

Curriculum Vitae  
**Dr. Dmitry G. Schepaschenko**

**Address:** Ecosystems Services & Management Program, International Institute for Applied Systems Analysis, A-2361 Laxenburg, Austria.

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**Date of birth:** January 18, 1966 **Nationality:** Russian

**Professional employment history:**

- 2007 - **Research Scholar**, (2018) **Senior Research Scholar** – *International Institute for Applied Systems Analysis (IIASA)*, Laxenburg, Austria.
- 2020 - **Guest Leading researcher** – *Siberian Federal University*, Krasnoyarsk, Russia
- 1993 - 2016 **Lecturer**, (1996) **Associate Professor**, (2004) **Professor** – *Moscow State Forest University*, Department of Soil Science. Mytischki, Moscow reg., Russia.
- 1988 - 1990 **Research assistant** – *Moscow State Forest University*, Department of Forest Inventory and Management.

**Scientific titles and awards:**

- 2020 - **Coordinator** of the IUFRO Unit 8.01.06 Boreal and Alpine Forest Ecosystem
- 2006 Doctor of science (**Dr. habil.**) in Ecology, *Moscow State Forest University*.
- 1993 Candidate of science (**PhD**) in Soil Science, *Dokuchaev Soil Science Institute*, Moscow, Russia.
- 1997 - 2000 Russian President's Scholarship for advanced young scientists.
- 1988 **Dipl. engineer** in forestry (*Moscow State Forest University*)

**Education:**

- 06-08/1995 Scholarship for Young Scientists, *International Institute for Applied Systems Analysis*, Laxenburg, Austria.
- 1990 - 1993 PhD Candidate, Soil Science. *Dokuchaev Soil Science Institute*, Pyzhevski, 7, Moscow, Russia.
- 1983 - 1988 Undergraduate, Forestry and Soil Science. *Moscow State Forest University*, Mytischki, Russia.

**Filed work experience:**

- **Siberia** (Soil & forest survey, biomass measurement, estimation of soil contamination caused by oil extraction and transportation).
- **European Russia** (Forest soils survey, estimation of forest productivity, reforestation).

## Computer skills:

Windows; Office Software (MS Office, Open Office, etc.); Databases (SQL); Statistical packages (Statistica, SPSS, Matlab, R, etc.); GIS (ArcGIS; QGIS); Web (Dreamweaver).

## Scientific interests:

Global land cover, forest cover, cropland and biomass mapping/analysis; Remote sensing and crowdsourcing applications; Carbon accounting for terrestrial ecosystems (with special focus to Russia and Ukraine); Ecosystems ecology; Modeling of structure, productivity and growth of forests; Soil carbon and soil respiration; Adaptation and mitigation under global change.

## Editorial/review activities:

**Member of editorial board:** Forestry Bulletin, Forestry Ideas, MDPI Forests, Sovremennye problemy distantsionnogo zondirovaniya Zemli iz kosmosa (Current Problems in Remote Sensing of the Earth from Space), Siberian Forest Journal.

**Guest editor:** Environmental Research Letters, MDPI Remote Sensing.

**Papers reviewed for WoS Q1 journals:** Applied Geography, Biogeosciences, Environmental Research Letters, European Journal of Forest Research, IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, International Journal of Applied Earth Observation and Geoinformation, Journal of the Royal Society Interface, ISPRS Journal of Photogrammetry and Remote Sensing, Forest Ecology and Management, Forests, PLoS One, Scientific Data, PNAS, Remote Sensing, Remote Sensing of Environment.

**Papers reviewed for other journals:** Contemporary Problems of Ecology, Folia Forestalia Polonica - Series A Forestry, Geographica Helvetica, Forest Ecosystems, Forestry Ideas, Sustainability, Russian Journal of Forest Science, Russian Journal of Ecology.

**Grant proposals reviewed for:** Mega grants by Ministry of Education and Science of Russian Federation; OeAD (Austrian centre for European and international mobility and cooperation programmes).

## Selected peer-reviewed publications (extended list available on [Google Scholar](#) or [IIASA pure](#) or [ORCID 0000-0002-7814-4990](#)):

Schepaschenko D., Chave J., Phillips O.L., et al. (2019). [The Forest Observation System, building a global reference dataset for remote sensing of forest biomass](#). *Scientific Data* 6 (1): e198.

DOI:10.1038/s41597-019-0196-1.

Schepaschenko D., See L., Lesiv M., et al. (2019). [Recent Advances in Forest Observation with Visual Interpretation of Very High-Resolution Imagery](#). *Surveys in Geophysics* 40 (4): 839-862.

DOI:10.1007/s10712-019-09533-z.

Steidinger B.S., Crowther T.W., Liang J., et al. (2019). [Climatic controls of decomposition drive the global biogeography of forest-tree symbioses](#). *Nature* 569 (7756): 404-408.

DOI:10.1038/s41586-019-1128-0.

Schepaschenko D., Moltchanova E., Shvidenko A., et al. (2018) [Improved Estimates of Biomass Expansion Factors for Russian Forests](#). *Forests*, 9(6), 312. DOI: 10.3390/f9060312.

- Schepaschenko D, Fritz S, See L, Laso Bayas JC, Lesiv M, Kraxner F, & Obersteiner M (2017). [Comment on “The extent of forest in dryland biomes”](#). *Science* 358 (6362): eaa0166. DOI:10.1126/science.aao0166.
- Schepaschenko D., Shvidenko A., Usoltsev V., et al. (2017) [A dataset of forest biomass structure for Eurasia](#). *Scientific Data* 4: 170070. DOI: 10.1038/sdata.2017.70.
- Fritz S., Schepaschenko D., See L. (2016) [Carbon tracking: Limit uncertainties in land emissions](#). *Nature*, 534(7609): 621. DOI: 10.1038/534621e.
- Gauthier S., Bernier P., Kuuluvainen T., Shvidenko A.Z., Schepaschenko D.G. (2015) [Boreal forest health and global change](#). *Science*, 349: 819-822. DOI: 10.1126/science.aaa9092.
- Schepaschenko D., See L., Lesiv M. et al. (2015). [Development of a global hybrid forest mask through the synergy of remote sensing, crowdsourcing and FAO statistics](#). *Remote Sensing of Environment*, 162: 208-220. DOI: 10.1016/j.rse.2015.02.011.
- Schepaschenko D.G., Shvidenko A.Z., Lesiv M.Yu., Ontikov P.V., Shchepashchenko M.V., Kraxner F. (2015) [Estimation of Forest Area and its Dynamics in Russia Based on Synthesis of Remote Sensing Products](#). *Contemporary Problems of Ecology*, 8(7): 811–817. DOI: 10.1134/S1995425515070136.
- Mukhortova L., Schepaschenko D., Shvidenko A., McCallum I., Kraxner F. (2015) [Soil contribution to carbon budget of Russian forests](#). *Agricultural and Forest Meteorology*, 200: 97–108. DOI: 10.1016/j.agrformet.2014.09.017.
- See L. Schepaschenko D. Lesiv M. et al. (2015). [Building a hybrid land cover map with crowdsourcing and geographically weighted regression](#). *ISPRS Journal of Photogrammetry and Remote Sensing*. 103: 48-56. DOI: 10.1016/j.isprsjprs.2014.06.016.
- Thurner M. Beer C., Santoro, M., Carvalhais, N., Wutzler, T., Schepaschenko, D., et al. (2014) [Carbon stock and density of northern boreal and temperate forests](#). *Global Ecology and Biogeography*. 23(3): 297-310. DOI: 10.1111/geb.12125.
- Schepaschenko D.G, Mukhortova L.V, Shvidenko A.Z, Vedrova E.F. (2013) [The Pool of Organic Carbon in the Soils of Russia](#). *Eurasian Soil Science* 46(2): 107-116. DOI: 10.1134/S1064229313020129.
- Dolman A.J., Shvidenko A., Schepaschenko D. et al. (2012) [An estimate of the terrestrial carbon budget of Russia using inventory-based, eddy covariance and inversion methods](#). *Biogeosciences* 9: 5323-5340. DOI: 10.5194/bg-9-5323-2012.
- Fritz S., McCallum I., Schill C., Perger C., See L., Schepaschenko D., van der Velde M., Kraxner F., Obersteiner M. (2012) [Geo-Wiki: An online platform for improving global land cover](#). *Environmental Modelling & Software* 31: 110-123. DOI: 10.1016/j.envsoft.2011.11.015
- Schepaschenko D., McCallum I., Shvidenko A., Fritz S.; Kraxner F., Obersteiner M. (2011) [A new hybrid land cover dataset for Russia: a methodology for integrating statistics, remote sensing and in situ information](#). *Journal of Land Use Science* 6(4): 245-259. DOI: 10.1080/1747423X.2010.511681.
- Shvidenko A.Z., Shchepashchenko D.G., Vaganov E.A. et al. (2011) [Impact of Wildfire in Russia between 1998–2010 on Ecosystems and the Global Carbon Budget](#). *Doklady Earth Sciences*. 441(2): 1678–1682. DOI: 10.1134/S1028334X1.
- Shvidenko A., Schepaschenko D., McCallum I., Nilsson S. (2010) [Can the uncertainty of full carbon accounting of forest ecosystems be made acceptable to policymakers?](#) *Climatic Change*. 103: 137-157. DOI: 10.1007/s10584-010-9918-2.
- Shvidenko A., Schepaschenko D., Nilsson S., Bouloui Yu. (2008) [Tables and models of growth and productivity of forests of major forest forming species of Northern Eurasian](#). Moscow. Federal Agency of forest management. International Institute for Applied Systems Analysis. 886 pp.

- Shvidenko A.Z., Schepaschenko D.G., Vaganov E.A., Nilsson S. (2008) [Net Primary Production of Forest Ecosystems of Russia: A New Estimate](#). *Doklady Earth Sciences*. 421A(6): 1009-1012. DOI: 10.1134/S1028334X08060330.
- Shvidenko A., Schepaschenko D., Nilsson S., Bouloui Yu. (2007) [Semi-empirical models for assessing biological productivity of Northern Eurasian forests](#). *Ecological Modelling*. 204: 163-179. DOI: 10.1016/j.ecolmodel.2006.12.040.
- Lapenis A., Shvidenko A., Schepaschenko D. et al. (2005) [Acclimation of Russian forests to recent changes in climate](#). *Global Change Biology*. 11: 2090-2102. DOI: 10.1111/j.1365-2486.2005.001069.x.

### Recent projects:

- ALPTREES (<https://www.alpine-space.eu>) A Transnational Cooperation for Sustainable Use and Management of Non-Native Trees in Urban, Peri-Urban and Forest Ecosystems in the Alpine Region. Leading partner: Federal Research and Training Centre for Forests, Natural Hazards and Landscape (BFW), Austria [10.2019 – 06.2022].
- FOS / IFBN: International Forest Biomass Network (<http://forest-observation-system.net/>). IIASA leading project funded by European Space Agency, contract 4000114425/15/NL/FF/gp. [07.2015 – 01.2021].
- RESTORE+: Addressing Landscape Restoration on Degraded Land in Indonesia and Brazil (<http://www.restoreplus.org/>). IIASA leading project funded by International Climate Initiative 2016, Federal Ministry for the Environment, Nature conservation, Building and Nuclear Safety (BMUB). [02.2017 – ongoing]
- CCI Biomass (<http://cci.esa.int/biomass>). Funding: European Space Agency, contract 4000113100/14/I-NB. Leading partner: Aberystwyth Univ., UK. [2018-2021]
- DUE GlobBiomass (<http://globbiomass.org/>). Funding: European Space Agency, contract 4000113100/14/I-NB. Leading partner: Friedrich Schiller University Jena, Germany. [12.2014-12.2017].