Curriculum Vitae

**Pavel Alekseychik**

**PERSONAL DETAILS**

Address Maasälväntie 2 A 44

00710 Helsinki

Phone number (+358)466114657

e-mail: pavel.alekseychik@helsinki.fi

Nationality: Russian

Language skills: English (fluent)

Russian (mother tongue)

Date and place of birth: 8 May 1989, Ulyanovsk, Russia

Key skills: Environmental Physics

Data analysis

Matlab

Eddy-covariance

Biogeochemistry

Meteorology

International Cooperation

Teaching

ORCID: orcid.org/0000-0002-4081-3917

**EDUCATION**

07/2011 – onwards University of Helsinki

Doctoral student

04/2009 – 05/2011 University of Helsinki

BSc & MSc, major subject: Meteorology

08/2006 – 03/2009 Russian State Hydrometeorological University

Major subject: Meteorology

**WORK EXPERIENCE**

07/2009 – 05/2011 University of Helsinki, Department of Physics

Research Assistant

07/2011 – onwards University of Helsinki, Department of Physics

Researcher

08/2015 – onwards University of Helsinki, Department of Physics

PEEX Infrastructure Officer

**PROGRAMMING SKILLS**

MatLab excellent

**SUBJECTS OF INTEREST**

Climate change, ecosystem-atmosphere feedbacks, peatland biogeochemistry, eddy-covariance method, ecology, climate awareness

**PROFESSIONAL SOCIAL NETWORK ACCOUNTS**

[**https://www.researchgate.net/profile/Pavel\_Alekseychik**](https://www.researchgate.net/profile/Pavel_Alekseychik)

[**https://www.linkedin.com/in/pavel-alekseychik-886460a4?trk=nav\_responsive\_tab\_profile\_pic**](https://www.linkedin.com/in/pavel-alekseychik-886460a4?trk=nav_responsive_tab_profile_pic)

**TEACHING EXPERIENCE**

- Assistant at the course "Physics and chemistry of air pollution and their effects" ("Ilman epäpuhtauksien fysiikka, kemia ja vaikutukset; kenttämittaukset"), Hyytiälä, Finland, 2010, 2012, 2013, and Helsinki, 31.10-09.11, 2011.

- Assistant at the course "Biosphere-Atmosphere Interactions", Abisko, Sweden, 22.3-27.3, 2010.

- Assistant at the course "Introduction to atmosphere-biosphere studies", Hyytiälä, Finland, September 2010.

- Assistant at the course “Boundary layer physics I”, Helsinki, spring 2011.

- Assistant at the course “Cloud Physics”, Helsinki, autumn 2011.

- Assistant at the course “Forest-Atmosphere interactions”, Helsinki, autumn 2012.

- Lecturer and assistant at the course “Statistical analysis of the environmental field observations” (programming in Matlab), Helsinki, autumn 2013.

- Lecturer and assistant at the course “Terrestrial water, carbon and nitrogen cycles”, Helsinki, autumn 2014.

- Assistant at the course "Atmospheric Processes and Feedbacks and Atmosphere-Biosphere Interactions", Hyytiälä, Finland, spring 2015.

- Assistant at the course “Global Biogeochemical Cycles”, Helsinki, Finland, autumn 2015.

- Assistant at the course “Theories of micrometeorological measurements”, Helsinki, Finland, spring 2016.

- Assistant at the course “Effects of climate change on Arctic ecosystems and societies”, Greenland and Iceland, summer 2016.

- Organizer and teacher of the summer school “Boreal wetlands: from plant bio-diversity and ecophysiology to biogeochemical cycles and greenhouse gases budgets”, August-September 2016, Khanty-Mansiysk, Russia.

**RECENT ACTIVITIES**

- Maintenance of the measurement site and post-processing the data (eddy-covariance and ecosystem measurements at a bog site, Siikaneva-II, 2011-onw.; Siikaneva-1, 2013-onw.)

- Participation in the program “Pan-Eurasian Experiment” (PEEX) since 2011; work on the metadatabase of the project sites since April 2014.

- Cooperation with the Yugra State University (Khanty-Mansijsk, Russia) on academic exchange and technical consultations; starting the first Eddy-Covariance system in a Western Siberian bog (project leader Dr. Ivan Mammarella, Uni. Helsinki). Visits to the Yugra State University in April and September 2014, April 2015, September-October 2016.

**RECEIVED FUNDING**

Grant of the Nordic-Russian Cooperation Programme in Education and Research for the Summer School “Functioning of boreal raised bogs of West Siberia and their response to climate change” NCM-RU-2015/10055**,** 26270 Eur.

**CONFERENCE PRESENTATIONS IN 2009-2015**

- 8 oral and poster presentations in national conferences (DEFROST, ICOS, FCoE)

- 5 oral presentations in international conferences:

THAW-2014 (Quebec City, Canada),

WSCPP-2014 (Novosibirsk, Russia),

PEEX Science Conference-2015 (Helsinki, Finland),

Society of Wetland Scientists European Chapter Meeting-2015 (Bled, Slovenia),

IGU-2015 (Moscow, Russia).

**PERSONAL REFERENCES**

Prof. Timo Vesala, Department of Physics, University of Helsinki

[timo.vesala@helsinki.fi](mailto:timo.vesala@helsinki.fi)

Prof. Markku Kulmala, Department of Physics, University of Helsinki

[markku.kulmala@helsinki.fi](mailto:markku.kulmala@helsinki.fi)

**PUBLICATION LIST**

**Alekseychik, P.**, H. Lappalainen, T. Petäjä, N. Zaitseva, M. Heimann, T. Laurila, H. Lihavainen, E. Asmi, M. Arshinov, V. Shevchenko, A. Makshtas, S. Dubtsov, E. Mikhailov, E. Lapshina, S. Kirpotin, Yu. Kurbatova, A. Ding, H. Guo, S. Park, J. V. Lavric, F. Reum, A. Panov, A. Prokushkin & M. Kulmala 2016. Ground station network in the Boreal-Arctic Pan-Eurasian region: an overview. *Geogr. Environ. Sustain*. **9**, DOI: 10.15356/2071-9388\_02v09\_2016\_06.

Alekseychik, P., Mammarella, I., Launiainen, S., Rannik, Ü. & Vesala, T. 2013. Evolution of the nocturnal decoupled layer in a pine forest canopy. *Agric. For. Meteorol.* 174-175: 15-27.

Alekseychik, P., Mammarella, I. & Vesala, T. Investigating CO2 flows at night time high stability conditions in Scots pine forest. Proceedings of the Finnish Center of Excellence and Graduate School in ”Physics, Chemistry, Biology and Meteorology of Atmospheric Composition and Climate Change”, 17.05.10-19.05.10, Kuopio, Finland.  *Report Series in Aerosol Science* 109, 2010.

**Alekseychik, P.**, Mammarella, I. & Vesala, T. 2011. Investigation of nighttime thermal decoupling regimes in a tall vegetation canopy. Electronic Abstract Book of the iLEAPS Science Conference 2011, (<http://www.ileaps.org/sci_conf_book/>).

Kulmala, M., **Alekseychik**, **P.**, Paramonov, M., Laurila, T., Asmi, E., Arneth, A., Zilitinkevich, S. & Kerminen, V.-M. 2011. On measurements of aerosol particles and greenhouse gases in Siberia and future research needs. *Boreal Env. Res.* **16**: 337–362.

Kasurinen V., K. Alfredsen, P. Kolari, I. Mammarella, **P. Alekseychik**, J. Rinne, T. Vesala, P. Bernier, J. Boike, M. Langer, L.B. Marchesisi, K. van Huissteden, H. Dolman, T. Sachs, T. Ohta, A. Varlagin**, A.V. Rocha,** A. Arain, W. Oechel, M. Lund, A. Grelle, A. Lindroth, A. Black, M. Aurela, T. Laurila, A. Lohila and F. Berninger. 2014. Latent heat exchange in the boreal and arctic biomes. *Global Chang. Biol.*, **20**: 3439–3456, doi: 10.1111/gcb.12640.

Korrensalo, A., Hájek, T., **Alekseychik, P.**, Rinne, J., Vesala, T., Mehtätalo, L., Mammarella, I., and Tuittila, E.-S. 2016. Species-specific temporal variation in photosynthesis as a moderator of peatland carbon sequestration. *Biogeosciences*, **14**: 267-269, doi:10.5194/bg-2016-265.

Lappalainen, H. K., Kerminen, V. M. , Petäjä, T., Kurten, T., Baklanov, A., Shvidenko, A., Bäck, J., Vihma, T., **Alekseychik, P**., Arnold, S., Arshinov, M., Asmi, E., Belan, B., Bobylev, L., Chalov, S., Cheng, Y., Chubarova,  N., de Leeuw, G., Ding, A., Dobrolyubov, S., Dubtsov, S., Dyukarev, E., Elansky, N., Eleftheriadis, K., Esau, I., Filatov, N., Flint M., Fu, C., Glezer, O., Gliko, A., Heimann, M., Holtslag, B., Janhunen, J., Juhola, S., Järvi, L., Järvinen, H., Kanukhina, A., Konstantinov, P., Kotlyakov, V., Kieloaho, A.-J., Komarov, A., Kujansuu, J., Kukkonen, I., Laaksonen, A., Laurila, T., Lihavainen, H., Lisitzin, A., Mahura, A., Makshtas, A., Mareev, E., Matishov, D., Mazon, S., Melnikov, V., Mikhailov, E., Moisseev, D., Nigmatulin,  R., Noe, S.M., Ojala, A., Pihlatie M., Popovicheva, O., Pumpanen, J., Regerand, T., Repina, I., Shcherbinin, A., Shevchenko,  V., Sipilä, M., Skorokhod, A., Spracklen, D.V., Su, H., Subetto, D., Sun, J., Terzhevik, A., Timofeyev, Y., Troitskaya, Y., Tynkkynen, V.-P., Kharuk, V.I., Zaytseva, N., Zhang, J., Viisanen, Y., Vesala, T., Hari, P., Hansson, H.-C., Matvienko, G., Kasimov, N., Guo, H., Bondur, V., Zilitinkevich, S.S. and Kulmala, M. 2016. Pan-Eurasian Experiment (PEEX): Towards holistic understanding of the feedbacks and interactions in the land - atmosphere - ocean- society continuum in the Northern Eurasian region, *Atmos. Chem. Phys.*, **16**: 14421–14461, doi:10.5194/acp-2016-186.

Li T., Raivonen M., **Alekseychik P.,** Aurela M., Lohila A., Zheng, X., Zhang Q., Wang G., Mammarella I., Rinne J., Yu L., Xie, B., Vesala T. and Zhang W.,. Importance of vegetation classes in modeling CH4 emissions from boreal and subarctic wetlands in Finland 2016. [*Sci.*](http://www.sciencedirect.com/science/journal/00489697) *Total Environ*., **572**: 1111-1122, http://dx.doi.org/10.1016/j.scitotenv.2016.08.020.

Li, L., Dal Maso, M., Taipale, R., Rinne, J., Ehn, M., Junninen, H., Äijälä, M., Nieminen, T., **Alekseychik**, **P.**, Hulkkonen, M., Worsnop, D. R., Kerminen, V.-M. and Kulmala, M. 2011. Monoterpene pollution episodes in a forest environment: indication of anthropogenic origin and association with aerosol particles. *Boreal Env. Res.* **16**: 288–303.

Mathijssen P., VälirantaM., KorrensaloA., **AlekseychikP.,** VesalaT., RinneJ. and TuittilaE.-S. 2016. Reconstruction of Holocene carbon dynamics in a large boreal peatland complex, southern Finland. *Quaternary Sci. Rev*. **142**: 1-15, 2016.

Sabrekov A., GlagolevM., **AlekseychikP.**, SmolencevB., TerentievaI., KrivenokL. and MaksyutovS. 2016. A fully process-based model of methane consumption by soils. *Environ. Res. Lett*. **11**, 075001, doi:10.1088/1748-9326/11/7/075001.

Vonk J. E., S. E. Tank, W. B. Bowden, I. Laurion, W. F. Vincent, **Alekseychik P.**, M. Amyot, M. F. Billet, J. Canário, R. M. Cory, B. N. Deshpande, M. Helbig, M. Jammet, J. Karlsson, J. Larouche, G. MacMillan, M. Rautio, K. M. Walter Anthony and K. P. Wickland 2015. Reviews and Syntheses: Effects of permafrost thaw on arctic aquatic ecosystems. *Biogeosciences*. **12**: 7129-7167, 2015.

**Submitted/in review:**

- Relationship between aerodynamic roughness length and leaf area index in a boreal mire

- Net ecosystem exchange and energy fluxes in a West Siberian bog

- Surface energy exchange in natural and managed Fennoscandian peatlands