Curriculum Vitae

Sofia (Sergeevna) Kantorovich

Ural Federal (State) University named after A.M. Gorky, Lenin av. 51, 620083, Ekaterinburg, Russia; Computational Physics, University of Vienna, Sensengasse 8, 1090, Vienna, Austria. **Telephone:** +7 343 3507541; +43 (0) 1427773271.

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Date of Birth: 27.05.1980

Place of Birth: Sverdlovsk (Ekaterinburg), Russia.

Languages: Russian (native); English (fluent); German, French and Italian (speaking, understanding, basic writing, B2 level).

EMPLOYMENT and EDUCATION

- **03.2013 present time:** Senior researcher, Start-Project Leader, University of Vienna, Vienna, Austria. Research work, lecturer in "Physics", "Statistical Physics of Magnetic Fluids", "Electricity and Magnetism". Advisor of PhD and Master's degree students.
- 02.2011 present time: Senior researcher, associate professor, Ural State University (on May 2011 joined Ural Federal University), Ekaterinburg, Russia. Research work, lecturer in "Physics", "Statistical Physics of Magnetic Fluids", "Electricity and Magnetism". Advisor of PhD and Master's degree students.
- **03.2012 02.2013:** Senior researcher, University of Rome "La Sapienza", Rome, Italy. Coadvisor of PhD students.
- **09.2009 02.2012**: Humboldt Fellow at the Institute for Computational Physics, Stuttgart, Germany. Research work, advisor of diploma and PhD students (Position is valid till February 2012).
- **01.2009 08.2009:** Senior researcher, associate professor, Ural State University, Ekaterinburg, Russia. Research work, lecturer in "Physics", "Statistical Physics of Magnetic Fluids", "Electricity and Magnetism", advising PhD and Master degree students.
- **02.2008 12.2008**: Postdoctoral fellow, Max Planck Institute for Polymer Research, Mainz, Germany. Research.
- 01.2007 02.2008: Senior researcher, associate professor, Ural State University, Ekaterinburg, Russia. Research work and lecturer in "Physics", "Statistical Physics of Magnetic Fluids". Advisor of diploma and PhD students.
- **06.2006 01.2007**: Postdoctoral fellow, Max Planck Institute for Polymer Research, Mainz, Germany. Research work, lecturer in "Statistical Physics".
- **09.2003 06.2006:** Researcher, lecturer, Ural State University, Ekaterinburg, Russia. Research work and lecturer in "Physics", "Partial Differential Equations". Advisor of diploma students.
- 09.2000 09.2003: Assistant researcher, Ural State University, Ekaterinburg, Russia. Research



work and tutoring courses in "Physics", "Partial Differential Equations".

- **05.04.2005**: PhD degree with Distinction, Ural State University, Ekaterinburg, Russia and Highest Attestation Commission, Moscow, Russia.
- **06.2003 04.2005**: Ural State University, Ekaterinburg, Russia, Department of Mathematical Physics, PhD studies.
- **09.2001 06.2003:** Ural State University, Ekaterinburg, Russia, Faculty of Mathematics and Mechanics, Master Degree (Diploma with Excellence).
- **09.1997 06.2001**: Ural State University, Ekaterinburg, Russia, Faculty of Mathematics and Mechanics, Bachelor Degree (Diploma with Excellence).
- **09.1987 06.1997**: Language Lyceum, Secondary School N2, (graduation with Golden Medal/Distinction), Sverdlovsk (Ekaterinburg), Russia; Ecole de Roches, France; Bromley School of English, UK.

CO-ORGANIZER OF THE CONFERENCES:

- International Soft Matter Conference 2013, Rome, Italy, 2013;
- Euromech Colloquium "Patterns in Magnetic Soft Matter", Dresden, Germany, 2011;
- Symposium on Magnetic Gels, Stuttgart, Germany, 2010;
- 8th German Ferrofluid Workshop, Max Plank Institute for Polymer Research, Mainz, Germany, 2007.

RESEARCH VISITS and INVITED TALKS:

- University of Rome, La Sapienza, Rome, Italy, 2011 (talk), invited by Prof. Sciortino;
- University of Budapest, Budapest, Hungary, 2011, 2012 (visits, 1 week), invited by Prof. Jedlovzsky;
- Technical University of Dresden, Dresden, Germany, 2009 (talk), invited by Prof. Odenbach;
- Frankfurt Institute for Advanced Studies, Frankfurt, Germany, 2009 (visit, 1 month), invited by Prof. Holm;
- University of Bayreuth, Bayreuth, Germany, 2006 (talk), invited by Dr. Richter;
- Moscow State University, Moscow, Russia, 2003 (talk), invited by Prof. Nikitin;
- Institute of Continuous Media Mechanics, Ural Branch of Russian Academy of Science, Perm, Russia, 2003 (visit, 5 weeks), invited by Prof. Raikher and Prof. Pschenichnikov;
- University of Bremen, Bremen, Germany, 2002 (visit, 4 weeks), invited by Prof. Odenbach.

MEMBER of the German Ferrofluid Society, Austrian Chemical Physical Society, Advisory Board of EMLG

ACTIVE COLLABORATIONS:

- Prof. F. Sciortino, University of Rome, "La Sapienza", Italy;
- Prof. J.M. Tavares, ISEL, Portugal;
- J. Prof A. Arnold, Institute for Computational Physics, University of Stuttgart, Germany;
- Dr. M. Sega, University of Vienna, Vienna, Austria;

- Dr. J. J. Cerda, University of Balearic Islands, Mallorca, Spain;
- Prof. F. Kremer, Institute of Experimental Physics I, University of Leipzig, Germany;
- Prof. A. Ivanov, Ural Federal University, Russia;
- Prof. A. Schmidt, Institute of Physical Chemistry, University of Cologne, Germany;
- Dr. R. Richter, Physics Institute, Experimental Physics V, University of Bayreuth, Germany;
- Prof. S. Odenbach, Technical University of Dresden, Germany;
- Prof. R. Perzynski, University P. and M. Curie, Paris 6, Paris, France;
- Dr. P. Camp, School of Chemistry, University of Edinburgh, United Kingdom;
- Prof. Yu. Raikher, Institute of Continuous Media Mechanics, Perm, Russia;
- Prof. A. Pshenichnikov, Institute of Continuous Media Mechanics, Perm, Russia;
- Dr. B. Erne, Van't Hoff Laboratory, Debye Institute, Utrecht University, The Netherlands;
- Prof. P. Jedlovzsky, Eszterhazy Karoly College, Eger, Hungary;
- Prof. A. Philipse, Van't Hoff Laboratory, Debye Institute, Utrecht University, The Netherlands;
- Prof. M. Barbosa, Physics Institute, UFRGS, Porto Alegre, Brazil.

REFEREE: Journal of Magnetism and Magnetic Materials; Journal of Chemical Physics; Soft Matter, Physical Review E, Physical Review Letters.

RESEARCH INTERESTS

My current research interests lie in the field of complex dipolar systems and can be divided into 3 main groups: magnetic soft matter (magnetic fluids, magnetic gels, capped magnetic colloids, anisotropic magnetic particles, Janus particles), charged soft matter (ionic liquids, polyelectrolytes) and DNA duplexes self-assembly. Different methods of statistical physics and computer simulations are used and various new approaches are developed to describe the aforementioned systems in detail and to assist experimentalists in constructing possible new smart materials.

GRANTS

2002	RFBR 02-02-06501 for young scientists (Russian Fund for Basic Research)
2004	IUPAP (International Union of Pure and Applied Physics) grant for women in physics
2005	Ministry of Education grant for Young Doctors (Russia)
2005	Ministry of education grant for collaborative research (Russia)
2006	Grant Y3-P-05-11 (Civil Research and Development Foundation, U.S.A.)
2006	Ural State University grant (Russia)
2005	Ministry of Education grant for Young Doctors (Russia)
2006, 2008, 2010	President of RF grants MK-4836.2006.2, MK-412.2008.2, MK-6415.2010.2 (Russia)

2006	Grant Y3-P-05-11 (Civil Research and Development Foundation, U.S.A.)
2009-2011	Alexander von Humboldt Fellowship (AvH, Germany)
2012-2013	RFBR for young scientists, mol-a 1202-31-374
2013-2014	RFBR for young scientists leading a scientific school mol-a-ved 12-02-33106
2013-2018	Austrian Science Fund (FWF), START-Projekt Y627-N27

AWARDS

2001	The regional best student research work in Physics (Government of Sverdlovsk region)
2001,2002	Ural State University Academic Council Scholarship (Ural State University)
2001	Educational Centre Scholarship «Advanced materials» (Civil Research and Development Foundation, U.S.A.)
2002, 2003	Sverdlovsk Region Governor Scholarship (Government of Sverdlovsk region)
2003	Dynasty foundation scholarship for students specialised in Theoretical Physics (Russia)
2004	Dynasty foundation scholarship for PhD students specialised in Theoretical Physics (Russia)
2007	L'Oreal – Russian Academy of Science – UNESCO award for young women in science

INTERESTS: computer design, languages, drawing, literature, sports.