Pavel Terskii

Hydrologist, PhD (Geosciences)

ResearchGate Profile
ORCID Profile
LinkedIn Profile

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RESEARCH INTERESTS AND EXPERTISE

River floods, catchment water balance and regime, water bodies monitoring

Water resources engineering and management

Hydrological modeling (lumped and distributed)

Hydraulic modeling (1D, 2D)

Statistical analysis of river runoff components, probability analysis and calculations

Designing and conducting hydrological and geodetic fieldwork campaigns (rivers, lakes, estuaries)

Remote sensing data analysis, spatial analysis and mapping

HARD SKiLLS

LANGUAGES	Russian (native)	English (B2/C1), Swedish (beginner)
TECH	Hydrological software (experienced user): HEC-RAS, DELFT 3D, SWAT (SWAT+, SWAT CUP etc.), HBV	GIS (experienced user): ArcGIS, QGIS, Global Mapper, Surfer
MANAGEMENT AND RESEARCH DELIVERABLE	Project management skills and knowledge of national Soviet-based water-related legislation	• Methane emission measurements and calculations • Conducting field campaigns on the largest reservoirs in Russia • Publishing scientific papers and attending conferences
TEACHING AND SUPERVISING	Teaching hydrology, hydraulics, GIS, geography,	• Teaching, student's practices, supervising BS&MS students • Administrating at university (deputy dean on student's internship experience) • Supervising bachelor and master students
PRESENTING	Presenting scientific results on conferences and workshops	Preparing hydrological chapters, providing water-related characteristics for city landscaping, hydrological modeling and mapping, field hydrological, ecological and geodetic surveys
CODING (DATA HANDLING)	R, Python	

SOFT SKILLS

Multitasking	Adaptability and learnability	Comprehensive view

Lomonosov Moscow State University	PhD thesis: "Floods in the Northern Dvina River basin"	**2012**
Lomonosov Moscow State University	PhD student, instructor-researcher in geosciences (postgraduate)	2007-2011
Lomonosov Moscow State University	Specialist 5-year program student, thesis: "Maximum water level generation – case study on the Northern Dvina river basin"	2002-2007

TEACHING AND ADVISING

Lomonosov Moscow State University	GIS application in hydrology (3-rd course) Developer, lecturer and seminar teacher	2015-2022
	Hydrology (1st course), Seminar and field practice	2008-2022
	Hydraulics and engineering (4th course) Assist. lecturer	2014-2022
	Hydrological calculations (4th course) Assist. lecturer	2012-2014
	Student's supervisor - 4 bachelor's, 3 master's	2012-2023
Peoples' Friendship University of Russia	ADVANCES IN ENVIRONMENTAL MONITORING (master students - international program) Invited lecturer (English)	2023

FiELDWORK TECHNICAL SKiLLS

Land	GNSS (DGPS), acoustic profiling, geodetic methods, drones - user
Water	ADCP, current meters, autonomous sensors, sonars, water and sediment sampling – expert user
Other	Organization and planning ability, high endurance, cars, snowmobiles and boats driving (wide experience, various driver's permissions), enjoy winter fieldworks

SERVICES

Peer Reviewer	Theoretical and applied climatology Geography, environment, sustainability Arabian Journal of Geosciences Russian Water resources Russian Vestnik of Saint-Petersburg University: Earth Sciences Environment and Ecology Research (Horizon)	2016-ongoing

RESEARCH OUTCOMES

Co-author of **42** peer-reviewed articles, book chapters, and proceedings
Co-author of **71** contributions to conferences
107 citations, current h-index **6** (Google-based) over the past 5 years
Info and an overview: Google Scholar
Patent #2018617501 (RU): Flood zones - a unit for determining the boundaries of flood zones (SOFTWARE). Authors: Konovalov M.L., **Terskii P.N.,** Zhbakov K.K., Fatkhi M.O., Zemlyanov I.V., Gorelits O.V., Pavlovsky A.E.
Patent #2018617500 (RU): Flood zones - a unit of water levels interpolation along the axial line of the watercourse (SOFTWARE). Authors: Konovalov M.L., **Terskii P.N.,** Pavlovsky A.E., Zhbakov K.K., Fakhi M.O., Zemlyanov I.V., Gorelits O.V.

A SELECTION OF JOURNAL PUBLICATIONS

Other outcome and Russian publications are available on request and on the webpage ISTINA

1. Ecological revitalization master plan of Lipetsk city based on the HBV hydrological modelling of a small ungauged Lipovka River (Russia) / P. Terskii, A. Tsyplenkov, A. Gurinov, A. Antoniuk, I. Shchukin, A. Sayanov // Proceedings of the conference SSC Smart Sustainable Cities. Springer SBM NL, 2023 P. 251-267 DOI: 10.1007/978-3-031-37216-2_20

2. Field measurements of methane emission at largest reservoirs in Russia in 2021. the start of large-scale studies / I. A. Repina, P. N. Terskii, S. L. Gorin et al. // Water Resources. — 2022. — Vol. 49, no. 6. — P. 1003–1008. DOI: 10.1134/S0097807822060148

3. Hydro-climatic changes of wetlandscapes across the world / I. Åhlén, G. Vigouroux, G. Destouni… P. Terskii … et al. // Scientific reports. 2021. — Vol. 11. — P. 2754. DOI: 10.1038/s41598-021-81137-3

4. Data for wetlandscapes and their changes around the world / N. Ghajarnia, G. Destouni, J. Thorslund… P. Terskii … et al. // Earth System Science Data. — 2020. no. 12. P. 1083–1100. DOI: 10.5194/essd-12-1083-2020

5. Investigations of winter regime of the White Sea estuaries in 2017–2020 / P.N. Terskii, E. D. Panchenko, S. L. Gorin et al. // Oceanology. 2021. Vol. 61, no. 6. P. 1076–1078. DOI: 10.1134/S0001437021060163

6. Maximum water level calculation based on 2-dimensional Delft-3d model, the case study of the Oka river / P. Terskii, E. Rakcheeva, M. Kharlamov et al. // E3S Web of Conferences. 2020. Vol. 163. P. 01012. DOI: 10.1051/e3sconf/202016301012

7. Hydrodynamics of the Onega river tidal estuary as a basis forecosystem monitoring / E. Panchenko, S. Lebedeva, P. Terskii, M. Leummens // IOP Conf. Series: Earth and Environmental Science 263 (2019) 012014. 2019. P. 1–6. DOI: 10.1088/1755-1315/263/1/012014

8. Assessment of water balance for Russian subcatchment of Western Dvina river using SWAT model / P. Terskii, A. Kuleshov, S. Chalov et al. // FRONTIERS IN EARTH SCIENCE. — 2019. DOI: 10.3389/feart.2019.00241

9. Integrated approach to study river fluxes, water and sediment sources apportionment in sparsely monitored catchment / S. Chalov, P. Terskii, T. Pluntke et al. // Proceedings of the International Association of Hydrological Sciences. Vol. 381. 2019. P. 7–11. DOI: 10.5194/piahs-381-7-2019

10. Challenges for transboundary river management in eastern Europe – three case studies / F. Krengel, C. Bernhofer, S. Chalov, … P. Terskii … et al. // Die Erde. — 2018. — no. 149. — P. 157–172. DOI: 10.12854/erde-2018-389

OTHER INFORMATION

Prize-winner ("Lomonosov" conference – Expeditionary research) as a leader of the Lomonosov Moscow State University students' winter scientific field investigations of the estuaries of the White Sea in 2017, 2019 and 2020.

Crystal Compass Award, Russian Geographic Society, co-author, Ecological Atlas of Russia. 2018.

| Hobbies and interests | Music, boats and sails, sports (ski, badminton, aikido), water trips |