Dr. Olga V. Boltalina

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EDUCATION

- Doctor of Sciences (aka, Habilitation), Physical Chemistry, Moscow State M.V. Lomonosov University, Moscow, Russia, 1998.
- Ph.D., Physical Chemistry, Moscow State M.V. Lomonosov University, Moscow, Russia, 1990.
- M.S., Chemistry (cum laude), Moscow State M.V. Lomonosov University, Moscow, Russia, 1982.

PROFESSIONAL EXPERIENCE

- Research Scholar III, CSU, 2013–present
- Postdoctoral Fellow, Colorado State University, Fort Collins, USA, 2001–2013
- Professor of Physical Chemistry, Moscow State M.V. Lomonosov University, Moscow, Russia,
- 2003–2005; retired.
- Lead Scientist, Moscow State M.V. Lomonosov University, Moscow, Russia, 1998–2003.
- Senior Research Scientist, Moscow State M.V. Lomonosov University, Moscow, Russia, 1990–1998.
- Junior Research Chemist, Moscow State M.V. Lomonosov University, Moscow, Russia, 1982–1990

PUBLICATIONS

- Principal author of 280 publications in peer-reviewed journals and 12 chapters in scientific monographs. h-index 48. Sum of Times Cited 6,512; without self-citations 4,822. Ranked among top 2% of the most-cited scientists in the world (https://data.mendeley.com/datasets/btchxktzyw/2)
- Principal inventor of Principal inventor of 5 Russian patents, 1 U.S. patent and 4 US patent applications.

10 SELECT PUBLICATIONS

1. Boltalina, O. V.; Borschevskii, A. Y.; Sidorov, L. N.; Street, J. M.; Taylor, R. Preparation of $C_{60}F_{36}$ and $C_{70}F_{36/38/40}$. *Chem. Commun*. **1996**, 529-530.
2. Boltalina, O. V.; Markov, V. Y.; Taylor, R.; Waugh, M. P. Preparation and characterization of $C_{60}F_{18}$. *Chem. Commun*. **1996**, 2549-2550.
3. Boltalina, O. V.; Galeva, N. A. Direct fluorination of fullerenes. *Uspekhi Khimii* **2000**, 69, 661-674.
4. Neretin, I. S.; Lyssenko, K. A.; Antipin, M. Y.; Slovokhotov, Y. L.; Boltalina, O. V.; Troshin, P. A.; Lukonin, A. Y.; Sidorov, L. N.; Taylor, R. $C_{60}F_{18}$, a flattened fullerene: Alias a hexa-substituted benzene. *Angew. Chem. Int. Ed*. **2000**, *39*, 3273-3276.
5. Goryunkov, A. A.; Markov, V. Y.; Ioffe, I. N.; Bolskar, R. D.; Diener, M. D.; Kuvychko, I. V.; Strauss, S. H.; Boltalina, O. V. $C_{74}F_{38}$: An exohedral derivative of a small-bandgap fullerene with D3 symmetry. *Angew. Chem. Int. Ed*. **2004**, *43*, 997-1000.
6. Streletskii, A. V.; Ioffe, I. N.; Kotsiris, S. G.; Barrow, M. P.; Drewello, T.; Strauss, S. H.; Boltalina, O. V. In-plume thermodynamics of the MALDI generation of fluorofullerene anions. *J. Phys. Chem. A*, **2005**, 109, 714-719.
7. Coffey, D.C., Larson, B.W., Hains, A.W., Whitaker, J.B., Kopidakis, N., Boltalina, O.V., Strauss, S.H. and Rumbles, G. An optimal driving force for converting excitons into free carriers in excitonic solar cells. *J. Phys. Chem. C*, **2012**, *116*, 8916-8923.
8. Kuvychko, I. V.; Clikeman,T. C.; Dubceac, C.; Chen, Yu-S.; Petrukhina, M. A.; Strauss, S. H.; Popov, A. A.; and Boltalina, O. V. Understanding Polyarene Trifluoromethylation with Hot CF_3 Radicals Using Corannulene. *Eur. J. Org. Chem*. **2018**, *31*, 4233-4245.
9. Shiyi, L.; DeWeerd, N. J.; Reeves, B. J.; San, L. K.; Dahal, D.; Krishnan, R. K. R; Strauss, S. H.; Boltalina, O. V.; and Lüssem, B. Doped N-Type Organic Field-Effect Transistors Based on Faux-Hawk Fullerene. *Adv. Electron. Mater*. **2019**, *5*, 1900109.
10. Boltalina, O. V.; Popov, A. A.; Kuvychko, I. V.; Shustova, N. B.; and Strauss, S. H. Perfluoroalkylfullerenes. *Chem. Rev*. **2015**, *115*, 1051-1105.

OTHER PROFESSIONAL ACTIVITIES

- Chair, ACS Division of Fluorine Chemistry, current.
- Vice Chair, Program Chair, ACS Division of Fluorine Chemistry, 2019-2021
- Member, Executive Committee, Nanocarbons Division, ECS, 2018-current.
- Division Secretary, Nanocarbons Division, ECS, 2016-2018
- Member, Editorial Board, *Journal of Fluorine Chemistry,* 2015-current.
- Editor/co-editor, Elsevier's book series, Progress in Fluorine Science
- Program Chair, 19th International Conference on Fluorine Chemistry (Jackson Hole, WY), 08/2009
- Member, International Advisory Board, International and European Symposia on Fluorine Chemistry, 2005-2015
- Chair, ECS Smalley Award Selection Committee, 2008-2009
- Member, International Steering Committee on Fluorine Chemistry, 2007-present
- Member, Executive Committee of Nanocarbon Division, Electrochemical Society (ECS), 1997–present.
- Member, American Chemical Society, 2001–present
- Member, Electrochemical Society (ECS), 1997–present
- Advisory Board, *Fullerene Science & Technology*, 2000–present
- Organizer/co-organizer of eleven (11) symposia at ECS Meetings (1998-2009).
- Present or past consultant for more than five chemical technological companies

HONORS AND AWARDS

2018 Humboldt Research Award (Humboldt Foundation, Germany)
2009-2010 Humboldt Research Award (Humboldt Foundation, Germany)
2003-2004 F. Bessel Award (Humboldt Foundation, Germany)
2003 Lomonosov Prize, Moscow State M.V.Lomonosov University (Russia)
2000 Shuvalov Prize of Moscow State M.V.Lomonosov University (Russia)
1998 JSPS Visiting Scholar, Shinshu University, Nagano (Japan)
1998–2001 President of Russia's Award for Young Doctors of Science
1996, 2000 International Author Award, Royal Society (UK)
1994 Royal Society Research Fellowship
1994, 1998 Visiting Researcher, Aarhus University, Institute of Physics and Astronomy (Denmark)

INVITED AND KEYNOTE LECTURES (select examples in the past five years)

1. "Perfluoroalkyl and Perfluoroaryl Carbon-Rich Electron Acceptors", 21nd International Symposium on Fluorine Chemistry, Como, Italy, August 28th, 2015.
2. "Electronic Applications of Fluorinated Acceptors", 22nd International Symposium on Fluorine Chemistry, Oxford, UK, July 23d, 2018.
3. "Direct High-Temperature Trifluoromethylation of Polycyclic Aromatic Hydrocarbons: New Developments", 257th ACS National Meeting, Orlando, USA, April 1st, 2019
4. "Synthesis and Applications of Fluorinated Electron Acceptors", Fluorine Symposium at Collaborative Research Center "Fluorine-Specific Interactions: Fundamentals and Functions", Berlin, Germany, October 30th, 2019.
5. "Electron Acceptor Materials by Design: from Molecular Library to Real-World Applications" Kent State University, Kent, USA, September 12th, 2019
6. "Organofluorine Electron Acceptors: Design, Synthesis and Applications" Goethe University, Frankfurt, Germany, April 17th, 2019.

RESEARCH INTERESTS

Transition-metal fluorides, fullerenes, physical chemistry, gas-phase ion thermochemistry, mass spectrometry, fluorine chemistry, applications of fluorinated electron acceptor materials in optoelectronics, nanoscience and nanotechnology.