

Andreas Stohl: Curriculum vitae

Norwegian Institute for Air Research
Instituttveien 18, 2027 Kjeller
☎ +47 6389 8035 ✉ ast@nilu.no

Personal Data

Date and place of birth: 23 March 1968, Vienna
Nationality: Austria
Marital status: married to Beate D. Stohl
three children



Education and University Degrees

1986-1992	Studies of astronomy and meteorology at the University of Vienna, Austria
24 March 1992	Diploma degree (equivalent to a Master's degree) in meteorology at the University of Vienna, Austria
1992-1994	Postgraduate study "Technischer Umweltschutz (Environmental Protection by Technical Means)" at the Technical University of Vienna, Austria
1 July 1996	PhD degree in meteorology at the University of Vienna, Austria
June to December 1999	Seminar PROFIL (Professionell in der Lehre, professionalism in teaching) at the University of Munich, Germany
June 2000	Habilitation at the University of Natural Resources and Life Sciences, Vienna, Austria
Languages	German (native), English (excellent), Norwegian (good)

Employment Record

January 1992 to May 1995	Research assistant at <u>University of Vienna</u> , Austria
June 1995 to April 1997	Research assistant at <u>University of Agricultural Sciences</u> , Vienna, Austria
April to November 1996	Compulsory <u>military service</u> as a scientific expert on dispersion modeling, Vienna, Austria
December 1996 to May 1997	Contractual work with the <u>Central Institute of Meteorology and Geodynamics</u> , Vienna, Austria
May to July 1997	Research assistant at <u>University of Munich</u> , Germany
August 1997 to September 1999	Assistant professor (C1) at <u>University of Munich</u> , Germany
August 1999 to October 1999	Visiting scientist at <u>NOAA Aeronomy Laboratory</u> , Boulder, CO, USA
October 1999 to July 2003	Assistant professor (C1) at <u>Technical University of Munich</u> , Germany (no change of position, faculty was transferred from University of Munich to Technical University of Munich)
August 2001 to September 2001	Visiting scientist at <u>NOAA Aeronomy Laboratory</u> , Boulder, CO, USA
July 2003 to November 2004	Research Associate at <u>University of Colorado</u> , Boulder, CO, USA
Since December 2004	Senior scientist at <u>NILU - Norwegian Institute for Air Research</u> , Kjeller, Norway
2010	Guest professor at <u>University of Innsbruck</u>

Research Performance

Publication statistics	http://www.researcherid.com/rid/A-7535-2008
Publications	271 peer-reviewed publications in major scientific journals
Citations	<i>h</i>-factor of 57 (ISI Web of Science®) to 69 (Google Scholar). (Hirsch, J. E., An index to quantify an individual's scientific research output, PNAS 102 , 16569-16572, 2005). <i>m</i>-factor of 2.7-3.3 (<i>h</i> -factor divided by years since first publication) Stohl is listed as one of nine highly cited researchers in Norway: see http://highlycited.com
Fast moving front	The paper by Stohl and Trickl (1999) was identified by ISI Essential Science Indicators® to have triggered the number 1 in the Geosciences in their list of "Research fronts" for 5 bi-monthly periods between July 2005 and June 2006. An interview is available at http://www.esi-topics.com/fmf/2005/july05-AndreasStohl.html
Performance evaluation	In the Norwegian Research Council's evaluation of the Geosciences in Norway (2011), Stohl's group at NILU was awarded the top grade, given only to five other research groups out of 65 evaluated, see: http://www.forskningsradet.no/no/Artikkel/Evaluering_av_grunnleggende_forskning_i_geof_ag/1253954331612

Honors and Awards

2004	EUROTRAC-2 Young Scientist Award , a one-time prize given to five scientists under the age of 40 for their achievements during the EUREKA project <i>EUROTRAC-2</i> (www.gsf.de/eurotrac/winners.html)
2007	NOAA OAR Outstanding Scientific Paper Award from the <i>U.S.A. National Oceanic and Atmospheric Administration's (NOAA) Office for Oceanic and Atmospheric Research</i> for the paper by O. R. Cooper, A. Stohl, M. Trainer, et al. (2006)
2009	Certificate of Appreciation from the <i>World Meteorological Organization and the International Council for Science</i> for "valuable contributions that have helped make the International Polar Year 2007-2008 a success and an enduring example of international collaboration"
2009	Group Achievement Award from the <i>U.S.A. National Aeronautics and Space Administration (NASA)</i> for outstanding accomplishments in the framework of the ARCTAS campaign
2011+2012	2010 and 2011 Editor's Citations for Excellence in Refereeing for the <i>American Geophysical Union's (AGU) Journal of Geophysical Research-Atmospheres</i>
2012	NILU Communication Award 2011 for the interaction with the international media after the Fukushima nuclear power plant accident
2012	Recognition and Appreciation by the <i>Ozone Secretariat, United Nations Environment Programme</i> for "valuable contributions and efforts in the Scientific Assessment Panel"
2015	Advanced Grant of the <i>European Research Council</i>

Major Funded Research Projects

1993-1996	Pannonian Ozone Project (<i>POP</i>), funded by the Austrian Ministry of Science
1996-1997	Principal investigator (PI) of " <i>Accuracy of Trajectories As Determined From Meteorological Tracers</i> ", funded by the Jubiläumsfonds der Oesterreichischen Nationalbank
1996-1998	Vertical Ozone Transports in the Alps (<i>VOTALP</i>), an EU project

1998-2000	Subcontractor of <u>VOTALP II</u> , an EU project
2000-2002	Coordinator of <u>STACCATO</u> (Influence of Stratosphere-Troposphere Exchange in a Changing Climate on Atmospheric Transport and Oxidation Capacity), an EU project
2000-2003	PI of <u>CARLOTTA</u> (Climatology of Ascending Airstreams and their Relation to the Long-Range Transport of Trace Substances in the Atmosphere), a project within the German Atmospheric Research Program 2000 (AFO 2000)
2001-2005	PI within <u>ATMOFAST</u> (Long-range Transport and its Impact on the Trace-Gas Concentrations in the Free Troposphere over Central Europe), a project within the German Atmospheric Research Program 2000 (AFO 2000)
2001-2006	Coordinator of <u>NOXTRAM</u> (Determination of NO _x Source Strengths by Combining GOME Image Sequences and Atmospheric Transport Modeling), a project within the German Atmospheric Research Program 2000 (AFO 2000)
2001-2004	PI within <u>CONTRACE</u> (Convective Transport of Trace Gases into the Upper Troposphere Over Europe: Budget and Impact on Chemistry), a project within the German Atmospheric Research Program 2000 (AFO 2000)
2001-2004	PI within <u>PARTS</u> (Particles in the Upper Troposphere and Lower Stratosphere and their Role in the Climate System), an EU project
2003-2004	Coordination of aircraft activities in the framework of the Lagrangian experiment during <u>ICARTT</u> (International Consortium for Atmospheric Research on Transport and Transformation), funded by NOAA
2005-2006	PI of <u>MIRAGE-Forecasts</u> (Megacity Impacts on Regional and Global Environments – Forecasts and Analyses for the Mexico City Case Study), funded by the Research Council of Norway in their cooperation program with the United States (62 k€)
2005-2006	Project manager for Owen Cooper's (Univ. Colorado) stay at NILU, funded by the Leiv Eiriksson mobility program of the Research Council of Norway (10 k€)
2005	Subcontractor of DLR-IPA to support the <u>TROCCINOX</u> (Tropical Convection, Cirrus and Nitrogen Oxides Experiment) campaign (20 k€)
2005-2007	Subcontractor of DLR-IPA to support the <u>IMPACT</u> campaigns at Zugspitze with forecasts and transport model analyses (30 k€)
2005-2007	Subcontractor of IfT, Leipzig, to support the German UBA project <i>Determination of the Northern Hemispheric Background at the GAW station Zugspitze under special consideration of the remote transport of fine particulate matter</i> with transport model analyses (24 k€)
2006	PI of <u>MEGAPLUME</u> , a project with 13 flight hours on the German DLR Falcon aircraft, supported by EUFAR (European Fleet for Airborne Research)
2006-2008	PI of <u>FLEXPOP</u> (Further Development of a Lagrangian Particle Dispersion Model (FLEXPART) to Evaluate the Atmospheric Fate and Distribution of POPs), funded by the Research Council of Norway (300 k€)
2006-2010	PI of <u>WATER-SIP</u> (Where Norway Receives its Water from), funded by the Research Council of Norway (560 k€)
2007-2009	Coordinator of <u>POLARCAT-Norway</u> (Polar Study using Aircraft, Remote Sensing, Surface Measurements and Models, of Climate, Chemistry, Aerosols, and Transport), an International Polar Year sub-project funded by the Research Council of Norway (2.6 million € , 1.9 million € for NILU)
2007-2010	PI in <u>EUCAARI</u> (European Integrated Project on Aerosol, Cloud, Climate, and Air Quality Interaction), an Integrated Project coordinated by M. Kulmala (U. Helsinki) and funded by the European Commission (792 k€ for NILU , of which 50% from the EU, 25% from the

	Research Council of Norway, 25% NILU internal funds)
2007-2010	PI of <u>SUMSVAL</u> (A Comparison of Data from Atmospheric Research Stations at Summit, Greenland, and Zeppelin, Svalbard), funded by the Research Council of Norway (150 k€)
2007-2010	PI in <u>POCAHONTAS</u> (Polar Climate and Heat Transport), coordinated by S. Østerhus (Nansen Environmental and Remote Sensing Centre) and funded by the Research Council of Norway (100 k€ for NILU)
2007-2010	Contributor to <u>EARLINET-ASOS</u> (European Aerosol Research Lidar Network: Advanced Sustainable Observation System), a research infrastructure action funded by the European Commission (Stohl's part ca. 45 k€)
2007-2010	Co-supervisor of <u>The Effect of Changes in European Sulfur Emissions on the Water Cycle</u> , a 4-year PhD student project supervised jointly by T. Iversen, J. E. Kristjánsson, J. H. LaCasce, and A. Stohl; funded by University of Oslo strategic research program
2008-2010	Coordinator of <u>RAPSIFACT</u> (Study of Russian Air Pollution Sources and their Impact on Atmospheric Composition in the Arctic, using the TROICA railway carriage, data from Svalbard, and the FLEXPART transport model), funded by the Research Council of Norway (390 k€, 300 k€ for NILU)
2008-2011	PI in <u>MEGAPOLI</u> (Megacities: Emissions, Urban, Regional and Global Atmospheric Pollution and Climate Effects, and Integrated Tools for Assessment and Mitigation), funded by the European Commission (250 k€ for NILU, of which 75% from the EU)
2009-2012	PI in <u>SHIVA</u> (Stratospheric Ozone: Halogen Impacts in a Varying Atmosphere), funded by the European Commission (130 k€ for NILU, of which 75% from the EU)
2008-2011	Co-PI in <u>SAVAA</u> (Support to Aviation Services for Volcanic Ash Avoidance; coordinator and NILU main PI: Fred Prata), funded by the European Space Agency (280 k€ for NILU)
2010-2012	Coordinator of <u>SOGG-EA</u> (Sources of Greenhouse Gases in East Asia), funded by the Research Council of Norway (900 k€, 250 k€ for NILU)
2010-2012	Coordinator of <u>CLIMSLIP</u> (Climate Impacts of Short-Lived Pollutants in the Polar Regions), selected by the European Science Foundation and funded by several national research councils (901 k€, 371 k€ for NILU)
2010-2011	Work with the AMAP (Arctic Monitoring and Assessment Program) <u>Expert Group on Short-Lived Climate Forcers</u> , funded by Norwegian Environmental Protection Agency (100 k€)
2010-2015	Deputy leader of <u>CRAICC</u> (Cryosphere-Atmosphere Interactions in a Changing Arctic Climate), a Nordic Center of Excellence (4.5 M€); leader Markku Kulmala
2011-2013	PI in <u>EARTHCLIM</u> (An Integrated Earth System Approach to Explore Natural Variability and Climate Sensitivity), coordinated by Helge Drange and funded by the Norwegian Research Council (5 M€, 200 k€ for NILU)
2011-2014	Co-PI in <u>GHG-Nor</u> (Greenhouse Gases in the North: From Local to Regional Scale), led by C.L. Myhre and funded by the Research Council of Norway (710 k€, 300 k€ for Stohl's group)
2011-2014	Coordinator of <u>ECLIPSE</u> (Evaluating the Climate and Air Quality Impacts of Short-Lived Pollutants), funded by the European Commission (3.8 M€, 0.7 M€ for Stohl's group)
2013-2015	Subcontracting PI of „Bewertung und Prognose der Weiterentwicklung eines radiologisch relevanten Ereignisses in einer kerntechnischen Anlage mit Hilfe der Abschätzung von Quelltermen auf der Grundlage von Messdaten in der Umgebung“, coordinated by S. Thummerer and funded by the German Radiation Protection Agency (265 k€ for NILU)

2013-2015	WP leader in <u>VAST</u> (Volcanic Ash Strategic Initiative Team), funded by the European Space Agency
2013-2016	Co-PI of <u>MOCA</u> (Methane Emissions from the Arctic Ocean to the Atmosphere: Present and Future Climate Effects), coordinated by C.L. Myhre and funded by the Norwegian Research Council
2014-2017	PI of <u>EVA</u> (Earth System Modelling of Climate Variations in the Anthropocene), coordinated by Christoph Heinze and funded by the Norwegian Research Council (560 k€ for NILU)
2014-2016	PI of <u>SLICFONIA</u> (Emissions of Short-Lived Climate Forcers Near and in the Arctic), funded by the Norwegian Research Council (500 k€ for NILU)
2014-2018	Director of the <u>Nordic Center of Excellence eSTICC</u> (eScience Tools for Investigating Climate Change at High Northern Latitudes), funded by Nordforsk (3.1 M€, ca. 1 M€ for NILU)
2014-2017	PI in <u>STRADI</u> (Source-Term Determination of Radionuclide Releases by Inverse Atmospheric Dispersion Modelling), a Norway Grant project coordinated by Václav Šmídl (ca. 800 k€, 400 k€ for NILU)
2014-2017	PI in “The Role of Short-Lived Climate Forcers in the Global Climate Regime”, coordinated by Steffen Kallbekken and funded by the Norwegian Research Council (ca. 120 k€ for NILU)
2015-2020	Advanced Grant (personal to Stohl) from the European Research Council: <u>COMTESSA</u> (Camera Observation and Modelling of 4D Tracer Dispersion in the Atmosphere) (2.8 M€ from EU plus 0.93 M€ from Norwegian Research Council), under contract negotiation
2015-2019	Co-PI in <u>ICOS-Norway</u> (Integrated Carbon Observation System - Norway), coordinated by T. Johannessen (ca. 10 M€), under contract negotiation

Other Project-Related Functions

Since 1999	<u>MOZAIC</u> Co-Investigator
2001	Consultant to the “Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization” (CTBTO), United Nations, Vienna
1999-2003	PI in EUROTRAC-2 projects <u>TOR-2</u> , <u>TROPOSAT</u> , and <u>EXPORT-E2</u>
1997-2003	PI of a research project at the European Centre for Medium-Range Weather Forecasts (<u>Validation of Trajectory Calculations</u>)
2003-2006	Member of the Scientific Steering Committee of <u>IGAC-ITCT</u> (International Global Atmospheric Chemistry Project – Intercontinental Transport and Chemical Transformation)
2005-2010	Coordinator of <u>POLARCAT</u> (Polar study using aircraft, remote sensing, surface measurements and models, of climate, chemistry, aerosols, and transport, www.polarcat.no), an International Polar Year core activity that is also endorsed by AMAP, IGAC, iLEAPS, and SPARC

Community Services

2002-2003	Spokesman for the BMBF-funded <u>German Atmospheric Research Program 2000</u>
2003-2004	Associate editor of the <u>Journal of Geophysical Research</u>

Since 2003	Editor of <i>Atmospheric Chemistry and Physics</i>
Since 2007	Member of the editorial advisory board of <i>Atmospheric Pollution Research</i>
2003-2012	Convener of the annual session “Vertical and long-range transport of trace gases in the troposphere” at the <i>General Assembly of the European Geosciences Union</i>
2005	Co-convener of two sessions (“Sources and Distributions of Tropospheric Trace Gases in the Midlatitude Northern Hemisphere“ and „Climate Change, Biomass Burning, and the Boreal Zone“) at the <i>American Geophysical Union’s Fall Meeting</i>
2006	Co-convener of the session “Long-range transport and chemical transformations” at the <i>CACGP (Commission on Atmospheric Chemistry and Global Pollution) Symposium</i> , Cape Town, South Africa, 18-23 September 2006
2007	Organizer of a conference on <i>Short-lived pollutants and the Arctic climate</i>
2008	Convener of the session „Polar and oceanic regions – relating local and regional processes to the larger scale” at the <i>10th IGAC 2008 Conference: Bridging the Scales in Atmospheric Chemistry: Local to Global</i>
2009	Convener of the session “Short-lived pollutants in the polar regions: Sources, transport, impacts” at the <i>General Assembly of the European Geosciences Union</i>
2010	Head convener of the session „Troposphere and stratosphere dynamics and processes and their links with climate“ at the <i>International Polar Year Science Conference 2010</i>
Since 2012	Co-convener of the session „Geoscience processes related to Fukushima nuclear accident“ at the <i>General Assembly of the European Geosciences Union</i>
2006	Contributing author to the <i>3rd AMAP (Arctic Monitoring and Assessment Programme) Assessment Report</i>
2006-2007	Coordinating lead author for the <i>UNECE Taskforce on Hemispheric Transport of Air Pollutants Interim Report</i>
2009-2010	Co-author of the <i>2010 Scientific Assessment of Ozone Depletion</i>
From 2009	Chair of the <i>AMAP Expert Group on Short-Lived Climate Forcers</i> , with has produced two assessments (2011 and 2015)
2010-2015	Member of the <i>International Commission on Atmospheric Chemistry and Global Pollution</i> (http://www.icacgp.org/)
Project reviewing	<p>European Research Council (Consolidator Grants, panel PE10 on Geosciences): Panel member in 2013, panel chair in 2015</p> <p>Academy of Finland, Canadian Foundation for Climate and Atmospheric Sciences, Canadian Space Agency, Council of the Earth and Life Sciences (Netherlands), COST secretariate of the European Science Foundation, Department for Environment – Food and Rural Affairs (DEFRA, U.K.), European Commission, Deutsche Forschungsgemeinschaft (Germany), Helmholtz-Gemeinschaft Deutscher Forschungszentren e.V. (Germany), National Aeronautics and Space Administration (NASA, USA), National Oceanic and Atmospheric Administration (NOAA, USA), National Research Foundation of South Africa, National Science Foundation (USA), National Science Centre (Poland), Natural Environment Research Council (U.K.), Netherlands Organisation for Scientific Research, Research Commission of ETHZ Zürich, Space Research Organization of the Netherlands, Swiss National Science Foundation</p>

Reviewing for scientific journals	Advances in Geosciences, Advances in Meteorology, Advances in Science and Research, Atmosfera, Atmospheric Chemistry and Physics, Atmospheric Environment, Chemometrics and Intelligent Laboratory Systems, Climate Research, Contributions to Atmospheric Physics, Environmental Fluid Mechanics, Environmental Science and Pollution Research, Environmental Chemistry, Environmental Science and Technology, Geophysical Research Letters, Geophysical Monographs, International Journal of Climatology, Journal of Agricultural, Biological and Environmental Statistics, Journal of Atmospheric Chemistry, Journal of the Air & Waste Management Association, Journal of Applied Meteorology, Journal of Atmospheric Chemistry, Journal of Climate, Journal of Environmental Radioactivity, Journal of Geophysical Research, Journal of Hydrometeorology, Jökull, Meteorology and Atmospheric Physics, Nature Geosciences, Naturwissenschaften, Physics and Chemistry of the Earth, Quarterly Journal of the Royal Meteorological Society, Tellus, The Science of the Total Environment, Water Resources Research, Wetter und Leben
Model development	Initiator and main author of the community models FLEXTRA and FLEXPART, which are currently used at maybe more than 100 institutions from more than 20 countries
Memberships	Österr. Gesellschaft für Meteorologie, European Geosciences Union