CURRICULUM VITAE

Viacheslav Vasenev

CONTACT INFORMATION
Address: Miklukho-Maklaya, 8/2, Moscow, Russia
Phone: +79264341703
Email: vasenev-vi@rudn.ru; vasenyov@mail.ru

POSITION

- Coordinator of the research center "Smart technologies for sustainable development of urban environment in the conditions of global change", RUDN University
- Associate professor at the Department of Landscape Design and Sustainable Development, RUDN University
- Vice-director on research and international relationships of the Department of Landscape Design and Sustainable Development, RUDN University

INTRODUCTION

Viacheslav Vasenev was trained as soil scientist in Lomonosov Moscow State University (2008) and obtained Dr (PhD) degrees in Lomonosov Moscow State University (2011) and in Wageningen University (2015). His research interests have always been focused on urban ecosystems. The main topics include, but are not limited to the following: urban soils' quality and health; IoT technologies and remote sensing to monitor urban green infrastructure; urban farming; soil contamination and remediation; engineering artificial soil constructions; urban climate; social and economic metrics to evaluate ecosystem services provided by urban green infrastructure. Viacheslav Vasenev coordinated 11 research projects as a project leader and was involved in 5 more projects as a principal investigator. Viacheslav Vasenev has an 8 year teaching experience including: developing and teaching courses for diverse international audience of bachelors, masters and PhD students (8 on-campus and 3 on-line courses in English); supervising diplomas and thesis (more than 20 thesis in English); organization of field research practices and summer schools, including an annual international field summer school 3MUGIS "Anthropogenic soils and landscapes: from Sea to Sea" - the first summer school involving a comprehensive analysis of soils and green infrastructure by express and integral assessment techniques in a wide range of bioclimatic conditions from subarctic to subtropics; developing and coordinating two double-diploma programs for masters and PhD students with Tuscia University (Italy) (both in English); developing and coordinating programs for educational mobilities, funded by Russian and EU projects.

RESEARCH EXPERIENCE

2018-present	Coordinator of the research center "Smart Technologies for Sustainable Urban Development Under Global Changes", RUDN University
2016-present	Vice-director for science and international affairs in Landscape Design and Sustainable Ecosystems, RUDN University
2014-present	Associate professor in Department of Landscape Design and Sustainable Ecosystems, RUDN University

2011-2015	Senior researcher in Laboratory of Agroecological Monitoring, Modeling and prediction of ecosystems, Russian State Timiryazev Agrarian University
2011-2014	Senior lecturer in Department of Landscape Design and Architecture, RUDN University

I suggest you: Start ALL words in the Titles of the department names from Capitals

Guest researcher

2018	Brooklyn College (USA)
2017	Wageningen University (Netherlands) – Erasmus Mundus PostDoc fellowship
2016	Georg-August-University of Gottingen (Germany) – DAAD Mikhail Lomonosov fellowship

SKILLS AND EXPERTISE

Field work. Soil survey, field soil analysis and description, monitoring greenhouses gases, soil temperature and moisture regimes in suit, tree survey and visual tree assessment, implementation of express methods to monitor soil quality

Laboratory analysis. Soil carbon stocks, soil microbial activity, hydrophysical properties of soils and soil constructions

Data analysis and software Expertise in statistics and geostatistics in Statistica, SPSS and R software. GIS analysis and spatial modeling in ArcGIS and QGIS software.

PUBLICATIONS

- Scopus ID 43861956300
- WoS Researcher ID: N-8451-2016
- ID ORCID: 0000-0003-0286-3021
- AuthorID (RSCI): 7209-1269

Scopus (41 papers, 225 citations, H-index 9)

Web of Science (23 papers, 151 citations, H-index 8)

Journal papers

Erofeeva, V.V., Vasenev, V. Influence of Environmental Factors on the Development and Survival of Toxocara Sp. Eggs in Various Soil Substrates (2020). Springer Geography, pp. 52-57. DOI: 10.1007/978-3-030-16091-3_8

Romzaykina, O., Vasenev, V., Andrianova, D., Neaman, A., Gosse, D. The Effect of Sealing on Soil Carbon Stocks in New Moscow (2020). Springer Geography, pp. 29-36 DOI: 10.1007/978-3-030-16091-3_5

Gavrichkova, O., Hajiaghayeva, R.A., Liberati, D., Pallozzi, E., Calfapietra, C., Vasenev, V. Effects of the Road Deicing Practices on Gas Exchange Parameters in Urban Lawn Ecosystems (2020). Springer Geography, pp. 45-51. DOI: 10.1007/978-3-030-16091-3_7

Vasenev, V., Veretelnikova, I., Brianskaia, I., Demina, S., Romzaykina, O., Pulatov, B., Pulatov, A. Soil Electroconductivity as a Proxy to Monitor the Desertification in the Hungry Steppe (Uzbekistan) (2020). Springer Geography, pp. 125-132. DOI: 10.1007/978-3-030-16091-3_15

Vasenev, V., Dovletyarova, E.A., Veretelnikova, I., Calfapietra, C., Cheng, Z., Fatiev, M., Valentini, R. Smart and Sustainable Cities: From Environmental Threats Towards Nature Based Solutions and Sustainable Management (2020). Springer Geography, pp. 1-3. DOI: 10.1007/978-3-030-16091-3_1

Slukovskaya, M.V., Vasenev, V.I., Ivashchenko, K.V., Morev, D.V., Drogobuzhskaya, S.V., Ivanova, L.A., Kremenetskaya, I.P. Technosols on mining wastes in the subarctic: Efficiency of remediation under Cu-Ni atmospheric pollution (2019). International Soil and Water Conservation Research, 7 (3), pp. 297-307. DOI: 10.1016/j.iswcr.2019.04.002

Sushko, S., Ananyeva, N., Ivashchenko, K., Vasenev, V., Kudeyarov, V. Soil CO2 emission, microbial biomass, and microbial respiration of woody and grassy areas in Moscow (Russia) (2019). Journal of Soils and Sediments, 19 (8), pp. 3217-3225. DOI: 10.1007/s11368-018-2151-8

Vasenev, V.I., Morel, J.L., Nehls, T., Shaw, R.K., Kim, K.J., Hajiaghayeva, R.A. Preface (2019). Journal of Soils and Sediments, 19 (8), pp. 3123-3126/ DOI: 10.1007/s11368-019-02389-1

Ivashchenko, K., Ananyeva, N., Vasenev, V., Sushko, S., Seleznyova, A., Kudeyarov, V. Microbial C-availability and organic matter decomposition in urban soils of megapolis depend on functional zoning (2019). Soil and Environment, 38 (1), pp. 31-41.
DOI: 10.25252/SE/19/61524

Brianskaia, I.P., Vasenev, V.I., Hajiaghayeva, R.A., Morev, D.V. Evaluation of peat stability under various temperature and moisture conditions (2019). Springer Geography, pp. 153-159
DOI: 10.1007/978-3-319-89602-1_19

Shchepeleva, A.S., Vizirskaya, M.M., Vasenev, V.I., Vasenev, I.I. Analysis of carbon stocks and fluxes of urban lawn ecosystems in moscow megapolis (2019). Springer Geography, pp. 80-88.
DOI: 10.1007/978-3-319-89602-1_11

Bhoobun, B., Vasenev, V.I., Smagin, A.V., Gosse, D.D., Ermakov, A., Volkova, V.S. Hydrophysical properties of substrates used for technosols' construction in Moscow megapolis (2019). Springer Geography, pp. 260-266. DOI: 10.1007/978-3-319-89602-1_31

Vasenev, V.I., Cheng, Z., Dovletyarova, E.A., Morel, J.L., Prokof'eva, T.V., Hajiaghayeva, R.A., Plyushchikov, V.G. SUITMA 9: Urbanization as a challenge and an opportunity for soils functions and ecosystem services (2019). Springer Geography, pp. 1-3. DOI: 10.1007/978-3-319-89602-1_1

Demina, Sofiya; Vasenev, Viacheslav; Ivashchenko, Kristina; Ananyeva, Nadezhda; Plyushchikov, Vadim; Hajiaghayeva, Ramilla; Dovletyarova, Elvira. Microbial Properties of Urban Soils With Different Land-Use History in New Moscow (2018). SOIL SCIENCE 183(4), pp. 132-140. DOI 10.1097/SS.0000000000000240

Smagin, A.V., Sadovnikova, N.B., Vasenev, V.I., Smagina, M.V. Biodegradation of some organic materials in soils and soil constructions: Experiments, modeling and prevention (2018) . Materials, 11 (10), paper № 1889. DOI: 10.3390/ma11101889

Vasenev, V.I., Van Oudenhoven, A.P.E., Romzaykina, O.N., Hajiaghaeva, R.A. The Ecological Functions and Ecosystem Services of Urban and Technogenic Soils: from Theory to Practice (A Review) (2018). Eurasian Soil Science, 51 (10), pp. 1119-1132. DOI: 10.1134/S1064229318100137

Vasenev, V., Kuzyakov, Y. Urban soils as hot spots of anthropogenic carbon accumulation: Review of stocks, mechanisms and driving factors (2018). Land Degradation and Development, 29 (6), pp. 1607-1622. DOI: 10.1002/ldr.2944

Stoorvogel, J.J., van Manen, I., Vasenev, V.I. Modelling and mapping urban soils (2018). Springer Geography, pp. 36-40. DOI: 10.1007/978-3-319-70557-6_5

Vasenev, V.I., Stoorvogel, J.J., Leemans, R., Valentini, R., Hajiaghayeva, R.A. Projection of urban expansion and related changes in soil carbon stocks in the Moscow Region (2018) .
DOI: 10.1016/j.jclepro.2017.09.161

Vasenev, V.I., Cheng, Z., Stoorvogel, J.J., Dovletyarova, E.A., Hajiaghayeva, R.A., Plyushchikov, V.G. MEGACITIES 2050: From urbanization risks towards sustainable urban development (2018). Journal of Cleaner Production, 170, pp. 902-914. DOI: 10.1007/978-3-319-70557-6_1

Vasenev, V.I., Castaldi, S., Vizirskaya, M.M., Ananyeva, N.D., Shchepeleva, A.S., Mazirov, I.M., Ivashchenko, K.V., Valentini, R., Vasenev, I.I. Urban soil respiration and its autotrophic and heterotrophic components compared to adjacent forest and cropland within the Moscow megapolis (2018). Springer Geography, pp. 18-35. DOI: 10.1007/978-3-319-70557-6_4

Romzaykina, O.N., Vasenev, V.I., Khakimova, R.R., Hajiaghayeva, R., Stoorvogel, J.J., Dovletyarova, E.A. Spatial variability of soil properties in the urban park before and after reconstruction (2017). Soil and Environment, 36 (2), pp. 155-165.
DOI: 10.25252/SE/17/51219

Sarzhanov, D.A., Vasenev, V.I., Vasenev, I.I., Sotnikova, Y.L., Ryzhkov, O.V., Morin, T.
Carbon stocks and CO2 emissions of urban and natural soils in Central Chernozemic region of Russia (2017) Catena, 158, pp. 131-140. DOI: 10.1016/j.catena.2017.06.021

Shchepeleva, A.S., Vasenev, V.I., Mazirov, I.M., Vasenev, I.I., Prokhorov, I.S., Gosse, D.D.
Changes of soil organic carbon stocks and CO2 emissions at the early stages of urban turf grasses' development (2017) Urban Ecosystems, 20 (2), pp. 309-321. DOI: 10.1007/s11252-016-0594-5

Yang, J., Yu, F., Yu, Y., Zhang, J., Wang, R., Srinivasulu, M., Vasenev, V.I.
Characterization, source apportionment, and risk assessment of polycyclic aromatic hydrocarbons in urban soil of Nanjing, China (2017) Journal of Soils and Sediments, 17 (4), pp. 1116-1125. DOI: 10.1007/s11368-016-1585-0

Sarzhanov, D.A., Vasenev, V.I., Sotnikova, Y.L., Tembo, A., Vasenev, I.I., Valentini, R.
Short-term dynamics and spatial heterogeneity of CO_2 emission from the soils of natural and urban ecosystems in the Central Chernozemic Region (2015) Eurasian Soil Science, 48 (4), pp. 416-424. DOI: 10.1134/S1064229315040092

Vasenev, V.I., Stoorvogel, J.J., Vasenev, I.I., Valentini, R. How to map soil organic carbon stocks in highly urbanized regions? (2014) Geoderma, 226-227 (1), pp. 103-115.
DOI: 10.1016/j.geoderma.2014.03.007

Ivashchenko, K.V., Ananyeva, N.D., Vasenev, V.I., Kudeyarov, V.N., Valentini, R. Biomass and respiration activity of soil microorganisms in anthropogenically transformed ecosystems (Moscow region) (2014) Eurasian Soil Science, 47 (9), pp. 892-903. DOI: 10.1134/S1064229314090051

Vasenev, V.I., Anan'eva, N.D., Ivashchenko, K.V. The effect of pollutants (heavy metals and diesel fuel) on the respiratory activity of constructozems (artificial soils) (2013) Russian Journal of Ecology, 44 (6), pp. 475-483. DOI: 10.1134/S1067413613060118

Vasenev, V.I., Stoorvogel, J.J., Vasenev, I.I. Urban soil organic carbon and its spatial heterogeneity in comparison with natural and agricultural areas in the Moscow region (2013) Catena, 107, pp. 96-102. DOI: 10.1016/j.catena.2013.02.009

Vasenev, V.I., Prokof'eva, T.V., Makarov, O.A. The development of approaches to assess the soil organic carbon pools in megapolises and small settlements (2013) Eurasian Soil Science, 46 (6), pp. 685-696. DOI: 10.1134/S1064229313060100

Vasenev, V.I., Ananyeva, N.D., Makarov, O.A. Specific features of the ecological functioning of urban soils in Moscow and Moscow oblast (2012) Eurasian Soil Science, 45 (2), pp. 194-205. DOI: 10.1134/S1064229312020147

Kovda, I.V., Lebedeva, M.P., Chizhikova, N.P., Zhang, G.L., Gong, Z.T., Li, D.C., Vasenev, V.I. Secondary calcification of paddy soils in Southern China: Morphological and substantive characteristics (2011) Eurasian Soil Science, 44 (2), pp. 126-136.

Book Chapters

Vasenev, V.I., Stoorvogel, J.J., Dolgikh, A.V., Ananyeva, N.D., Ivashchenko, K.V., Valentini, R. Changes in soil organic carbon stocks by urbanization (2017) Urban Soils, pp. 61-92. CRC Press DOI: 10.1201/9781315154251

Dovletyarova, E.A., Mosina, L.V., Vasenev, V.I., Ananyeva, N.D., Paltseva, A., Ivashchenko, K.V. Monitoring and assessing anthropogenic influence on soil's health in urban forests: The case from Moscow City (2017) Adaptive Soil Management: From Theory to Practices, pp. 531-557. Springer Singapore. DOI: 10.1007/978-981-10-3638-5_24

Vasenev, V.I., Smagin, A.V., Ananyeva, N.D., Ivashchenko, K.V., Gavrilenko, E.G., Prokofeva, T.V., Paltseva, A., Stoorvogel, J.J., Gosse, D.D., Valentini, R. Urban soil's functions: Monitoring, assessment, and management (2017) Adaptive Soil Management: From Theory to Practices, pp. 359-409. Springer Singapore. DOI: 10.1007/978-981-10-3638-5_18

Przemysław Charzyński, John M. Galbraith, Cezary Kabała, Dieter Kühn, Tatiana V. Prokofeva, Viacheslav I. Vasenev Classification of urban soils (2017). Soils within Cities. P. 93-107.Catena-Schweizerbart.

Vasenev V.I., Stoorvogel J.J., Ananyeva N.D., Ivashchenko K.V., Sarzhanov D.A., Epikhina A.S., Vasenev I.I., Valentini R. Quantifying spatial-temporal variability of carbon stocks and fluxes in urban soils: from local monitoring to regional modeling (2015). Carbon footprint handbook. P.185-222. CRC Press

EDUCATION

2015	Doctoral (PhD) degree from Wageningen University. PhD thesis on the topic "How does urbanization affect spatial variability and temporal dynamics of soil organic carbons stocks in the Moscow region?"
2011	Doctoral (PhD candidate) degree in Soil Science and Environmental Science from Soil Science Faculty, Lomonosov Moscow State University. PhD thesis on the topic "Analysis of microbial respiration and carbon pools for functional-ecological assessment of urban constructed soil in Moscow region"
2008	Diploma (equivalent to MSc) in Soil Science from Soil Science Faculty, Lomonosov Moscow State University. Diploma with honor. Thesis on the topic "Development of the criteria for ecological certification of urban constructed soils"

GRANTS AND FELLOWSHIPS

On-going projects

2019-2022	Smart technologies for monitoring, modeling and assessment of ecosystem services provided by green infrastructure and soils to support decision-making for sustainable urban development under global changes *(principal investigator)*
2019-2022	Testing new technologies for monitoring natural and anthropogenic ecosystems and their components *(project leader)*
2018-2020	Analyzing capacities of the advanced monitoring techniques to control green stands' condition *(project leader)*
2019-2021	Carbon stocks of urban soils in different climatic zones of European Russia: formation factors and accumulation mechanisms *(project leader)*
2018-2020	Modeling and assessment of dynamics in C stocks and greenhouse gases emissions in soils of Moscow megapolis affected by urban heat island and other meso- and microclimatic anomalies (*project leader)*
2017-2020	Analysis and modelling sustainable soil constructions for urban greenery *(project leader)*
2018-2020	Spatial analysis and projecting desertification effect on soil functions in Hungry Steppe (Sir-Dariinskii district of Uzbekistan) *(project leader)*

Finished projects

2016-2018	European traditions in governance, design and environmental management of megacities: search for solutions (EDEMS) *(project leader)*
2015-2016	Analysis and modeling urbanization effect on soil environmental functions in the New Moscow *(project leader)*
2014-2015	Quantitative and qualitative assessment of carbon stocks in soils of representative urban ecosystems in China and Russia *(project leader)*
2014-2015	Analysis, assessment and modeling basic environmental functions and ecosystem services of urban soils in south-taiga and forest-steppe bioclimatic zones *(project leader)*
2014-2015	Analysis of spatial-temporal variability and profile distribution of soil microbiological activity in Central Chernozemic region to assess their environmental functioning under contrast land-use anthropogenic pressure *(project leader)*
2011-2015	C and N stocks and fluxes in anthropogenic changed ecosystems of Central European Russia *(principal investigator)*

AWARDS AND HONORS

2016, 2017	Best young lecturer in RUDN University
2017	The best course for the master program in foreign language (Award by V. Potanin Foundation)

JOURNAL EDITOR BOARD

2018- present	Land Degradation and Development Journal
2017- present	Journal of Soils and Sediments (guest editor)
2017- present	Soil Science (guest editor)