

Current Position

Senior scientist, Department for Atmospheric and Climate Research
NORWEGIAN INSTITUTE FOR AIR RESEARCH (NILU)

Associate Professor, Department of Physics, UNIVERSITY OF OSLO

Contact details

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Personalia

Born: 20. August 1967
Nationality: Norwegian
Sex: Female
Children: 4 children, born 1999 - 2004
Languages: Norwegian (native), English

Education

Dr. Scient, 2004, at the Department of Physics, University of Oslo. Title of the thesis:
Reevaluation and statistical analysis of stratospheric ozone measurements in Southern
Norway. Historical and recent ozone records from Dobson spectrophotometers.

Cand. Scient., 1993, in the field of atmospheric physics at the Department of Physics,
University of Oslo.

Cand. Mag., 1991, at the Department of Physics, University of Oslo

Key qualification and research interests:

- Computer programming (Fortran, C, Pearl)
 - Formation and transport of atmospheric aerosols, with main focus on SOAs
 - Chemistry Transport Modelling
 - Radiative Transfer Modelling
 - Total ozone measurements and analysis
 - Studies of optical properties of aerosols and ice crystals
 - Retrieval and processing of satellite data
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Experience:

- October 2000 - present; Scientist, Department for Atmospheric and Climate Research (www.nilu.no)
- 1998: Participated in the SHEBA (Surface Heat Budget of the Arctic Ocean) project in the Beaufort Sea. Responsible for running HRPT satellite receiving station, balloon launches and performing data quality control.
- 1995 – 1998: Secretary and accountant of the Norwegian Physical Society
- 1995 – 1997: Part time lectured in General Physics at the University of Oslo
- 1996: Part time engaged to built the Access database for the 27th International Physics Olympiad in Oslo
- 1994 – 1995: Exchange visitor at the Geophysical Institute, University of Alaska Fairbanks (USA)
- 1992: Worked with the planning and setting up of "Deilig er den himmel blå" – an exhibition on environmental issues (ozone, UV radiation and greenhouse effect) in the Norwegian Museum of Science and Technology (NTM)

LIST OF PUBLICATIONS

TOVE MARIT SVENDBY

Books etc.

- Henriksen, T., and Svendby, T., *Ozonlag, UV-stråling og helse*. Department of Physics, University of Oslo. ISBN 82-992073-9-8, 176 pages, 1997.
- Henriksen, T., Henriksen, E. K., and Svendby, T., *Deilig er den himmel blå*. Department of Physics, University of Oslo, ISBN 82-992073-4-7, 48 pages, 1997.
- Henriksen, T., Ingebretsen, F., Storruste, E., Strand, T., Svendby, T., and Wethe, P., *Stråling og helse*. Department of Physics, University of Oslo, ISBN 82-992073-2-0, 208 pages, 1995.

Peer reviewed journal articles

- Svendby, T. M., Lazaridis, M., and Tørseth, K. Modelling of Secondary Organic Aerosol Formation from Terpenes and Aromatics. Atmospheric Environment, submitted March 2006
- Stordal, F., G. Myhre, E.J.G. Stordal, W.B. Rossow, D.S. Lee, D.W. Arlander, and T. Svendby. Is there a trend in cirrus cloud cover due to aircraft traffic? *Atmospheric Chemistry and Physics*, 5, 2155-2162, 2005.
- Brönnimann, S., Luterbacher, J., Staehelin, J., Svendby, T. M., Hansen G., Svenøe, T., Extreme climate of the global troposphere and stratosphere in 1940-42 related to El Niño. *Nature*, 431, 971-974, 2004.
- Svendby, T. M., and A. Dahlback, Statistical analysis of total ozone measurements in Oslo, Norway, 1978-1998. *J. Geophys. Res.*, 109, D16107, doi:10.1029/2004JD004679, 2004.
- Brönnimann, S., Luterbacher, J., Staehelin, J., Svendby, T. M., An extreme anomaly in stratospheric ozone over Europe in 1940–1942. *Geophys. Res. Lett.*, 31, L08101, 2004.
- Svendby, T. M., Reanalysis of total ozone measurements at Dombås and Oslo, Norway, from 1940 to 1949. *J. Geophys. Res.*, 108, 4750, doi: 10.1029/ 2003JD003963, 2003.
- Brönnimann, S., J. Staehelin, S. Farmer, J. Cain, T. Svendby, and T. Svenøe, Total ozone observations prior to the IGY. I: A history, *Q. J. R. Meteorol. Soc.*, 129, 2797-2817, 2003.

Svendby, T. M., and A. Dahlback, Twenty years of revised Dobson total ozone measurements in Oslo, Norway. *J. Geophys. Res.*, 107, 4369, doi: 10.1029/2002JD002260, 2002.

Other articles and reports

- Svendby, T. M., Myhre, C. L., Kahnert, M. Sensitivity studies of Arctic Ice clouds, *Geophysical Research Abstracts*, Vol. 8, 10451, 2006.
- Svendby, T., Hov, Ø. and Lazaridis, M., Chemistry and thermodynamics of organic aerosols. Proceedings of BACCI activities 2004 (Ed. M. Kulmala and T. M. Ruuskanen). Helsinki, Aerosolitutkimusseura 2004. (Report series in aerosol science, vol. 71B). pp. 463-472, 2004.
- Høiskar, B.A.K., Braathen, G.O., Dahlback, A., Edvardsen, K., Hansen, G., Stebel, K., Svendby, T., and Vik, A.F., Monitoring of the atmospheric ozone layer and natural ultraviolet radiation. Annual report 2003, Kjeller (NILU OR 53/2004), 2004.
- Svendby, T. and Lazaridis, M., Modelling of secondary biogenic aerosols. *J. Aerosol Science*, 35, Suppl. 2, S959-S960, 2004.
- Lazaridis, M., Dahlin, E., Hanssen, J. E., Smolik, J., Schmidbauer, N., Moravec, P., Zdimal, V., Hermansen, O., Glytsos, T., Svendby, T. and Dye, C., Indoor/outdoor particulate matter measurements in two residential houses in Oslo, Norway. *J. Aerosol Science*, 34, Suppl. 2, S1367-S1368, 2003.
- Høiskar, B. A., Braathen, G. O., Dahlback, K. E., Hansen, G., Stebel, K., Svendby, T. og Vik, A. F., Overvåking av ozonlaget og naturlig ultrafiolett stråling. Annual report 2002, Kjeller (NILU OR 33/2003), 2003.
- Høiskar, B. A., Braathen, G. O., Dahlback, K. E., Edvardsen, K., Hansen, G., and Svendby, T., Overvåking av ozonlaget og naturlig ultrafiolett stråling. Annual report 2001, Kjeller (NILU OR 35/2002), 2002.
- Svendby, T., and Moan, J., Ozone and UV-trends in Norway 1978-1994. In *Ozone, Sun, Cancer* (Ed. L. Dubertret, R. Santus, and P. Morliere), pp. 30-34, LesEditors INSERM, Paris, 1995.
- Henriksen, T. and Svendby, T., Ozon og UV-stråling som miljøproblem. *Naturen*, 3,117-125, 1994.
- Svendby, T. and Henriksen, E. K., Miljøutstillingen 'Deilig er den himmel blå'. *Volund*, Published by the Norwegian Museum of Science and Technology (NTM), pp. 107-114, 1993.
- Svendby, T., UV-stråling til glede og nytte, eller en risiko? *LYS-ÅRET 1992/93*, pp. 15-18, 1993.
- Henriksen, T., Larsen, S. H. H., Svendby, T., 14 år med ozonmålinger i Oslo. *VÆR & KLIMA*, 16, No. 4, pp. 131-136, 1992.
- Henriksen, T., and Svendby, T., Ozon, UV og biologisk betydning. *VÆR & KLIMA*, 16, No. 4, pp. 137-144, 1992.

Selected posters and presentations

- Svendby, T. M., Myhre, C. L., Kahnert, M. Sensitivity studies of Arctic Ice clouds. Poster presentation at EGU General Assembly, Vienna, 2-7 April 2006.
- Svendby, T. and Lazaridis, M., Modelling of secondary biogenic aerosols. Poster on European Aerosol Conference, Budapest, September 2004.
- Brönnimann, S., Luterbacher, J., Staehelin, J., Svendby, T. M., The Northern Hemisphere total ozone anomaly 1940–1942. Proceedings of the XX Quadrennial Ozone Symposium, 1-8 June 2004, Greece (Ed. C. Zerefos), pp. 812-813, 2004.
- Svendby, T., Ozone and UV Radiation. Influence of the Cloud Cover on the UV-Level. Poster on "International Symposium. Ozone - Sun - Cancer", Paris, 17-20 May 1994.

- Svendby, T., Ozone and UV, measurements and calculations. Poster on "International Symposium on Environmental UV Radiation and Health Effects", Munich, Germany, 4-6 May 1993.
- Larsen, S. H. H., Svendby, T., Tønnesen, F., Long-term ozone measurements in Oslo. Poster on "International Symposium on High Latitude Optics (Conference on Atmospheric Ozone)", Tromsø, Norway, 28 June - 2 July 1993.
- Larsen, S. H. H., Svendby, T., Tønnesen, F., and Rabbe, A., Ozone variations and dynamic processes. Poster on "International Symposium on High Latitude Optics (Conference on Atmospheric Ozone)", Tromsø, Norway, 28 June - 2 July 1993.
- Svendby, T., Henriksen, T., and Larsen, S. H. H., 14 år med ozonmålinger over Oslo. Poster on the Norwegian Physics Society Meeting, Stavanger, Norway, 23-25 June 1992.
- Larsen, S. H. H., Svendby, T., Tønnesen, F., and Dahlback, A., Recalculated values of the total ozone amount over Oslo, 60°N, for the period 1979-1992. Proceeding on "International Ozone Symposium", Charlottesville, Virginia USA, 4-13 June 1992.