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**, *International Institute for Applied Systems Analysis (IIASA)*, Laxenburg, Austria.
2016 -	**Professor** (guest affiliation), *Bauman Moscow State Technical University*, Mytischi, Moscow reg., Russia.
1993 - 2016	**Lecturer**, (1996) **Associate Professor**, (2004) **Professor**, *Moscow State Forest University*, Department of Soil Science. Mytischi, Moscow reg., Russia.
1988 - 1990	**Research assistant**, *Moscow State Forest University*, Department of Forest Inventory and Management.

Scientific titles and awards:

2009 -2015	**Member of Academic Council**, *Moscow State Forest University*.
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*, Mytischi, 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).
- **Kola Peninsula** (Study of soil contamination by heavy metals and acid rains).

Computer skills:

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

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.

Other activities:

Member of editorial board: Forestry Ideas, 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.
Papers reviewed for: Applied Geography, Biogeosciences, Contemporary Problems of Ecology, Environmental Research Letters, ISPRS Journal of Photogrammetry and Remote Sensing, Forest Ecology and Management, Forest Ecosystems, Forests, Forestry Ideas, PLoS One, Sustainability, PNAS, Remote Sensing, Remote Sensing of Environment, Russian Journal of Ecology.
Reviewer for grant application: Mega grants by Ministry of Education and Science of Russian Federation

Selected peer-reviewed publications (extended list available on Google Scholar or IIASA pure):

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): eaao0166. 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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

Lapenis A., Shvidenko A., Schepaschenko D. et al. (2005) Acclimation of Russian forests to recent changes in climate. *Global Change Biology*. 11: 2090-2102.

Recent projects:

- 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 – ongoing].
- RESTORE+: Addressing Landscape Restoration on Degraded Land in Indonesia and Brazil. IIASA leading project funded by International Climate Initiative 2016, Federal Ministry for the Environment, Nature conservation, Building and Nuclear Safety (BMUB). [02.2017 – ongoing]
- DUE GlobBiomass (http://globbiomass.org/). Finding: European Space Agency, contract 4000113100/14/I-NB. Leading partner: Friedrich Schiller University Jena, Germany. [12.2014-12.2017].
- Independent Monitoring: Building trust and consensus around GHG data for increased accountability of mitigation in the land use sector. Funding: European Commission, DG Climate Action, contract N° 340202/2014/692569/ETU/CLIMA.A.2. Leading partner: Öko-Institut e.V., Germany [01.2015 – 03.2017].