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SHORT CV: Sergey Chalov

January 2020

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Dr. Sergey R. Chalov received his M.S. and Ph.D in Fluvial Processes and Hydrology from Faculty of Geography of Lomonosov Moscow State University (LMSU) in 2004 and 2007, respectively. After received his Ph.D., he works at the Hydrology Department of Faculty of Geography, since 2018 as a Associate professor. He is also a Deputy Dean of the Faculty of Geography of LMSU for international relations. Since 2015 serves as Vice-president of the International Commission on Continental Erosion (ICCE) of International Association of Hydrological Sciences. Since 2016 - general Secretary of “Geography, Environment, Sustainability” journal (Scopus listed journal) and Head of the Pan-Eurasian Experiment Moscow office.

His research interests are focused on Sediment quality and quantity, remote sensing applications for sediment transport, fluvial processes, stream ecology and biodiversity. Since 2011 he coordinates integrated catchment studies over Baikal Lake catchment implemented by Lomonosov Moscow State University under support from Russian Ministry of Education and Science, United Nations Development Program, Russian Geographical Society grants. He has a long-term experience in Arctic research, including research projects implemented at Tarfala research station of Stockholm University and Khibini research station of Lomonosov MSU.

For over 15 year Sergey Chalov has been working for the field-based sediment-related projects in river systems of Russia (Kamchatka peninsula, Sakhalin island, Khibiny mountains), Sweden (Lapland) and Mongolia (Baikal Lake drainage basin). He introduced a whole new area of integrated sediment transport and sediment quality research linking together hydrodynamics and geochemistry into the Russian scientific landscape, as well as novel tools of innovative sediment transport monitoring.

Sergey Chalov has published over 120 journal papers (among them international peer-reviewed ISI journals “Atmos. Chem. Phys.”, “Water resources research”, “Journal of Environmental Monitoring”, “Catena”, “International Journal of Disaster Risk Reduction”, “Global and Planetary Change”, “Hydrology research”, “Hydrological sciences journal”, “Environmental Earth Sciences”, “Geomorphology”, “Journal of Hydrology”, “Hydrological Processes”, “Regional Environmental Change”, “Ecological Engineering” etc.) and 6 books.

He has received the number of awards for outstanding results in research and teaching from Lomonosov Moscow State University, in particular in 2017 he received University Advanced Grant for the young outstanding scientists for creation a novel research school.

Indexing in Web of Science (January 2020):

Total publications: > 60
h-index 13
Sum of Times Cited: >600

1. UNIVERSITY DEGREE

M.Sc. in Hydrology, specialising in Fluvial Processes, Lomonosov Moscow State University (LMSU), 2004.

2. PH.D. DEGREE

Ph.D. in Hydrology and Water resources, October 11, 2007. Thesis title: “Hydrological impacts of braided channels”. Department of Hydrology, Faculty of Geography of Lomonosov Moscow State University. Supervisor: Nikolay Alexeevsky.

3. ACADEMIC CAREER

2012- present, Associate professor at Lomonosov Moscow State University

2018-present. professor, University of Kazimierz Wielkiego, Institute of Geography (Bydgoszcz, Poland)

2007 – 2012 Researcher, Lecturer at Lomonosov Moscow State University:

Hydrology (1st, 2nd and 3rd years modules)

Hydrology field course (1st year module)

Water resources assessment (4rd year module)

Fluvial processes and fluvial geomorphology (4rd year module)

2014-2015 – visiting professor at Catholic University of Eichstätt-Ingolstadt (Faculty for Mathematics and Geography)

Environmental Monitoring (M.Sc. module)

Case Studies in Applied Physical Geography (B.Sc. module)

4. PHD SUPERVISIONS

On-going PhD supervisor: Supervisor Margarita Pashkina (since 2017), Vasily Efimov (since 2018).

Completed Ph.D. supervision:

Co-supervisor of Anatoly Tsyplenkov (defended for PhD in hydrology, 2019)

5. RESEARCH PROJECTS, RECENT (SINCE 2007) AND ON-GOING

2007-2008. Grant of the Provention Consortium for Disaster risk reduction “*The Rivers of Kamchatka peninsula: impact of channel deformations on social and economic situation, ways of their assessment and predicting*” (Co-Principal Investigator)

2008-2009. World Wild Fund project “*Estimation of pollution rivers below placer mining using satellite imagery: application to Koryak plateau*” (Principal Investigator)

2011 – 2014 Russian Ministry of Science – Mongolian Academy of Science project “*Monitoring and forecasting strategy in Selenga rivers basin to manage and mitigate transboundary pollutants transport into the Baikal Lake*” (Principal Investigator)

2010- 2013 Tempus project Development of qualification framework in meteorology (Qualimet) Project № 159352-TEMPUS-1-2009-1-FI-TEMPUS-JPHES

2011- present: Russian geographical Society project “*Selenga-Baikal expedition*” (Co-Principal Investigator)

2012-2013 President grant for supporting of the young scientists project “*Natural and technogenic effects of sediment transport changes along river systems*” (Principal investigator)

2012 – PEOPLE MARIE CURIE ACTIONS International Research Staff Exchange Scheme Call: FP7-PEOPLE-2012-IRSES « *Fluvial processes and sediment dynamics of slope channel systems: Impacts of socio economic-and climate change on river system characteristics and related services* » (coordinator from Russia)

2013 - 2014 *Russian Fund of basic research 12-05-33090 “Monitoring and forecasting of metal mining impacts on rivers of Northern Eurasia”* (Principal investigator)

2013 - 2014 International Bureau of the German Federal Ministry of Education and Research (BMBF-IB): “*Sustainable Water Management in the Baikal-Selenga Basin: Development of an Integrated Monitoring Concept for a Transboundary Catchment with Multiple Stressors*” (Co-Principal Investigator)

2012-2013 Sumitomo foundation project (Japan) «*Natural hazards in volcanic region: comparative analyses of Kamchatka and Hokkaido*» (Co-Principal Investigator)

2012-2014: UNDP-GEF project “Integrated Natural Resource Management in the Baikal Basin Transboundary Ecosystem”, Subcontracts:
 «*Database for modeling and simulation of pollutants transport in the Baikal Basin*” (Principal investigator)
 “*Setting up the model of pollutants transport and water balance calculation in the Baikal basin*” (Principal investigator)

GPSO/LakeBaikal/085/02Mar2015_MSU Predictive assessment of long-term changes of water balance in the basin of transboundary Selenga river in terms of climatic fluctuations and changes of the characteristics of water use (“*Прогнозная оценка долгопериодных изменений водного баланса в бассейне трансграничной реки Селенга в условиях климатических флуктуаций и изменения характеристик водопользования*”)

2013-2016: *Basin-scale hydrological spreading of pollutants and wetland opportunities for reducing them under different hydroclimatic and other regional conditions*, funded by the Swedish Research Council Formas (coordinator from Russia)

2015-2016 International Bureau of the German Federal Ministry of Education and Research (BMBF-IB) project “WQQ Baikal - Modelling of Water Quantity and Quality in the Selenga-Baikal-Angara Region: Current Potentials and Future Necessities”.

2015-2016 International Bureau of the German Federal Ministry of Education and Research (BMBF-IB) project “Adaption Strategies in the Water Sector to Changes in Climate in South Russia. Development of key-technologies and planning instruments for an integrated water resources management in the lower Volga basin”

2015 – 2017. Russian Fund for Basic Research project “River sedimentation: hydrological and environmental impacts” (Principal Investigator)

2014-2018. Russian Scientific Foundation project “River runoff parametrization and environmental consequences”

2016-2019 “Management of Transboundary Rivers between Ukraine, Russia and the EU” (Volkswagen Stiftung Trilateral Partnerships – Cooperation Projects between Scholars and Scientists from Ukraine, Russia and Germany) (coordinator from Russia, ca 70cEuro)

2017-2018. Grant of INTERACT Transnational Access program “Fluvial sediment transport characteristics in periglacial and glacial environments of Northern Sweden (SedTraC)” (Principal Investigator from MSU)

2017 – 2020 Russian Fund for Basic Research project 17-29-05027 “Long-term variability of water, sediment and pollution spreading into Baikal Lake” (Principal Investigator)

2018-2021 Russian Fund for Basic Research project 18-05-60219 «Large Siberian rivers heavy metals, metalloids and biogens fluxes into the Arctic Ocean» (Principal Investigator)

6. SERVICE TO THE SCIENTIFIC COMMUNITY

1. Vice-president, secretary on the International Commission on Continental Erosion (ICCE) of International Association of Hydrological Sciences. 2015 – present (elected on 26 June 2015 at IUGG 2015 General Assembly)
2. Councilor of World Association of Soil and Water Conservation (WASWAC) (2019-2024)
3. Head of young scientists committee of Interuniversity council for water erosion and fluvial processes. 2011 – 2016
4. Member of the International Association of Hydrological Sciences (IAHS). 2009 - present
5. Member of Interuniversity council for water erosion and fluvial processes. 2005 – present

Invited / keynote speaker:

10 invited talks (plenary lectures) at international scientific conferences, 2011-2019.

Session Chair:

11th International Symposium on River Sedimentation, South Africa, 2010;

International Conference on the Status and Future of the World's Large Rivers, Austria, 2011;
Sediment transport modeling in hydrological watersheds and rivers (Modélisation du transport de sédiments dans les bassins-versants et dans les rivières), Turkey, 2012 ;
European Geophysical Union, 2013;
IGU Regional conference 2015 "Geography, Culture and Society for our Future Earth";
"Integrating monitoring and modelling for understanding, predicting and managing sediment dynamics",
Symposium of the International Commission on Continental Erosion (IAHS), UK, 2016;
3rd International Conference on the Status and Future of the World's Large Rivers 18-21 April 2017,
New Delhi, India, 2017;
GMIT Symposium on Environmental Science and Engineering, Mongolia, 2018;

Conference/Workshop organizer:

Russian-Finish workshop «Environment and Climate Change», Moscow, 2009 (15 international participants); Russian-Italian workshop "Water Erosion and mass movement", Moscow, 2010 (20 international participants); Conference "Bringing together Selenga-Baikal research 2012", Switzerland, Geneva, 2012 (25 international participants); Co-Convener Hydrological Sciences 5.2 "Hydrological, hydrochemical and hydroecological monitoring for water resources management in continental areas", EGU General Assembly 2013; Conference "Bringing together Selenga-Baikal research 2014", Germany, Leipzig, 2014 (35 international participants);
Secretary General of IGU Regional conference 2015 "Geography, Culture and Society for our Future Earth" (Moscow, August 2015, over 1000 international participants)
Chair of the organizing committee of the "3rd Pan-Eurasian Experiment (PEEX) Science Conference & The 7th PEEX Meeting & System Understanding WS" (September 2017, Moscow, 50 international participants)
Chair of the organizing committee "The Second International Youth Forum on Soil and Water Conservation (2nd IYFSWC) and ICCE symposium 2018 "Climate Change Impacts on Sediment Dynamics: Measurement, Modelling and Management" (August 2018, Moscow, 100 international participants)
GMIT Symposium on Environmental Science and Engineering and Bringing Together Selenga Baikal Research Conference 2018, Mongolia, September 2018 (70 international participants)

Referee/ reviewer for, e.g., Journal of Hydrology; Environmental Earth Sciences; Journal of Geochemical Exploration; Land Degradation & Development; Natural Hazards; Regional Environmental Change; Journal of Geography in Higher Education; Environmental Monitoring and Assessment; Russian Journal of Water Resources; Geography, Environment, Sustainability (5-7 reviews per year since 2012, 10-15 reviews since 2016).

Editorial boards:

General Secretary of "Geography, Environment, Sustainability" journal (Scopus listed, ges.rgo.ru);
Member of editorial board of Journal "Geography and Tourism" (geography.and.tourism.ukw.edu.pl)

Volumes editor:

Proceedings of the International Association of Hydrological Sciences: Land use and climate change impacts on erosion and sediment transport. ICCE Symposium 2018 – Climate Change Impacts on Sediment Dynamics: Measurement, Modelling and Management, Moscow, Russia, 27–31 August 2018 Editor(s): S. Chalov, V. Golosov, A. Collins, and M. Stone. Volume 381, 2019

Springer Proceedings in Earth and Environmental Sciences book series (SPEES). Climate Change Impacts on Hydrological Processes and Sediment Dynamics: Measurement, Modelling and Management. The Proceedings of The Second International Young Scientists Forum on Soil and Water Conservation and ICCE symposium 2018, 27–31 August, 2018, Moscow Editors: Sergey Chalov, Valentin Golosov, Rui Li, Anatoly Tsyplenkov

Guest editor of special issues: Environmental Earth Sciences (Springer), Regional Environmental Change (Springer), Water (MDPI).

7. AWARDS and medals

2009, 2010 - Lomonosov Moscow State University medal for outstanding young scientists researchers and lecturers

2011 - Anuchin price for the monograph «Hydrological impacts of braided rivers»

2014,2015,2016,2019 – winner of best international publications award of Lomonosov Moscow State University

2017 - winner of young leaders competition for outstanding scientific results achieved by young scientists

List of publications (representative :

Books and monographs:

Alekseevskiy N.I., Chalov S.R. Hydrological impacts of braided rivers. Moscow, 2009. 240 p. In Russian.

Large European river system responses to global change and human activities: Volga - Rhine // NCR report 27-2005 (NWO-RFBR project nr. 047.014.010). ISSN 1568-234X. Utrecht, the Netherlands. 2005.

Asarin A.E. Bestouzheva K.N., Khristoforov A.V., **Chalov S.** Water resources assessment. M.: Faculty of Geography, 2012. 140 p.

Molina D., M. Schletterer, U.H. Humpesch, W. Graf, Ieksey Sidorchuk, Roman S. Chalov, **Chalov S.**, Aleksandra S. Chalova, Ian C. Fuller, Jane M. Richardson, Les Basher, Rob C. Dykes, Simon S. Vale, Judit Petrovszki, Mohammed El Bastawesy, Safwat Gabr, Omar Cherif. River Channels: Types, Dynamics and Changes / Editor: Daniel A. Molina // Earth Sciences in the 21st Century series. 200 pp. ISBN: 978-1-61324-148-6

Fluvial processes hazards and salmon communities at Kamchatka peninsula/ Editors: **Chalov S.**, Leman V., Chalova A. Moscow, 2014. 240 p.

Esin E.V., Gorin S.L., **Chalov S.** Fish atlas of Kamchatka peninsula / Editor: Esin E.V. M.: Vniro, 2015. 144 p

Peer-reviewed WOS and Scopus journals (REPRESENTATIVE):

Alekseevskiy N.I., **Chalov S.** Structure of the braided channels // Geomorphology. 2004. № 3. P. 57-66. In Russian.

Chalov S. Morphology of the small rivers of Kamchatka peninsula // Relief and environmental management of Piedmont areas. Proceedings of the scientific conference. Barnaul, 2005. P. 343-347 In Russian.

Chalov S. Channel processes of the small rivers of kamchatka peninsula and its anthropogenic changes // Soil erosion and channel processes. № 15. 2005. P. 164-175.

Chalov S. Forming of the braided channels // Geomorphology. 2006. № 1. P. 92-102. In Russian.

Chalov S., Esin E.V. Influence of the channel patterns types on the stream communities of the Kamchatka peninsula rivers // Proceedings of the tenth international symposium on river sedimentation. Vol. 5. Moscow, 2007. pp. 31-37. In English.

Ermakova A.S., **Chalov S.** Fluvial processes on the rivers of Bolshaya river basin // MSU Vestnik. Geography. 2007. № 6. P. 64-71 In Russian.

Esin E. V. and **Chalov S.** The formation of wood jams in Kamchatka rivers and their role in juvenile fish distribution // Russian Journal of Ecology, 2011, Volume 42, Number 1, Pages 57-63

Chalov S., E. V. Esin, A.S. Ermakova. Wood jams: channel and environmental effects // MSU Vestnik. Geography. 2010. № 6. P. 30-78 In Russian.

- Чалов П.С., **Chalov S.**, Алексеевский Н.И. Structural levels and classifying of braided channels // MSU Vestnik. Geography 2011. № 4. P. 8-15
- Esin E. V., **Chalov S.** The Formation of Wood Jams in Kamchatka Rivers and Their Role in Juvenile Fish Distribution // Russian Journal of Ecology, 2011, Vol. 42, No. 1, pp. 57–63.
- Chalov S.**, Ermakova Galina. 2011. Fluvial response to climate change: a case study of northern Russian rivers // *Cold Region Hydrology in a Changing Climate* // IAHS Publ. 346. P. 111-119.
- L.V. Kuksina, **Chalov S** 2012, The suspended sediment discharge of the rivers running along territories of contemporary volcanism in Kamchatka // Geography and Natural resources, Vol. 33, No. 1, pp. 103–110. In Russian
- Chalov Sergey R., Zavadsky A., Belozeroва Ekaterina V., Bulacheva Mariya P., Jarsjö Jerker, Josefín Thorslund, Jambaljav Yamkhin. 2012. SUSPENDED AND DISSOLVED MATTER FLUXES IN THE UPPER SELENGA RIVER BASIN: SYNTHESIS // Geography, Environment, Sustainability. No. 02(v. 05) 2012. P. 78-94
- Thorslund, J., Jarsjö, J., Belozeroва, E.V., **Chalov S.** Assessment of the gold mining impact on riverine heavy metal transport in a sparsely monitored region: the upper Lake Baikal Basin case. J. Environ. Monit., 2012,14, 2780-2792 DOI: 10.1039/C2EM30643C
- Mouri, G., Golosov, V., **Chalov, S.**, Vladimir, B., Shiiba, M., Hori, T., Shinoda, S., Oki, T. 2013, Assessing the effects of consecutive sediment-control dams using a numerical hydraulic experiment to model river-bed variation. Catena. Vol. 104, Pages 174-185
- Chalov S.R.**, Esin E.V. The principles of ecological classification of rivers in areas of contemporary volcanism (Exemplified by Kamchatka) // Geography and Natural Resources 36(1):62-69
- Alexeevsky Nikolay I., Chalov Roman S., Berkovich Konstantin M. **Chalov S.** (2013) Channel changes in largest Russian rivers: natural and anthropogenic effects, International Journal of River Basin Management, 11:2, 175-191,
- Chalov S.**, Jarsjö Jerker, Kasimov N., Romanchenko A., Pietron Jan, Thorslund J., Belozeroва E. 2015 Spatio-temporal variation of sediment transport in the Selenga River Basin, Mongolia and Russia // Environmental Earth Sciences. Vol. 73, Iss. 2 pp 663-680
- Mouri, G., Ros, F.C., **Chalov, S.** 2014, Characteristics of suspended sediment and river discharge during the beginning of snowmelt in volcanically active mountainous environments // Geomorphology, 213, 266 – 276
- Mouri G, Golosov V, **Chalov S**, Takizawa S, Oguma K, Yoshimura K, Shiiba M, Hori T, Oki T., 2013. Assessment of potential suspended sediment yield in Japan in the 21st century with reference to the general circulation model climate change scenarios, Global and Planetary Change, Volume 102, p. 1-9.
- Karthe, D.; **Chalov, S.** & Borchardt, D. (2015): Water Resources and Their Management in Central Asia in the Early 21st Century: Status, Challenges and Future Prospects. Environmental Earth Sciences 73(2):487-499. DOI :10.1007/s12665-014-3789-1
- Karthe, D.; Kasimov, N.; **Chalov, S.**; Shinkareva, G.; Malsy, M.; Menzel, L.; Theuring, P.; Hartwig, M.; Schweitzer, C.; Hofmann, J.; Priess, J. & Lychagin, M. (2014): Integrating Multi-Scale Data for the Assessment of Water Availability and Quality in the Kharaa -Orkhon - Selenga River System. Geography, Environment, Sustainability 3(7):65-86.
- Chalov S.**, Esin E. V., Aizel G. V.. Geological factors governing ichthyofauna formation in rivers of Semlyachikskii volcanic region (Eastern Kamchatka) // Water Resources, 2014, Vol. 41, Iss. 3, pp 242-251
- Kuksina L.V., Podlas A. V., **Chalov S.** Ecological runoff assessment in rivers of mine areas: Case study of Koryak Plateau rivers // Water Resources, 41 (3), pp 302-311
- Pietroń, J., Jarsjö, J., Romanchenko, A.O., **Chalov, S.** 2015 Model analyses of the contribution of in-channel processes to sediment concentration hysteresis loops // Journal of Hydrology 522, 576-589 DOI:10.1016/j.jhydrol.2015.05.009
- Mouri, G., Minoshima, K., Golosov, V., **Chalov, S.**, Seto, S., Yoshimura, K., Nakamura, S., Oki, T., Probability assessment of flood and sediment disasters in Japan using the Total Runoff-Integrating Pathways model. International Journal of Disaster Risk Reduction, 3C, 31-43.
- Chalov S.**, Shkol'nyi D. I., Promakhova E. V., Leman V. N., Romanchenko A. O. 2015 Formation of the sediment yield in areas of mining of placer deposits // Geography and Natural Resources 36 (2), pp 124-131
- Alekseevskii N, Zavadskii A, Krivushin M, **Chalov S.** Hydrological Monitoring at International Rivers and Basins // Water Resources, 2015, Vol. 42, No. 6, pp. 747–757.

- Chalov, S.**, Alexeevsky N.I. 2015. Braided rivers: structure, types and hydrological effects // Hydrology research, Vol 46, 2. pp 258–275
- Jarsjö J, **Chalov S**, Pietron J, Alekseenko A, Thorslund J.// Patterns of soil contamination, erosion, and river loading of metals in a gold mining region of Northern Mongolia. *Regional Environmental Change* 17(7): 1991-2005.
- Chalov S**, Thorslund J, Kasimov NS, Nittrouer J, Iliyecheva E, Pavlov M., Pietron J, Shinkareva G, Lychagin M, Aybullatov D, Kos-itsky A, Tarasov M, Akhtman Y, Garmaev E, Karthe D, Jarsjö J (2017): The Selenga River delta: a geochemical barrier protecting Lake Baikal waters // *Regional Environmental Change* 17(7), pp 2039–2053
- Chalov S.R.**, 2014. Effects of placer mining on suspended sediment budget: case study of north of Russia's Kamchatka Peninsula. *Hydrological Sciences Journal*, 59 (5), 1081-1094
- Shkolny D., **Chalov S.**, Tsyplenkov A., Tersky P. Fluvial processes hazards at Kamchatka peninsula rivers // *Georisk* .№ 3. pp. 30-41 In Russian.
- Chalov S.**, Tsyplenkov A., Sediment yield small river of volcanic territories (Sukhaya Elizovskaya, Kamchatka peninsula) // *Geomorphology*, 2017, № 1. pp. 104-116 In Russian.
- Pietron J, **Chalov S**, Chalova A, Alekseenko A, Jarsjö J.. Extreme spatial variability in riverine sediment load inputs due to soil loss in surface mining areas of the Lake Baikal basin // *Catena*, Volume 152, 2017, pp 82–93
- Mouri, G., Faizah Che Ros, **Chalov, S.** Characteristics of suspended sediment and river discharge during the beginning of snowmelt in volcanically active mountainous environments Volume 213, 15 May 2014, 266–276
- Chalov, S.**, Alexeevsky N.I. 2012. Braided rivers: structure, types and hydrological effects // *Hydrology research*. In press. doi: 10.2166/nh.2013.023
- Chalov S.**, Tsyplenkov A., Pietron J, Chalova A, Shkolny D., Jarsjö J. Maerker M. Sediment transport in headwaters of a volcanic catchment—Kamchatka Peninsula case study // *Front. Earth Sci. Frontiers of Earth Science* 11(3), pp 565–578
- Thorslund J, Jarsjö J, Wällstedt T, Mörth C, Lychagin M, **Chalov S.** 2017, Speciation and hydrological transport of metals in non-acidic river systems of the Lake Baikal basin: Field data and model predictions // *Regional Environmental Change*. 17: 2007. pp 2007–2021
- Ubydul Haque, Philipp Blum, Paula F. da Silva, Peter Andersen, Jürgen Pilz, **Chalov S.**, Jean-Philippe Malet, Mateja Jemec Auflič, Norina Andres, Eleftheria Poyiadji, Pedro C. Lamas, Wenyi Zhang, Igor Peshevski, Halldór G. Pétursson, Tayfun Kurt, Niko-lai Dobrev, Juan Carlos García-Davalillo, Matina Halkia, Stefano Ferri, George Gaprindashvili, Johanna Engström, David Keellings Fatal landslides in Europe // *Landslides*. 2016.
- Babinski Z., Habel M., **Chalov S.** 2014 Prediction of the Vistula Channel Development Between Wloclawek and Torun: Evaluation with Regard to the New Geological Survey // *Quaestiones Geographicae* 33(3):5-13
- Chalov S.**, Greschushnikova M., Varentov M., Kasimov N. Present and future water and sediment transport by Selenga river to Lake Baikal // *Geography and natural resources*. 2016. № 5 pp. 39–48. In Russian.
- Lychagin, M.; **Chalov, S** Kasimov, N.; Shinkareva, G.; Jarsjö, J. Thorslund, J. Surface water pathways and fluxes of metals under changing environmental conditions and human interventions in the Selenga River system // *Environmental Earth Sciences*. 2017. 76: 1.
- Chalov S.**, Bazilova Varvara, Tarasov Mikhail (2017) Modeling suspended sediment distribution in the Selenga River Delta using LandSat data. *Proc. IAHS*, 375, 19-22, doi:10.5194/piahs-375-19-2017
- Chalov S.**, Bazilova Varvara, Tarasov Mikhail (2017) Suspended Sediment Balance in Selenga Delta at the Late XX–Early XXI Century: Simulation by LANDSAT Satellite Images // *Water resources* Vol. 44, No. 3, pp. 463–470
- Karthe D., **Chalov S.**, Moreido V., Pashkina M., Romanchenko A., Batbayar G., Kalugin A., Westphal K., Malsy M., Florke M. //Assessment of Runoff, Water and Sediment Quality in the Selenga River Basin Aided by a Web-Based Geoservice // *Water Resources*, 2017, Vol. 44, No. 3, pp. 399–416.
- Romanescu G, **Chalov S**, Stoleriu CC, et al. Geomorphologic map of the 1st Mutnaya River, Southeastern Kamchatka, Russia // *Journal of Mountain Science* 14(12). 2373-2390
- Thorslund J, Jarsjö J, Jaramillo F, Jawitz JW, Manzoni S, Basu NB, **Chalov S.**, Cohen MJ, Creed IF, Goldenberg R, Hylin A, Kalantari Z, Koussis AD, Lyon SW, Mazi K, Mård J, Persson K, Pietron J, Prieto C, Quin A, Van Meter K, Destouni G, Wetlands as large-scale nature-based solutions: Status and

challenges for research, engineering and management // Ecological Engineering Vol. 108, Part B, 489-497

Kasimov, N., Karthe, D. **Chalov, S.** 2017, Environmental change in the Selenga River—Lake Baikal Basin // Reg Environ Change 17 (7), pp 1945–1949

Habel M., Babinski Z., Szatten D., **Chalov S.**, Rohlac Z., MAerker M. Clastic sediment transport renewal below Wloclwek reservoir // [in] Geography in the Face of Modern World Challenges. Krakow, 2016. P. 93-115

Karthe D, Abdullaev A, Boldgiv B, Borchardt D., **Chalov S**, Jarsjö J, Li L, Nittrouer J (2017) Water in Central Asia: An Integrated Assessment for Science-Based Management // Environmental Earth Sciences. 76:690

Pietron, Jan; Nittrouer, Jeffrey; **Chalov, S.**; Dong, Tian; Nikolay Kasimov Shinkareva, Galina ; Jarsjo, Jerker "Sedimentation processes in the Selenga River delta: implications for sequestering sediment-bound metals." Hydrological Processes, Volume 32, Issue 2, p 278-292

Lappalainen, H. K., Kerminen, V.-M., Petäjä, T., Kurten, T., Baklanov, A., Shvidenko, A., Bäck, J., Vihma, T., Alekseychik, P., An-dreae, M. O., Arnold, S. R., 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, A. A. M., Hörrak, U., Janhunen, J., Juhola, S., Järvi, L., Järvinen, H., Kanukhina, A., Konstan-tinov, P., Kotlyakov, V., Kieloaho, A.-J., Komarov, A. S., Kujansuu, J., Kukkonen, I., Duplissy, E.-M., Laaksonen, A., Laurila, T., Lihavainen, H., Lisitzin, A., Mahura, A., Makshtas, A., Mareev, E., Mazon, S., Matishov, D., 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. A., Sun, J., Terzhevik, A. Y., Timofeyev, Y., Troitskaya, Y., Tynkkynen, V.-P., Kharuk, V. I., Zaytseva, N., Zhang, J., Viisanen, Y., Vesala, T., Hari, P., Hansson, H. C., Matvien-ko, G. G., Kasimov, N. S., Guo, H., Bondur, V., Zilitinkevich, S., and Kulmala, M.: Pan-Eurasian Experiment (PEEX): towards a 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, <https://doi.org/10.5194/acp-16-14421-2016>, 2016.

Chalov S., Golosov V., Tsyplenkov A., Theuring P., Zakerinejad R., Märker M., Samokhin M. A toolbox for sediment budget research in small catchments // Geography, environment, sustainability. 2017;10(4):43-68.

Dong, T. Y., Nittrouer, J. A., Czapiga, M. J., Ma, H., McElroy, B., Il'icheva, E, Pavlov M, **Chalov S**, Parker G. Roles of bank material in setting bankfull hydraulic geometry as informed by the Selenga River delta, Russia // Water Resources Research 54. <https://doi.org/10.1029/2017WR021985>

Kasimov, N., Karthe, D. **Chalov, S.** 2017, Environmental change in the Selenga River—Lake Baikal Basin // Reg Environ Change 17 (7), pp 1945–1949 <https://doi.org/10.1007/s10113-017-1201-x>

Karthe D, Abdullaev A, Boldgiv B, Borchardt D., **Chalov S**, Jarsjö J, Li L, Nittrouer J (2017) Water in Central Asia: An Integrated Assessment for Science-Based Management // Environmental Earth Sciences. 76:690 DOI 10.1007/s12665-017-6994-x

Pietron, Jan; Nittrouer, Jeffrey; **Chalov, Sergey**; Dong, Tian; Nikolay Kasimov Shinkareva, Galina ; Jarsjo, Jerker "Sedimentation processes in the Selenga River delta: implications for sequestering sediment-bound metals." 2018 Hydrological Processes, Volume 32, Issue 2, p 278-292

Chalov Sergey R., Shuguang Liu, Chalov Roman S., Chalova, Ekaterina R., Chernov Alexey V., Promakhova Ekaterina V., Berkovitch Konstantin M., Chalova Aleksandra S., Zavadsky Aleksander S., Nadezhda Mikhailova 2018 Environmental and human impacts on sediment transport of the largest Asian rivers of Russia and China // Environmental Earth Sciences: 77: 274 <https://doi.org/10.1007/s12665-018-7448-9>

Chalov, S. (2018). Source-to-sink fluxes in undisturbed cold environments. Achim A. Beylich, John C. Dixon and Zbigniew Zwoliński (editors). Cambridge: Cambridge University Press. 419 p, hardcover. ISBN 978-1-107-06822-3. £112. doi: 10.1017/CBO9781107705791. *Polar Record*, 1-1. doi:10.1017/S0032247418000165

Krengel, F., Bernhofer, C., Chalov, S., Efimov, V., Efimova, L., Gorbachova, L., Habel M., Helm B., Kruhlov I., Nabyvanets Y., Osadcha N, Osadchyi V, Pluntke T, Reeh T., Terskii P., Karthe D.. Challenges for transboundary river management in Eastern Europe – three case studies. Die Erde – Journal of the Geographndhical Society of Berlin, 149(2-3), 157-172. 2018

Chalov S.R., Millionshchikova T.D., Moreido V. M. Multi-Model Approach to Quantify Future Sediment and Pollutant Loads and Ecosystem Change in Selenga River System // *Water Resources*, 2018, Vol. 45, Suppl. 6, pp. S22–S34. **DOI:** 10.1134/S0097807818060210

Vihma, T., Uotila, P., Sandven, S., Pozdnyakov, D., Makshtas, A., Pelyasov, A., Pirazzini, R., Danielsen, F., **Chalov, S.**, Lappalainen, H. K., Ivanov, V., Frolov, I., Albin, A., Cheng, B., Dobrolyubov, S., Arkhipkin, V., Myslenkov, S., Petäjä, T., and Kulmala, M.: Towards an advanced observation system for the marine Arctic in the framework of the Pan-Eurasian Experiment (PEEX), *Atmos. Chem. Phys.*, 19, 1941-1970, <https://doi.org/10.5194/acp-19-1941-2019>, 2019

Jaramillo, F., Desormeaux, A., Hedlund, J., Jawitz, J.W., Clerici, N., Piemontese, L., **Rodriguez-Rodriguez JA**, Borja S. Blanco-Libreros J., Anaya J., Celi J., **Chalov S.** et al. Priorities and Interactions of Sustainable Development Goals (SDGs) with Focus on Wetlands. *Water* 2019, 11, 619.
