

Curriculum vitae

Silvia Henning

Address

Name: Silvia Henning
Work address: Leibniz-Institute for Tropospheric
Research
Permoserstrasse 15
DE-04318 Leipzig
Phone: +49 341 235 34 33
Fax: +49 341 235 24 61
email: silvia.henning@tropos.de



Working experience

- since 02/2005 Postdoc at Leibniz-Institute for Tropospheric Research (IfT) Leipzig
Topic: Setup and operation of a portable version of the Leipzig Aerosol
Cloud Interaction Simulator (LACIS)
- 04/2003–12/2004 Postdoc in the group of Merete Bilde at the University of Copenhagen,
Denmark (first year supported by the Swiss National Science Foundation)
Topic: Investigation of organic aerosol particles with respect to their
cloud activation properties
- 01/1999–03/2003 Scientist at the Paul Scherrer Institut (Villigen), Switzerland.
Topic: Partitioning of the atmospheric aerosol between aerosol and cloud
phase at the high-alpine site Jungfrauoch (3454 m asl, Switzerland),
chemical composition of the water-soluble fraction of the high-alpine
aerosol.

Education

- 10/2002 PhD Natural Sciences
- 01/1999–10/2002 PhD student at the Paul Scherrer Institut and University of Bern, Swit-
zerland
Advisor: Dr. Urs Baltensperger
- 12/1998 Graduated as Diplom Meteorologin
- 11/1997–11/1998 Diploma work at Institute for Tropospheric Research, Leipzig, Germany
Advisor: Dr. Alfred Wiedensohler
- 10/1993–12/1998 Diploma student in Meteorology, University of Leipzig, Germany

Field campaigns

- 03/2004–04/2004 Participation in CLACE-3 campaign at the Jungfrauoch, Switzerland; Investigation of the high-alpine ambient aerosol with respect to their activation properties using a thermal gradient diffusion chamber
- 01/1999–10/2002 Maintaining aerosol measurements at the high-alpine Global Atmosphere Watch (GAW) station at Jungfrauoch, Switzerland; Several intensive measuring campaigns at Jungfrauoch, e.g. CLACE 2000
- 05/1997–08/1997 ACE-2 participant, Mt. Fóia (902 m asl), Portugal

Peer Reviewed Papers

Coen, M. C., Weingartner, E., Nyeki, S., Cozic, J., Henning, S., Verheggen, B., Gehrig, R. and Baltensperger, U. (2007) Long-term trend analysis of aerosol parameters at the high alpine site Jungfrauoch. *Journal of Geophysical Research* submitted.

Henning, S., Rosenørn, T., D'Anna, B., Gola, A. A., Svenningsson, B. and Bilde, M. (2005) Cloud droplet activation and surface tension of mixtures of slightly soluble organics and inorganic salt. *Atmospheric Chemistry and Physics* 5, 575–582.

Hinz, K. P., Trimborn, A., Weingartner, E., Henning, S., Baltensperger, U. and Spengler, B. (2005) Aerosol single particle composition at the Jungfrauoch. *Journal of Aerosol Science* 36, 123–145.

Coen, M. C., Weingartner, E., Schaub, D., Hueglin, C., Corrigan, C., Henning, S., Schwikowski, M. and Baltensperger, U. (2004) Saharan dust events at the Jungfrauoch: detection by wavelength dependence of the single scattering albedo and first climatology analysis. *Atmospheric Chemistry and Physics* 4, 2465–2480.

Henning, S., Bojinski, S., Diehl, K., Ghan, S., Nyeki, S., Weingartner, E., Wurzler, S. and Baltensperger, U. (2004) Aerosol partitioning in natural mixed-phase clouds. *Geophysical Research Letters* 31, doi:10.1029/2003GL019025.

Sorjamaa, R., Svenningsson, B., Raatikainen, T., Henning, S., Bilde, M. and Laaksonen, A. (2004) The role of surfactants in Köhler theory reconsidered. *Atmospheric Chemistry and Physics* 4, 2107–2117.

Henning, S., Weingartner, E., Schwikowski, M., Gäggeler, H. W., Gehrig, R., Hinz, K.-P., Trimborn, A., Spengler, B. and Baltensperger, U. (2003) Seasonal variation of the water soluble ions of the aerosol at the high-alpine site Jungfrauoch (3580 m asl). *J. Geophys. Res.* 108, 10.1029/2002JD002439.

Nessler, R., Bukowiecki, N., Henning, S., Weingartner, E., Calpini, B. and Baltensperger, U. (2003) Simultaneous dry and ambient measurements of aerosol size distributions at the Jungfrauoch. *Tellus* 55B, 808–819.

Henning, S., Weingartner, E., Schmidt, S., Wendisch, M., Gäggeler, H. W. and Baltensperger, U. (2002) Size-dependent aerosol activation at the high-alpine site Jungfraujoch (3580 m asl). *Tellus* 54B, 82–95.

Silva, A. M., Bugalho, M. L., Costa, M. J., von Hoyningen Huene, W., Schmidt, T., Heintzenberg, J. and Henning, S. (2002) Aerosol optical properties from columnar data during ACE-2 at the south coast of Portugal. *J. Geophys. Res.* 107, 10.1029/2002JD002196.

Conference Proceedings

Henning, S., Bojinski, S., Diehl, K., Ghan, S., Nyeki, S., Weingartner, E., Wurzler, S. and Baltensperger, U. (2003a) Investigation of mixed-phase clouds at the Jungfraujoch. *J. Aerosol Sci.* 34 Suppl. 1, 975–976. European Aerosol Conference, Madrid, September 1-5, Talk.

Henning, S., Lugauer, M., Weingartner, E., Nyeki, S., Buchmann, B., Gäggeler, H. W. and Baltensperger, U. (1999) Influence of synoptic weather conditions on the aerosol size distribution at the high-alpine site Jungfraujoch. *J. Aerosol Sci.* 30 Suppl. 1, 579–580. European Aerosol Conference, Prague, September 6-10, Talk.

Henning, S., Rosenørn, T., Svenningsson, B. and Bilde, M. (2003b) Activation behavior of internal mixtures of slightly soluble organics. *J. Aerosol Sci.* European Aerosol Conference, Madrid, September 1-5, Poster.

Henning, S., Rosenørn, T., Weingartner, E. and Baltensperger, U. (2004a) Activation behaviour of ambient aerosol (Jungfraujoch 3580 m asl). *J. Aerosol Sci.* 35 Suppl. 1, 67–68. European Aerosol Conference, Budapest, September 6-11, Talk.

Henning, S., Rosenørn, T., Weingartner, E., Baltensperger, U. and Bilde, M. (2004b) Ambient aerosol activation measurements (Jungfraujoch, 3580 m asl). *The Fifth informal conference on reaction kinetics and atmospheric chemistry* Helsingør, June 11 - 13, Poster.

Henning, S., Svenningsson, B. and Bilde, M. (2003c) CCNC measurements of binary and ternary mixtures of slightly soluble organics with inorganic salts. *NOSA Aerosol Symposium* Copenhagen, November 13-14, Poster.

Henning, S., Weingartner, E. and Baltensperger, U. (2002a) Long-term measurements of the aerosol chemical composition at the Jungfraujoch. *Conference Proceedings 182nd SAS Annual Meeting*, 68–69. Workshop on 'Atmospheric Research at the Jungfraujoch and in the Alps', Davos, Switzerland, September 20, Poster.

Henning, S., Weingartner, E., Baltensperger, U. and Gäggeler, H. W. (2000) Investigation of the interaction between aerosol and clouds at the Jungfraujoch (3580 m asl). *J. Aerosol Sci.*, 31 Suppl. 1, 13–14. European Aerosol Conference, Dublin, September 3-8, Talk.

Henning, S., Weingartner, E., Schmidt, S., Gäggeler, H. W. and Baltensperger, U. (2001a) Aerosol-cloud interaction at the high-alpine site Jungfraujoch (3580 m asl) - experimental data and modelling results. *European Geophysical Society XXVI General Assembly* Nice, March 25-30, Talk.

Henning, S., Weingartner, E., Schmidt, S., Wendisch, M. and Baltensperger, U. (2001b) Results from simultaneous measurements of aerosol and cloud parameters at the Jungfraujoch. *J. Aerosol Sci.* 32 Suppl. 1, 975–976. European Aerosol Conference, Leipzig, September 3-7, Talk.

Henning, S., Weingartner, E., Wurzler, S., Diehl, K. and Baltensperger, U. (2002b) Aerosol scavenging for different ambient conditions at the Jungfraujoch. *Conference Proceedings 182nd SAS Annual Meeting*, 66–67. Workshop on 'Atmospheric Research at the Jungfraujoch and in the Alps', Davos, Switzerland, September 20, Poster.

Henning, S., Weingartner, E., Wurzler, S., Diehl, K. and Baltensperger, U. (2002c) Experimental data of aerosol particle and cloud properties for warm, cold and mixed-phase clouds in comparison with modeling results. *CD-ROM 11th Conference on Cloud Physics*, Ogden, Utah, June 3-7, Talk.

Henning, S., Weingartner, E., Wurzler, S., Diehl, K. and Baltensperger, U. (2002d) Measurement and modeling of aerosol particle and cloud properties for warm, cold and mixed-phase clouds at the Jungfraujoch (3580 m asl). In *IAC 2002*, vol. S1, pp. 57–58, Taipei, Taiwan.

Henning, S., Weingartner, E., Wurzler, S., Diehl, K. and Baltensperger, U. (2003d) Aerosol partition in mixed-phase clouds at the high-alpine site Jungfraujoch (3580 m asl). *European Geophysical Society XXVIII General Assembly Nice*, April 6-11, Talk.

Henning, S., Weise, D., Birmili, W., Wiedensohler, A. and Covert, D. S. (1998) The particle size distribution and total number concentration for different air masses at the south-western edge of Europe. *J. Aerosol Sci.* 29 Suppl. 1, 273–274. International Aerosol Conference, Edinburgh, September 12-18, Poster.

Henning, S., Wex, H., Stratmann, F. and LExNo-Team (2007) CCN properties of coated soot particles - results from LExNo. In *EGU General Assembly 2007*, Vienna. EGU2007-A-06669, accepted.

Theses

Henning, S. (2002) *Aerosol and Cloud Microphysics at the High-Alpine Site Jungfraujoch (3580 m asl)*. Phd, University of Berne, Switzerland.

Henning, S. (1998) *Aerosolgrößenverteilungen im Übergangsbereich zwischen freier Troposphäre und planetarer Grenzschicht*. Diplom, University of Leipzig, Germany.

6. März 2007