



TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE 4719

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di Scienze Agrarie e Ambientali**

Scientist-in-charge: Prof. Luca Bechini

ANASTASIA SHCHEGOLIKHINA

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	SHCHEGOLIKHINA
Name	ANASTASIA
Date of birth	[14, MAY, 1984]

PRESENT OCCUPATION

Appointment	Structure
NO OCCUPATION	-

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree	Bachelor in Soil Science	Tomsk State University, Russia	2005
Master	Master in Soil Science	Tomsk State University, Russia	2007
PhD	PhD in Natural Sciences	Ruhr-University Bochum, Germany	2013
Other	Scientific skill workshop "Basic scientific presentation"	Ruhr University Research School, Germany	2009
	Scientific skill workshop "Advanced professional communication"	Ruhr University Research School, Germany	2010
	Workshop "Intellectual Property Fundamentals"	Politecnico di Milano, Italy	2017



REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date registration	of	Association	City
-	-	-	-

FOREIGN LANGUAGES

Languages	level of knowledge
Russian	Native
English	Excellent
Italian	Basic
German	Basic
Bulgarian	Basic

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2018	European Molecular Biology Organization (EMBO) Short-Term Research Fellowship, Germany
2016-2019	Politecnico di Milano International Post-Doc Fellowship, Italia
2014-2015	Tomsk Polytechnic University Post-Doc Research Fellowship, Russia
2012	Best poster presentation award at the 16 th International Meeting of Humic Substances Society, China
2007-2010	Ruhr-University Research School Fellowship for PhD students, Germany

TRAINING OR RESEARCH ACTIVITY

October 2017: Workshop "X-ray image analyses of soils" organized by Dr. John Koestel, Department of Soil and Environment, Swedish University of Agricultural Sciences (Uppsala, Sweden).

February - May 2017: Research practical training "3D-printing using different materials: from nano- to macro-scales". Supervisor: Prof. Marinella Levi, Chemistry, Material and Chemical Engineering Department "Giulio Natta", Politecnico di Milano (Milan, Italy).

October 2010: Research practical training "Pore water extractability of xenobiotics from soils". Supervisor: Prof. Martin Elsner, Institute of Soil Ecology, German Research Center for Environmental Health, Helmholtz Zentrum München, (Munich, Germany).

September 2008: Scientific Summer School "Chemicals in soil: Interactions, availability and residue formation" organized in Helmholtz Centre for Environmental Research (Leipzig, Germany).

May 2008: Research practical training "Soil microbiology and enzymes". Supervisor: Dr. Andrey Yurkov, Faculty of Biology and Biotechnology, Ruhr-University Bochum (Bochum, Germany).

September 2007: International Scientific Summer School "Natural organic matter: A resource for environment and nanotechnologies" organized by Prof. Alessandro Piccolo, Department of Agricultural Sciences, University of Naples Federico II (Naples, Italy).



February 2007: research work “Peat humic and fulvic acids: extraction and further investigation” at the Tyumen State Agricultural Academy, Russia.

June-August 2006: field investigation work “Sampling of peats, ground water, soils, vegetation at the Great Vasyugan Mire - the UNESCO world heritage natural site” carried out together with researchers from the Institute of Agriculture and Peat, Russia.

PROJECT ACTIVITY

Year	Project
2016-2019	Postdoctoral project: “Transport of heavy metals through the soil porous media”. Supervisor: Prof. Monica Riva, Department of Environment and Civil Engineering, Politecnico di Milano (Milan, Italy).
2018	Short-term research project: “X-ray microtomography study of a biofilm growth within 3D-printed copy of a soil pore network”. Supervisors: Dr. Sabine Rolland du Roscoat, 3SR Laboratory (Laboratoire Sols, Solides, Structures, Risques) and Prof. Jean Martins, Institute of Geosciences and Environment, Université Grenoble Alpes (Grenoble, France).
2014-2015	Postdoctoral project: “Role of soil organic matter in formation of biogeochemical interfaces in groundwater bedrock”. Supervisor: Prof. Stepan L. Shvartsev, Department of Hydrogeology, Engineering Geology and Hydrogeocology, Institute of Natural Resources, Tomsk Polytechnic University (Tomsk, Russia).
2007-2013	PhD project: “Effects of soil organic matter molecular conformation and substrate additions on the formation and release of xenobiotics bound residues”. Supervisor: Prof. Bernd Marschner, Geographical Institute, Ruhr-University Bochum (Bochum, Germany).
2006-2007	Master research project: “Analysis of molecular forms of humic acids extracted from peats using different methods”. Carried out at the Institute of Agriculture and Peat (Tomsk, Russia) and Tyumen State Agricultural Academy (Tyumen, Russia)

PATENTS

Patent
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CONGRESSES AND SEMINARS

Date	Title of the presentation	Conference, place
2005	Chernozems in agriculture of the southern forest-plain of Tomsk region.	The 10 th Scientific School Conference of Young Scientists “Biology in the XXI century”, Pushino, Russia
2006	Fertility of chernozems of the Tomsk Priob’ye Region and means of its melioration.	The III National Russian Conference of Young Scientists “Fundamental Problems of New Technologies in 3 rd Millennium”
2006	Drained and native peat soils of Tomsk region and its enzymatic activity.	The International Scientific Conference “Soil is a connecting-link between natural and man-made ecosystems”, Irkutsk, Russia



2006	Analysis of molecular forms of humic acids extracted from peats using different methods.	The International Conference "Peat as a Problem Solution in Energy, Agriculture and Ecology", Minsk, Belorussia
2007	Effects of soil organic matter conformation and of substrate additions on the formation and release of bound residues.	DBG (Deutsche Bodenkundliche Gesellschaft) Annual Meeting, Dresden, Germany
2008	Effects of soil organic matter conformation on the formation and release of bound residues of xenobiotics.	International Conference EUROSOIL 2008, Vienna, Austria
2008	Effects of Soil Organic Matter Conformation and Substrates Addition on the Fate of Xenobiotics in Soils.	14 th Meeting of International Humic Substances Society, Moscow, Russia
2009	Sorption and degradation of Nonylphenol: effect of soil organic matter conformation and substrate additions in soil.	SPP 1315 Meeting: "Cations in soil organic matter: Key for biogeochemical functioning of soil organic matter?", Koblenz, Germany
2009	Sorption and degradation of Nonylphenol: effect of soil organic matter conformation and substrate additions in soil.	DBG (Deutsche Bodenkundliche Gesellschaft) Annual Meeting, Bonn, Germany
2009	Sorption and degradation of Nonylphenol: effect of soil organic matter conformation and substrate additions.	DBG-IUSS-Symposium, Jena, Germany
2009	Effects of Soil Organic Matter Conformation and Substrate Additions On the Formation and Release of Xenobiotic Bound Residues.	Soil Science Society of America International Annual Meeting, Pittsburgh, USA
2012	Effects of cation saturation, substrate addition, and aging on the mineralization and formation of non-extractable residues of nonylphenol and phenanthrene	The 16 th International Meeting of Humic Substances Society, Hangzhou, China

PUBLICATIONS

Books

Shchegolikhina A., Marschner B. 2013. Effects of cation saturation, substrate addition, and aging on the mineralization and formation of non-extractable residues of nonylphenol and phenanthrene in a sandy soil. In: Xu J., Wu J., He Y. (eds) Functions of Natural Organic Matter in Changing Environment. Springer, Dordrecht. 673-677.

Articles in reviews

Diehl, D., Schwarz, J., Goebel, M.-O., Woche, S.K., Schneckenburger, T., Krüger, J., **Shchegolikhina, A.**, Marschner, B., Lang, F., Thiele-Bruhn, S., Bachmann, J., Schaumann, G.E. 2014. Effect of multivalent cations, temperature, and aging on SOM thermal properties. *Journal of Thermal Analysis and Calorimetry* 118(2), 1203-1213.

Diehl, D., Schneckenburger, T., Krüger, J., Goebel, M.-O., Woche, S.K., Schwarz, J., **Shchegolikhina, A.**, Lang, F., Marschner, B., Thiele-Bruhn, S., Bachmann, J., Schaumann, G.E. 2014. Effect of multivalent cations, temperature and aging on soil organic matter interfacial properties. *Environmental Chemistry* 11, 709-718.

Shchegolikhina, A., Kunhi Mouvenchery, Y., Woche, S.K., Bachmann, J., Schaumann, G.E., Marschner, B. 2014. Cation treatment and drying-temperature effects on nonylphenol and phenanthrene sorption to a sandy soil. *Journal of Plant Nutrition and Soil Science* 177(2), 141-149.

Shchegolikhina, A., Marschner, B. 2013. Effects of sterile storage, cation saturation and substrate additions on the degradability and extractability of nonylphenol and phenanthrene in soil. *Chemosphere* 93(9), 2195-2202.



Shchegolikhina, A., Schulz, S., Marschner, B. 2012. Interacting effects of cation saturation and drying, freezing, or aging on the extractability of nonylphenol and phenanthrene from a sandy soil. *Journal of Soils and Sediments* 12, 1280-1291.

Jaeger, F., **Shchegolikhina, A.**, van As, H., Schaumann, G.E. 2010. Proton NMR relaxometry as a useful tool to evaluate swelling processes in peat soils. *The Open Magnetic Resonance Journal* 3, 27-45

Congress proceedings

Research work presented at the conferences listed above was also published at the conferences proceedings

OTHER INFORMATION

Career Breaks

September 2015 - September 2016: Maternity leave

August 2018 - until April 2019: Maternity leave

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Place and date: Milan, 05/10/2020

SIGNATURE

