 completed |
| 46. Gurova N.A. | Pharmacological effects of midazbenzimidazole derivative, a new antiarrhythmic compound | PhD dissertation | Scientific advisor | Volgograd – 1998 completed |
| 47. Iezhitsa I.N. | Psycho- and neurotoxic effects of single-dose versus multiple-dose actoprotectors | PhD dissertation | Scientific advisor | Volgograd – 1998 completed |
| 48. Mozgovoy P.V. | Improvement of reconstruction outcomes for chronically occluded arteries of the lower limbs | PhD dissertation | Scientific advisor | Volgograd – 1998 completed |
| 49. Khamidova T.V. | The effects of novel nootropic agents and actoprotectors on the reproductive function (an experimental study) | PhD dissertation | Scientific advisor | Volgograd – 1999 completed |
| 50. Bogus S.K. | Local anaesthetic effects of 1- and 9-substituted 2-tert –butyl imidazo [1,2- a]benzimidazole | PhD dissertation | Scientific advisor | Volgograd – 2000 completed |
| 51. Chernikov M.V. | The direct search and study of compounds with potent antihistamine activity among condensed benzimidazole derivatives | PhD dissertation | Scientific advisor | Volgograd – 2000 completed |
| 52. Frolov D.V. | Prognosis of early reocclusion in patients with obliterating arterial disease of the lower limbs | PhD dissertation | Scientific advisor | Volgograd – 2000 completed |
| 53. Mironova I.A. | Assessment, prognosis and correction of foreign students' learning and institutional outcomes in Russia | PhD dissertation | Scientific advisor | Volgograd – 2000 completed |
| 54. Tregubova I.A. | The effects of antioxidant compounds on maternal and fetal hypoxia (an experimental study) | PhD dissertation | Scientific advisor | Volgograd – 2000 completed |
| 55. Degtyarev A.N. | Mechanism of action and anti-platelet effects of new benzimidazole derivatives on the rheology of blood | PhD dissertation | Scientific advisor | Volgograd – 2001 completed |

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| 56. Guba T.I. | Professionalization of bilingual medical students | PhD dissertation | Scientific advisor | Volgograd – 2001 completed |
| 57. Kuzubova E.A. | Gonadotropic effects of new actoprotectors | PhD dissertation | Scientific advisor | Volgograd – 2001 completed |
| 58. Salaznikova O.A. | The effects of hypoglycemic agents on hemostasis and the rheology of blood | PhD dissertation | Scientific advisor | Volgograd – 2001 completed |
| 59. Schava S.N. | Clinical and experimental rationale for the use of bischofite mineral in comprehensive treatment of skin inflammation | PhD dissertation | Scientific advisor | Volgograd – 2001 completed |
| 60. Sidorov D.N. | Laser blood irradiation in the prevention of early reocclusion following terminal aortic and lower extremity arterial reconstruction | PhD dissertation | Scientific advisor | Volgograd – 2001 completed |
| 61. Stepanov A.V. | Pharmacokinetic characteristics of imidazo benzimidazole derivatives exhibiting antiarrhythmic activity | PhD dissertation | Scientific advisor | Volgograd – 2001 completed |
| 62. Kiabia S.T. | The direct search and study of 3 subtype serotonin receptor antagonists among condensed benzimidazole derivatives | PhD dissertation | Scientific advisor | Volgograd – 2003 completed |
| 63. Samokhina M.P. | Hemorheological properties of condensed imidazo benzimidazole derivatives exhibiting antioxidant effects | PhD dissertation | Scientific advisor | Volgograd – 2003 completed |
| 64. Arkova N.V. | The direct search and study of compounds that affect rheological properties of blood among new benzimidazole | PhD dissertation | Scientific advisor | Volgograd – 2004 completed |
| 65. Denisova T.D. | The effects of actoprotectors on the development of offspring postnatally | PhD dissertation | Scientific advisor | Volgograd – 2004 completed |
| 66. Lebedeva S.A. | Pharmacological study of Mg-containing bischofite mineral supplemented with iron, zinc and copper salts | PhD dissertation | Scientific advisor | Volgograd – 2004 completed |
| 67. Naumenko L.V. | The search and study of xanthine derivatives exhibiting hemorheological effects | PhD dissertation | Scientific advisor | Volgograd – 2006 completed |
| 68. Frolov M.V. | Prevention of late reocclusion in patients with obliterating atherosclerotic vascular disease of the lower extremities | PhD dissertation | Scientific advisor | Volgograd – 2007 completed |
| 69. Yakovlev D.S. | The search and study of 5-HT3-serotonin receptor antagonists among condensed and non-condensed benzimidazole and benzimidazoline derivatives | PhD dissertation | Scientific advisor | Volgograd – 2007 completed |
| 70. Kharitonova M.V. | Pharmacological activity of inorganic Mg salts | PhD dissertation | Scientific advisor | Volgograd – 2008 completed |
| 71. Sorokina E.V. | Anti-diabetic activity of Gymnema sylvestre dry extract | PhD dissertation | Scientific advisor | Volgograd – 2008 completed |
| 72. Iezhitsa I.N. | The design of magnesium – containing drugs based on bischofite mineral | Doctoral dissertation | Scientific advisor | Volgograd – 2008, completed |
| 73. Abakumov T.A. | The effectiveness of policatan in the treatment of periodontal disease | PhD dissertation | Scientific advisor | Volgograd – 2009 completed |
| 74. Vasiliev P.M. | A computer-based approach to identify highly potent chemical compounds | Doctoral dissertation | Scientific advisor | Volgograd – 2009, completed |

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| 75. | Voronkova M.P. | Anti-diabetic effects of gymnemic acids | Doctoral dissertation | Scientific advisor | Volgograd – 2009, completed |
| 76. | Eliseeva N.V. | The search and study of new kappa-opioid receptor agonists among benzimidazole derivatives | PhD dissertation | Scientific advisor | Volgograd – 2010 completed |
| 77. | Kuznetsova V.A. | The search and study of compounds with hemorheological activity among new methylxanthine derivatives | PhD dissertation | Scientific advisor | Volgograd – 2010 completed |
| 78. | Tibirkova E.V. | The direct search and study of antioxidants among noncondensed benzimidazole derivatives | PhD dissertation | Scientific advisor | Volgograd – 2010 completed |
| 79. | Likhodeeva V.A. | The use of drugs boosting performance in maladaptive athletes in response to exercise | Doctoral dissertation | Scientific advisor | Volgograd – 2011, completed |
| 80. | Cheplyaeva N.I. | Pharmacological properties of the combined use of diabenol, a hypoglycemic agent, and alpha lipoic acid | PhD dissertation | Scientific advisor | Volgograd – 2012 completed |
| 81. | Chepurnova M.V. | The study of the pharmacological properties of combined hypoglycemic compounds using diabenol | PhD dissertation | Scientific advisor | Volgograd – 2012 completed |
| 82. | Kolobrodova N.A. | The direct search and study of new 5-HT3 receptor blockers among indole derivatives and benzimidazole | PhD dissertation | Scientific advisor | Volgograd – 2012 completed |
| 83. | Zheltova A.A. | Pharmacological treatment of endothelial dysfunction and myocardial ischemia in experimentally-induced Mg deficiency | PhD dissertation | Scientific advisor | Volgograd – 2012 completed |
| 84. | Kucheryavenko A.F. | Condensed benzimidazole derivatives: a new class of antiplatelet agents | Doctoral dissertation | Scientific advisor | Volgograd – 2012, completed |
| 85. | Bukatin M.V. | The effects of benzimidazole derivatives on the reproductive system of male rats | PhD dissertation | Scientific advisor | Volgograd – 2013 completed |
| 86. | Bukatina T.M. | The search and study of purine receptor antagonists among condensed indole derivatives | PhD dissertation | Scientific advisor | Volgograd – 2014 completed |
| 87. | Maltsev D.V. | The study of 5-HT2A –antagonists, a class of benzimidazole derivatives | PhD dissertation | Scientific advisor | Volgograd – 2014 completed |
| 88. | Raschenko A.I. | Pharmacokinetic characteristics of a novel analgesic, a benzimidazole derivative | PhD dissertation | Scientific advisor | Volgograd – 2014 completed |
| 89. | Shtareva D.M. | Analgesic effects of a condensed benzimidazole derivative | PhD dissertation | Scientific advisor | Volgograd – 2014 completed |
| 90. | Ostrovsky O.V. | Pharmacological correction of stress and neurochemical aspects of anti-stress effects | PhD dissertation | Scientific advisor | Volgograd –1987, completed |
| 91. | Ostrovsky O.V. | Pharmacological study of condensed benzimidazole derivatives for antioxidant activity | Doctoral dissertation | Scientific advisor | Volgograd – 1996, completed |
| 92. | Bugaeva L.I. | Toxicity of novel psychotropic actoprotectors and nootropics | Doctoral dissertation | Scientific advisor | Volgograd – 2001, completed |
| 93. | Dudchenko G.P. | Anti-diabetic activity of benzimidazole derivatives | Doctoral dissertation | Scientific advisor | Volgograd – 2001, completed |
| 94. | Ponomarev V.V. | The direct search and study of novel | Doctoral | Scientific | Volgograd – 2001, |

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| | benzimidazole and imidazo [1,2-*a*] benzimidazole derivatives showing potent local anaesthetic activity | dissertation | advisor | completed |
| 95. Smirnova L.A. | Pharmacokinetics of benzimidazole derivatives: a basis for design and development of novel drugs and optimal drug therapy strategies | Doctoral dissertation | Scientific advisor | Volgograd – 2004, completed |
| 96. Kosolapov V.A. | Antioxidants: selection strategy and potential use | Doctoral dissertation | Scientific advisor | Volgograd – 2005, completed |
| 97. Chernikov M.V. | Benzimidazole derivatives are biologically active substance receptor modulators | Doctoral dissertation | Scientific advisor | Volgograd – 2008, completed |
| 98. Grechko O.Yu. | Condensed benzimidazoles: a new class of kappa-opioid receptor agonist | Doctoral dissertation | Scientific advisor | Volgograd – 2012, completed |
| 99. Naumenko L.V. | Pharmacological correctors of hemorheological and microcirculatory disorders: ways of improving the search and study of the mechanism of action | Doctoral dissertation | Scientific advisor | Volgograd – 2012, completed |
| 100. Gurova N.A. | Benzimidazole derivatives: a new class of cardioprotective drugs | Doctoral dissertation | Scientific advisor | Volgograd – 2015, completed |
| 101. Litvinov R.A. | Pharmacotoxicological properties of a new kappa-opioid agonist - a benzimidazole derivative | PhD dissertation | Scientific advisor | Volgograd – 2016, completed |
| 102. Muravyova V.Yu. | Cerebroprotective properties of new derivatives of cyclic guanidines of $Na^+/H^+$ inhibitors | PhD dissertation | Scientific advisor | Volgograd – 2016, completed |
| 103. Yakovlev D.S. | Condensed azoles - a new class of ligands of serotonin receptors | Doctoral dissertation | Scientific advisor | Volgograd – 2016, completed |
| 104. Ziganshin B.A. | Comparative pharmacological characteristics of P2-receptor-mediated responses of human blood vessels | PhD dissertation | Scientific advisor | Volgograd – 2016, completed |
| 105. Lenskaya K.V. | Cyclic guanidines - a new class of hypoglycemic agents | Doctoral dissertation | Scientific advisor | Volgograd–2018, completed |
| 106. Brigadirova A.A. | Pharmacological properties of novel biphenyl derivatives | PhD dissertation | Scientific advisor | Volgograd–2018, completed |
| 107. Taran A.S. | Neuropsychotropic effects of novel diazepino[1,2-a]benzimidazole derivatives | PhD dissertation | Scientific advisor | Volgograd–2018, completed |
| 108. Sirotenko V.S. | Antihtromogenic properties of new tricyclic diazepino(1,2-a) benzimidazole derivatives | PhD dissertation | Scientific advisor | Volgograd–2018, completed |
| 109. Kalitin K.Yu | Antiepieptic activity of new deivatives of parahalogen of benzimidazoles | PhD dissertation | Scientific advisor | Volgograd–2019, completed |
| 110. Agatsarskaya I.V. | Pharmacological properties of 9-dimetil-2-(4-methoxyphenyl imidazo-(1,2-a)benzimidazole | PhD dissertation | Scientific advisor | Volgograd–2019, completed |

## 2. LIST OF PUBLICATIONS

**FULL-TEXT ARTICLES IN REVIEWED JOURNALS (MEDLINE, SCOPUS, ISI WEB OF KNOWLEDGE)**

**SCOPUS *h*-index: 14**

1. Iezhitsa I.N., **Spasov A.A.,** Kharitonova M.V., Kravchenko M.S. The effects of magnesium chloride on psychomotor activity, emotional status, and acute behavioural responses to clonidine, d-amphetamine, arecoline, nicotine, apomorphine, and L-5-hydroxytryptophan. *Nutritional Neuroscience* 2011 Jan;14(1):10-24.

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12. Zinoveva V.N., **Spasov A.A.** Mechanism of action of plant polyphenols exhibiting anti-cancer effects. I. Blockade of carcinogenesis initiation]. Biomed Khim. 2012 Mar-Apr;58(2):160-75. Review. [In Russian].

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26. Stepanova E.F., Kuregyan A. G., **Spasov A.A.**, Yakovlev D. S., Smirnova L.A., Sultanova Ki. T., Agatsarskaya Y. Vl., Kornilov V.I., Petrov V.I., Adzhienko V. L. *Pharmaceutical Composition Of Antimigraine Action In Solid Dosage Form In The Form Of Tablets*. Patent RU No. 2696866 Date of publication 05.03.2019
27. Stepanova E.F., Remezova I.P., **Spasov A.A**., Kucheryavenko A.F., Smirnova L.A., Gajdukova K.A., Sirotenko V.S., Petrov V. I., Morozov A. V., Shevchenko A.M. *Pharmaceutical Composition Of Antithrombotic Action In Solid Dosage Form In The Form Of Tablets* Patent RU No. 2696869 Date of publication 05.03.2019
28. Zhukovskaya O.N., **Spasov A.A**., Petrov V.I., Rashchenko A.I, Litvinov R.A., Morkovnik A.S, Gurova N.A. , Smirnov A. V., Shmidt M. V., Panshin N.G., Maltsev D.V., Naumenko L.V., Anisimova V.A. *Agent Possessing Cardio-,*

*Nephro-, Endothelial-, Microangio-, Macroangio- And Encephaloprotective Properties* Patent RU No. 2700791 Date of publication 23.09.2019

## INTERNATIONAL, NATIONAL AND REGIONAL SYMPOSIUM PARTICIPANT (OVER THE PERIOD OF THE LAST 5 YEARS)

1. Russian-Wide Conference with International Participation dedicated to the 85th Anniversary of V.A. Kukhtin "Grand Challenges for Chemists and Pharmaceutists". Cheboksary, Russian Federation. April 3-4, 2014
2. 20th EuroQSAR Understanding Chemical-Biological Interactions, III International Scientific and Practical Conference "Academic Science: Challenges and achievements". St. Petersburg, Russian Federation. February 20-21, 2014
3. Symposium dedicated to the 75th Anniversary of Academician of the Russian Academy of Medical Sciences Yu. D. Ignatov "Recent Advances in pharmacological management of pain". St. Petersburg, Russian Federation. June 16, 2015
4. Russian Scientific Conference dedicated to the 150th Anniversary of N.P. Kravkov "Pharmacological treatment of emergency medical conditions". St. Petersburg, Russian Federation. June 29 –July 2, 2015
5. Scientific and Practical Conference with International Participataion "Disadaptation of various etiologies and ways of pharmacological treatment". Pyatigorsk, Russian Federation. November 2-3, 2015
6. ASCEPT-BPS joint scientific meeting "Tomorrow's medicines: pharmacology, patients and populations". [*The first joint meeting between the Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists (ASCEPT) and the British Pharmacological Society (BPS) in association with the Hong Kong Pharmacology Society (HKPS) and the Asia Pacific Federation of Pharmacologists (APFP)*] University of Hong Kong, Hong Kong. May 19-21 2015
7. XX Mendeleev Congress on General and Applied Chemistry. Ekaterinburg, Russian Federation, September 26-30, 2016
8. 3rd Russian Conference on Medicinal Chemistry. September 28 – October 03, 2017. Kazan, Tatarstan, Russian Federation.
9. V Congress of pharmacologists of Russia "Scientific basis of search and development of new drugs", May 14-18, 2018. Yaroslavl, Russian Federation.
10. XXI Mendeleev Congress on General and Applied Chemistry. Saint Petersburg, 2019
11. 2nd Volga Pharma Summit. 13-14 September 2017. Volgograd, Russian Federation.
12. 3rd Russian Conference on Medicinal Chemistry. September 28 – October 03, 2017. Kazan, Tatarstan, Russian Federation.
13. V Congress of pharmacologists of Russia "Scientific basis of search and development of new drugs", May 14-18, 2018. Yaroslavl, Russian Federation.
14. 4th Russian Conference on Medicinal Chemistry with international participants MedChem Russia 2019.
15. International congress «Biotechnology: state of the art and perspectives» Russia ,Feb. 2019
16. XXI Mendeleev Congress on General and Applied Chemistry. Saint Petersburg, 2019. Satellite symposia: From empirical to predictive chemistry
17. V conference on Molecular or biological aspect of chemistry and pharmacology: MOBI-CHEMPHARMA2019, Sudak, Krim, Russia
18. 4th Russian Conference on Medicinal Chemistry with international participants Ekaterinburg, Russia, 10-14 june 2019
19. 24th Iranian and 3th International Congress of Physiology and Pharmacology (FAOPS Satellite Congress), 30 oct-01 nov 2019, Tehran, Iran

## WORKSHOPS AND ADVANCED SUBJECT TRAINING COURSES (ASTC) – OVER THE PERIOD OF THE LAST 5 YEARS

1. All-Russian conference dedicated to the 90th anniversary of the birth of AMS of USSR Academician A.V. Waldman "Innovations in Pharmacology: From Theory to Practice". St. Petersburg, Russian Federation. October 27-28, 2014 (**organizing committee**)
2. Scientific and Practical Conference with International Participataion "Disadaptation of various etiologies and ways of pharmacological treatment". Pyatigorsk, Russian Federation. November 2-3, 2015 (**organizing committee**)
3. Recent advances in modern pharmacology. 22-24 October 2015, Ryazan, Russian Federation. (**session chair**)
4. Volga Pharma Summit. 14 September 2016. Volgograd, Russian Federation. (**organizing committee**)
5. XX Mendeleev Congress on General and Applied Chemistry. Ekaterinburg, Russian Federation, September 26-30, 2016
6. 2nd Volga Pharma Summit. 13-14 September 2017. Volgograd, Russian Federation. (**organizing committee**)
7. 3rd Russian Conference on Medicinal Chemistry. September 28 – October 03, 2017. Kazan, Tatarstan, Russian Federation. (**session chair**)
8. V Congress of pharmacologists of Russia "Scientific basis of search and development of new drugs", May 14-18, 2018. Yaroslavl, Russian Federation. (**organizing committee**)
9. 4th Russian Conference on Medicinal Chemistry with international participants MedChem Russia 2019. (**organizing committee, speaker**)

10. International congress «Biotechnology: state of the art and perspectives» Russia ,Feb. 2019
11. XXI Mendeleev Congress on General and Applied Chemistry. Saint Petersburg, 2019. Satellite symposia: From empirical to predictive chemistry (**speaker**)
12. V conference on Molecular or biological aspect of chemistry and pharmacology: MOBI-CHEMPHARMA2019, Sudak, Krim, Russia (**session chair, speaker**)
13. 4th Russian Conference on Medicinal Chemistry with international participants Ekaterinburg, Russia, 10-14 june 2019 (**speaker**)