

CURRICULUM VITAE

OKSANA ALEKSEEVNA TARASOVA

*Chief, Atmospheric Environment Research Division,
Research Department, World Meteorological Organization*Education

- 1996 *M.Sc. Degree in Physics*
Moscow State University, Faculty of Physics, Atmosphere Physics Department
Diploma with excellence
Master thesis: "Probability-functional method application in atmospheric optics tasks"
- 1999 *PhD Degree in Physics of the Atmosphere and Hydrosphere*
Moscow State University, Faculty of Physics, Atmosphere Physics Department
PhD thesis: "The main features of pollution of the atmosphere and its oxidation properties over some regions of Russia"
- Sept 2011 *UN language proficiency examination in English*

Employment

- 2014 - **Chief**, Atmospheric Environment Research Division, Research Department, World Meteorological Organization
- 2009 – 2014 *Scientific Officer*, Atmospheric Environment Research Division, Research Department, WMO
- 2006 – 2009 *Marie-Curie International Incoming Fellow and Post Doc*, Max-Planck Institute for Chemistry, Mainz
- 2004-2006 *Senior Research Scientist*, Lomonosov Moscow State University, Faculty of Physics, Atmosphere Physics Dept.
- 2002-2004 *Research Scientist*, Lomonosov Moscow State University, Faculty of Physics, Atmosphere Physics Dept.
- 1999-2002 *Junior Research Scientist*, Lomonosov Moscow State University, Faculty of Physics, Atmosphere Physics Dept.

Research interests

Due to specifics of my current employment I do perform international scientific coordination of activities of WMO Members related to atmospheric composition within WMO's Global Atmosphere Watch Programme.

Focal areas the GAW Programme include reactive gases, greenhouse gases, aerosols, ozone, UV radiation and precipitation chemistry. GAW includes GURME project as well, which addresses urban air quality.

My personal focus within GAW is on greenhouse gases and reactive gases observations, analysis and applications. This includes network management, establishment of collaboration with contributing networks, and development of integrated data products.

The other interest is Quality Assurance of atmospheric composition measurements, measurement techniques and standards.

GAW cooperates with and contributes to a number of Environmental Conventions, international research projects, infrastructures and initiatives, including Global Climate Observing System (GCOS), GEO (Group on Earth Observations, co-lead of GEO Carbon Task and co-author of GEO Carbon Strategy), Interdisciplinary Biomass Burning Initiative (IBBI), In-service Aircraft for a Global Observing System (IAGOS), Integrated Carbon Observation System (ICOS), Aerosols, Clouds, and Trace gases Research InfraStructure Network (ACTRIS) and many other.

GAW supports several environmental conventions, including UNFCCC and the Vienna Convention for the Protection of the Ozone Layer and its Montreal Protocol on Substances that deplete the Ozone Layer, European Convention on Long-range Transboundary Air Pollution (CLRTAP).

Since 2010 I am a co-chair of the Task Force for Measurements and Modeling in CLRTAP

2011-2015 - President of Atmospheric Sciences Division of European Geosciences Union

Personal research projects

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| 11.2006-
10.2008 | Marie-Curie Incoming International Fellowship in MPI-Chemistry, Mainz |
| 2005
2008 | - PI, research project "Variability and long-term trends of tropospheric ozone: Comparison and interpretation of measurements of Caucasian and Central European mountain sites using a Lagrangian approach", funded by International Co-operation: SCOPES (Scientific Co-operation with Eastern Europe). |
| 2004 -
2006 | PI, INTAS Young Scientist Fellowship |
| 2002-2004 | Coordinator of NIS (New Independent States of former USSR) groups, research project "Spatial and temporal variations of tropospheric ozone and precursors over Russia", funded by INTAS (EU) |
| 12.2001-
03.2002 | Consultant at TNO in the project "Methane in The Netherlands – An exploratory study to separate time scales" |
| 11. 2002-
03. 2003 | Consultant at TNO in the project "LOTOS model validation for Russia" |

- 2004-2008 Associated member of ACCENT project (Atmospheric Composition Change – the European Network of Excellence), **member of T&TP (Transport and Transformation of Pollutants) steering group**
- 1999-2002 Co-Coordinator of contribution "Surface ozone for remote, rural and urban regions of Russia" in European Project EUROTRAC TOR-2 (Tropospheric Ozone Research – 2 subproject)

Awards

- 1998 Scholarship of the Government of Russia
1999 Scholarship of the President of Russia
2003-2004 Special Scholarship of Moscow State University for Prospective Young Scientists and Teachers

Publications

Editorial work

- thematic GAW Reports
- WMO Greenhouse Gas Bulletin
- World Data Centre for Greenhouse Gases Data Summary
- Other thematic GAW related publications
- Co-editor of ACCENT Report "Air Quality in Eastern Europe: A Review of Measurement and Modelling Practices and Needs" (2006)
- invited editor of AMT Special Issue "Carbon dioxide, other greenhouse gases, and related measurement techniques - 16th WMO/IAEA meeting (GGMT-2011)"
- contributor to GEO Carbon strategy

Chapters in books:

- 1) N.F. Elansky, I.B. Belikov, O.V. Lavrova, A.I. Skorokhod, R.A. Shumsky, C.A.M. Brenninkmeijer and O.A. Tarasova, Train-Based Platform for Observations of the Atmosphere Composition (TROICA Project), in book: Air Pollution - Monitoring, Modelling and Health (ed. Mukesh Khare), p.175-197, 2012, ISBN: 978-953-51-0424-7
- 2) Mannava V.K. Sivakumar, Oksana Tarasova, Slobodan Nickovic, Deon Terblanche, and Ghassem Asrar, Contributions of WMO Programs in Addressing Climate Change and Agriculture, in Handbook of Climate Change and Agroecosystems: Impacts, Adaptation, and Mitigation (edited by Daniel Hillel and Cynthia Rosenzweig), 2012, ISBN 978-1-84816-983-8, 2012, p.236-262
- 3) Research Findings in support of the EU Air Quality, Review, edited by Michela Maione & Sandro Fuzzi, Luxembourg: Publications Office of the European Union, 2013, ISBN 978-92-79-29457-0, doi 10.2777/98974 (contribution to Chapter 3 "Ozone")

Selected publications (last 10 years)

- 1) P. Ciais, A. J. Dolman, A. Bombelli, R. Duren, A. Peregón, P. J. Rayner, C. Miller, N. Gobron, G. Kinderman, G. Marland, N. Gruber, F. Chevallier, R. J. Andres, G. Balsamo, L. Bopp, F.-M. Bréon, G. Broquet, R. Dargaville, T. J. Battin, A. Borges,

- H. Bovensmann, M. Buchwitz, J. Butler, J. G. Canadell, R. B. Cook, R. DeFries, R. Engelen, K. R. Gurney, C. Heinze, M. Heimann, A. Held, M. Henry, B. Law, S. Luyssaert, J. Miller, T. Moriyama, C. Moulin, R. B. Myneni, C. Nussli, M. Obersteiner, D. Ojima, Y. Pan, J.-D. Paris, S. L. Piao, B. Poulter, S. Plummer, S. Quegan, P. Raymond, M. Reichstein, L. Rivier, C. Sabine, D. Schimel, O. Tarasova, R. Valentini, R. Wang, G. van der Werf, D. Wickland, M. Williams, and C. Zehner, Current systematic carbon-cycle observations and the need for implementing a policy-relevant carbon observing system, *Biogeosciences*, 11, 3547-3602, 2014
- 2) Martin G. Schultz, Valérie Thouret, Oksana Tarasova, Jean-Pierre Cammas, Ian Galbally, Jennifer A. Logan, Samuel J. Oltmans, David D. Parrish, Johannes Staehelin, and David Tarasick (2011), Report on the second international workshop on tropospheric ozone changes, Toulouse, France, 11-14 April 2011, IGACNews, Issue No. 45, October 2011, p.25-35
 - 3) Tarasova O.A., S. Houweling, N. Elansky and C. A. M. Brenninkmeijer (2009), Application of stable isotope analysis for improved understanding of the methane budget: comparison of TROICA measurements with TM3 model simulations, *Journal of Atmospheric Chemistry*, Vol. 63, No.1, pp. 49-71.
 - 4) Tarasova O.A., I. A. Senik, M. G. Sosonkin, J. Cui, J. Staehelin, and A. S. H. Prevot (2009), Surface ozone at the Caucasian site Kislovodsk High Mountain Station and the Swiss Alpine site Jungfrauoch: data analysis and trends (1990–2006), *Atmos. Chem. Phys.*, 9, 4157–4175, www.atmos-chem-phys.net/9/4157/2009/
 - 5) Tarasova O.A., C. A. M. Brenninkmeijer, P. Jöckel, A. M. Zvyagintsev, and G. I. Kuznetsov (2007), A climatology of surface ozone in the extra tropics: cluster analysis of observations and model results, *Atmos. Chem. Phys.*, 7, 6099-6117.
 - 6) Tarasova O.A., Brenninkmeijer C.A.M., Assonov S.S., Elansky, N. F. , Röckmann, T, Sofiev, M. A. (2007), Atmospheric CO along the Trans-Siberian railroad and river Ob: Source identification using isotope analysis, *J. Atmos. Chem.*, 57 (2), pp. 135-152.
 - 7) Tarasova O.A., C. A. M. Brenninkmeijer, S.S Assonov, N. F. Elansky, T. Röckmann, M. Brass (2006), Atmospheric CH₄ along the Trans-Siberian Railroad (TROICA) and River Ob: Source Identification using Stable Isotope Analysis, *Atmospheric Environment*, 40, pp. 5617–5628.
 - 8) Tarasova O.A., Brenninkmeijer C.A.M. and Assonov S.S., Elansky N.F., Hurst D.F. (2005), Methane variability measured across Russia during TROICA expeditions, *Environmental Sciences*, 2(2-3), pp. 241 – 251.
 - 9) Oksana Tarasova, Gennady Kuznetsov, Ivan Zakharov (2004), Spectral windowing application to study the surface ozone variability over Europe, *J. Geophys.Res.*, 110, D19302, doi:10.1029/2004JD005599.