Prof. Dr. Andreas Wahner

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Curriculum vitae

1975 - 1977	Vordiplom (Chemistry) Ruhr-Universität Bochum
1981	Diplom (Chemistry) Ruhr-Universität Bochum
11.May 1984	Ph.D. (Chemistry) Ruhr-Universität Bochum
1983 - 1985	research scientist at Fraunhofer Institut für Toxikologie und Aerosolforschung, Hannover
1985 - 1988	research associate at CIRES (Cooperative Institute for Research in Environmental Sciences, University Colorado) and in the Atmospheric Chemical Kinetics Group (Dr. C. Howard und Dr. A. R. Ravishankara) at NOAA ERL (National Oceanic and Atmospheric Administration, Environmental Research Laboratories) in Boulder, Colorado, USA
1988 - 2001	senior scientist at the Institut für Atmosphärische Chemie (ICG-3) of the Forschungszentrum Jülich group leader: "Heterogeneous Chemistry"
2001	Habilitation Meteorology at University Cologne
2001 - 2010	Director; Institut für Chemie und Dynamik der Geosphäre; ICG-2: Troposphäre, Research Center Jülich, Germany
2002 - present	University full professor for Meteorologie at University Cologne
2007 - present	Excecutive director at Rheinisches Institut für Umweltforschung, EURAD, at University Cologne
2010 - present	Director: Institut für Energie und Klimaforschung, IEK-8: Troposphäre, Research Center Jülich
2014 - present	Vice President, IAGOS AISBL In-Service Aircraft for a Global Observing System, Association Internationale sans but lucratif

Activities in the scientific community, science politics, honors, awards

1991	Contributor, Scientific Assessment of Ozone Depletion:, Chapter 11, Ultraviolet Radiation Changes, WMO, Report No. 25
1994	Contributor, Climate Change, Chapter 2, Other Trace Gases and Atmospheric Chemistry, IPCC, 1995
1994	Lead author, Scientific Assessment of Ozone Depletion:, Chapter 11, Subsonic and Supersonic Aircraft Emissions, WMO, Report No. 37, 1995
1997	Author, European Scientific Assessment of the Atmospheric Effects of Aircraft Emissions: EC, 1997
1998	Review Editor, IPCC Special Report on Aviation and the Global Atmosphere, Chapter 2, Impacts of Aircraft Emissions on Atmospheric Ozone, IPCC
2003 - 2009	Editor of the Journal of Atmospheric Chemistry, Springer
2003 - 2009	Member of the editorial board of Atmospheric Research, Elsevier
2008 - present	Member of the International Advisory Board of the College of Environmental Science and Engineering, Peking University, China
2008 - 2012	Member of the „Nordrheinwestfälischen Energie- und Klimarat“
2009 - 2012	Member of the Scientific Advisory Board of the Leibniz-Institut für Troposphärenforschung e.V. (IfT) / Berufung zum Mitglied im wissenschaftlichen Beirat des IfT
2010	Member of the European Volcanic Ash Cloud Experts Group (EVACEG)
2010 - present	Member of the Advisory Committee of Research Center for Environmental Changes, Academia Sinica, Taipei, Taiwan
2010 - 2015	Chairperson of the scientific steering committee (WLA) research aircraft HALO

2012 - 2013	Chairperson of the Scientific and Technical Council, Forschungszentrum Jülich GmbH
2012 - 2014	Chairperson of the Scientific and Technical Council of all Helmholtz-Centers, Helmholtz Association, Berlin
2012 - 2016	Chairperson of the Scientific Advisory Board of the Leibniz-Institut für Troposphärenforschung e.V. (TROPOS)
2014 - present	Guest Professor of Peking University (Beijing, China)
2015	Awarding Dr. h.c. by the Tibilisi State University (TSU), Tibilisi, Georgien
2016 – present	Member of the Scientific Advisory Board Zeppelin NT, ZLT Zeppelin Luftschifftechnik GmbH & Co KG
2017 – present	Member of the Kuratorium of the Leibniz-Institut für Troposphärenforschung e.V. (TROPOS)

Research fields

- Air pollution and climate, chemistry and climate interaction
- Global and regional modelling of atmospheric chemistry, air pollution forecast
- Atmospheric chemistry: Laboratory and field investigations of the tropospheric photo chemistry; oxidation capacity of the troposphere; elementary reactions of the hydroxyl radical.
- Heterogeneous chemistry of nitrogen compounds and radicals in the troposphere.
- Field and simulations experiments of the tropospheric photochemistry. Impact of anthropogenic and biogenic emissions on the self-cleaning of the troposphere and chemistry climate interaction
- Climate and air quality effects of multi component aerosols, chemistry climate models; Mitigation and reduction strategies to reduce air pollution in a changing climate

Selected Publications

Statistics: Total number of Articles 131 Sum of the Times Cited: 3721 Last Updated: 01/01/2017
Average Citations per Article: 28.40 h-index: 35

- Rohrer, F., K. D. Lu, A. Hofzumahaus, B. Bohn, T. Brauers, C. C. Chang, H. Fuchs, R. Haseler, F. Holland, M. Hu, K. Kita, Y. Kondo, X. Li, S. R. Lou, A. Oebel, M. Shao, L. M. Zeng, T. Zhu, Y. H. Zhang, and **A. Wahner** (2014), Maximum efficiency in the hydroxyl-radical-based self-cleansing of the troposphere, *Nature Geoscience*, *7*(8), 559-563.
- Li, X., F. Rohrer, A. Hofzumahaus, T. Brauers, R. Haseler, B. Bohn, S. Broch, H. Fuchs, S. Gomm, F. Holland, J. Jager, J. Kaiser, F. N. Keutsch, I. Lohse, K. D. Lu, R. Tillmann, R. Wegener, G. M. Wolfe, T. F. Mentel, A. Kiendler-Scharr, and **A. Wahner** (2014), Missing Gas-Phase Source of HONO Inferred from Zeppelin Measurements in the Troposphere, Science, 344(6181), 292-296.
- Donahue, N. M., K. M. Henry, T. F. Mentel, A. Kiendler-Scharr, C. Spindler, B. Bohn, T. Brauers, H. P. Dorn, H. Fuchs, R. Tillmann, **A. Wahner**, H. Saathoff, K. H. Naumann, O. Mohler, T. Leisner, L. Muller, M. C. Reinnig, T. Hoffmann, K. Salo, M. Hallquist, M. Frosch, M. Bilde, T. Tritscher, P. Barmet, A. P. Praplan, P. F. DeCarlo, J. Dommen, A. S. H. Prevot, and U. Baltensperger (2012), Aging of biogenic secondary organic aerosol via gas-phase OH radical reactions, Proceedings of the National Academy of Sciences of the United States of America, 109(34), 13503-13508.
- Fuchs, H., A. Hofzumahaus, F. Rohrer, B. Bohn, T. Brauers, H. P. Dorn, R. Haseler, F. Holland, M. Kaminski, X. Li, K. Lu, S. Nehr, R. Tillmann, R. Wegener, and **A. Wahner** (2013), Experimental evidence for efficient hydroxyl radical regeneration in isoprene oxidation, Nature Geoscience, 6(12), 1023-1026.
- Hofzumahaus, A., F. Rohrer, K. D. Lu, B. Bohn, T. Brauers, C. C. Chang, H. Fuchs, F. Holland, K. Kita, Y. Kondo, X. Li, S. R. Lou, M. Shao, L. M. Zeng, **A. Wahner**, and Y. H. Zhang (2009), Amplified Trace Gas Removal in the Troposphere, Science, 324(5935), 1702-1704.
- Kiendler-Scharr, A., J. Wildt, M. Dal Maso, T. Hohaus, E. Kleist, T. F. Mentel, R. Tillmann, R. Uerlings, U. Schurr, and **A. Wahner** (2009), New particle formation in forests inhibited by isoprene emissions, Nature, 461(7262), 381-384.