

**PERSONAL INFORMATION**

Family name, first name: STOHL, Andreas (male)
 Researcher unique identifier(s): Researcher ID: A-7535-2008
ORCID: 0000-0002-2524-5755
 Nationality: Austria, Date of birth: 23 March 1968
 Marital status: married, three children

**EDUCATION**

2000 Habilitation, University of Natural Resources and Life Sciences, Vienna, Austria
 1996 PhD, Faculty of Natural Sciences, University of Vienna, Austria
 1992 Diploma in Meteorology, Faculty of Natural Sciences, University of Vienna, Austria
 1986-1992 Parallel studies of Astronomy and Meteorology, University of Vienna, Austria

CURRENT POSITION

From 2020 Full Professor, University of Vienna, Austria

PREVIOUS POSITIONS

2004 – 2020 Senior scientist and group leader, NILU – Norwegian Institute for Air Research, Norway
 2010 Guest Professor, University of Innsbruck, Austria
 2003 – 2004 Research Associate, University of Colorado, Boulder, CO, USA
 1997 – 2003 Assistant professor (C1), Technical University of Munich, Germany
 1995 – 1997 Research Assistant, University of Natural Resources and Life Sciences, Vienna, Austria
 1996 – 1996 Compulsory military service, partly as an expert on dispersion modelling, Austria
 1992 – 1995 Research Assistant, University of Natural Resources and Life Sciences, Vienna, Austria

FELLOWSHIPS AND AWARDS

2015 **Advanced Grant** of the *European Research Council*
 2014-2018 **ISI Highly Cited Researcher** (<https://hcr.clarivate.com/>); one of only three researchers in Norway who were listed in all the five years of 2014-2018
 2012 **Recognition and Appreciation** by the *Ozone Secretariate, United Nations Environment Programme* for “valuable contributions and efforts in the Scientific Assessment Panel”
 2011+2012 **Editor’s Citations for Excellence in Refereeing** for the *American Geophysical Union’s (AGU) Journal of Geophysical Research-Atmospheres*
 2009 **Group Achievement Award** from the *U.S.A. National Aeronautics and Space Administration (NASA)* for outstanding accomplishments in the framework of ARCTAS
 2009 **Certificate of Appreciation** from the *World Meteorological Organization and the International Council for Science* for “valuable contributions that have helped make the International Polar Year 2007-2008 a success and an enduring example of international collaboration”
 2007 **NOAA OAR Outstanding Scientific Paper Award** from the *U.S.A. National Oceanic and Atmospheric Administration’s (NOAA) Office for Oceanic and Atmospheric Research* for the paper by O. R. Cooper, A. Stohl, M. Trainer, et al. (2006)
 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 *EUROTRAC-2* (www.gsf.de/eurotrac/winners.html)

COMMISSIONS OF TRUST (selected list)

2019 ERC evaluation panel activity
 2015 + 2017 **Chair of ERC (European Research Council) Evaluation Panel PE10 (Geosciences) for Consolidator Grants**
 2013 Member, ERC Evaluation Panel PE10 (Geosciences) for Consolidator Grants

2009-2019	Chair of Expert Group on Short-Lived Climate Forcers , Arctic Monitoring and Assessment Programme (AMAP); group has already delivered two AMAP assessment reports.
since 2015	Member of the Scientific Steering Committee, Air Pollution in the Arctic: Climate, Environment and Societies (PACES)
2010-2014	Member of the Scientific Steering Committee, International Commission on Atmospheric Chemistry and Global Pollution
2009 – 2010	Co-author of the 2010 Scientific Assessment of Ozone Depletion
2006 – 2007	Coordinating lead author for the UNECE Taskforce on Hemispheric Transport of Air Pollutants Interim Report
2003 – 2006	Coordinator of POLARCAT (Polar Study Using Aircraft, Remote Sensing, Surface Measurements and Models, of Climate, Chemistry, Aerosols, and Transport), an International Polar Year core activity that was also endorsed by AMAP, IGAC, iLEAPS, and SPARC
2003 – 2017	Co-editor of EGU journal Atmospheric Chemistry and Physics
2003 – 2004	Associate Editor of Journal of Geophysical Research
2002 – 2003	Spokesperson for the German Atmospheric Research Programme 2000
2000 –	Reviewer and/or review panel member for at least 30 national research funding agencies in more than 10 countries (e.g., NSF, NASA, NOAA, DFG, SNCF, NERC, Finnish Academy)
1999 –	Reviewer for >70 international scientific journals

Research interests

Andreas Stohl studies and models transport processes in the atmosphere. He is the main developer of the open-source Lagrangian models FLEXTRA and FLEXPART, started in the mid-1990s. From the start of his career, he was a **strong proponent of the open-source movement**, making code, data and research results openly available to the public. As a result, FLEXPART (see www.flexpart.eu) nowadays is **one of the most widely used models** in the atmospheric sciences, with a community of probably many more than 100 user groups worldwide. The model is used for research as well as for operational applications. FLEXPART is the official atmospheric transport model for emergency preparedness in Austria, Belgium and Switzerland and the United Nations' Comprehensive Nuclear Test Ban Treaty Organization (CTBTO). Two articles describing the model in 1998 and 2005 (Stohl et al., 1998, 2005) have together received more than 1800 citations according to Google Scholar, and a new article describing recent developments is in preparation.

In earlier years, Andreas Stohl was interested in ozone formation, exchange of air between the stratosphere and troposphere and intercontinental pollution transport. His discovery of transport of North American pollution ozone to Europe (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 five bimonthly periods between July 2005 and June 2006 (<http://www.esi-topics.com/fmf/2005/july05-AndreasStohl.html>). In the last 12 years, Stohl has become increasingly interested in pollution and climate of the **polar regions**, on which he has published several highly cited papers. These include the discovery of the importance of smoke from wildfires (Stohl et al., 2007) and flaring of gas associated with oil production in Russia as important pollution sources for the Arctic (Stohl et al., 2013).

During the last ten years, Stohl has developed and used tools for **inverse estimation of emission sources** (e.g., of volcanic ash or radionuclides). For instance, Stohl et al. (2011) were the first to use inverse modelling for determining the emissions of volcanic ash, a technique that has now been introduced operationally at many emergency response agencies responsible for volcanic ash forecasts. His study of radionuclide emissions from the damaged Fukushima nuclear power plant (Stohl et al., 2012) raised international media attention after being highlighted in Nature. Stohl also uses inverse modelling for determination of greenhouse gas emissions (Stohl et al., 2009), again leading to open-source code (<http://flexinvert.nilu.no/flexinvert.html>). He is leading the integration of greenhouse gas observations into a modelling framework in the national ICOS (Integrated Carbon Observation System) project (<https://no.icos-cp.eu/>).

Turbulence is another aspect of atmospheric transport, in which Stohl is interested. In his Advanced Grant project COMTESSA (<https://comtessa-turbulence.net/so2-release/>), he is studying turbulent dispersion in novel tomography experiments involving infrared and ultraviolet cameras observing artificial tracer releases. Eddy covariance measurements are used to constrain Large Eddy Simulations of the tracer releases.

Stohl is also interested in **climate research** and has recently coordinated (2011-2015) an EU project on short-lived climate forcers (Stohl et al., 2015). Another research field is **water in the atmosphere**. For instance, his method of identifying the evaporative sources of water vapour and of precipitation (Stohl and James, 2004, 2005) is recently receiving large attention. This development was followed by studies of the 3D transport of water vapour in atmospheric rivers associated with cyclones (Stohl et al., 2008; Sodemann and Stohl, 2013), a co-authored review paper on the oceanic and terrestrial sources of continental precipitation (Gimeno et al., 2012) and a contribution to a forthcoming major book on atmospheric rivers.

A very new research field for Stohl is the **interpretation of ice core data** using atmospheric transport modelling (McConnell et al., 2018, 2019).