

CURRICULUM VITAE**Personal information**

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Date of birth 28 October 1948
Place of birth Vidsel, Norrbotten, Sweden
Civil status Married, 2 children
Nationality Swedish

Education

Graduate MSc with major in Physics, Mathematics, 1972, Umeå University
Post-graduate PhD in Hydrology, 1984, Uppsala University

Appointments

Docent 1987, Swedish University of Agricultural Sciences
Professor 1998, Lund University

Honours

2000, Member, Royal Physiographic Society in Lund, Lund, Sweden
2008, Member, Royal Swedish Academy of Science, Stockholm, Sweden

Awards

Shared the Nobel Peace Prize 2007 which was awarded to the IPCC

Key qualifications

More than 30 years of research on understanding processes governing exchanges of mass and energy in the soil-plant-atmosphere system with special emphasis on forest ecosystems. Uptake and emission of greenhouse gases and links to the climate system including effects of climate changes are topics of special interest and focus.

Published more than 110 peer review articles in

international journals including three in Nature with ca 2500 citations (2009-09-24) and a h-index of 27. Frequent dissemination of results from research by publication in popular science articles, radio and television programs and other media.

Attracted large number of grants from different funding bodies, national as well as international, amounting to ca 150 MSEK. Leader and coordinator of three centers/teams of excellence; the Nordic Centre for Studies of Ecosystem Carbon Exchange and its Interactions with the Climate System (NECC; 2003-2208), the Marie Curie Excellence Team on Exchange Processes in Land Surface Atmosphere System (MCT-ELSA; 2004-2008) and Lund University Centre for Studies of Carbon Cycle and Climate Interaction (LUCCI – Linnaeus Grant starting 2008-07-01).

Supervised ca 20 PhD students so far and currently supervisor for five students. Organized many workshops, conferences and courses.

Since 1998 led a small academic department to a successful development and increase both in undergraduate education and research. The turnover and staff have more than tripled during a 10-year period. In the 2008 review of research at Lund University by international peers, the department was graded as ‘outstanding’ in an international perspective.

Professional experience in academy

1998 – present: Professor, head, Department of Physical Geography and Ecosystems Analysis, Lund University.

1995 – 1998: Senior lecturer in Biogeophysics, Department for Production Ecology, Faculty of Forestry, SLU, Uppsala.

1989 – 1995: Research position in Biogeophysics, specially processes in the soil - plant - atmosphere system at the Swedish Natural Science Research Council.

1985 – 1989: Project leader at the University of Agricultural Sciences, Uppsala.

1983 – 1985: Research assistant at the Swedish University of Agricultural Sciences, Uppsala.

1979 – 1983: Computer systems analyst at the Jädraås Ecological Research Station, Swedish University of

Agricultural Sciences, Jädraås.

1977 – 1979: Research assistant at the Swedish University of Agricultural Sciences, Uppsala.

1973 – 1977: Research assistant at the Royal College of Forestry, Stockholm.

Professional experience, private enterprises

2002 – 2007: Partner and CO of the company In Situ Flux Systems. A company that produced systems for measurement of trace gas exchanges between ecosystems and atmosphere.

2007 – present: Owner of the company Biogeoclim Consulting. Consultancy in field of climate, meteorology, energy sector.

Commissions

Assignment on evaluation of candidates for the Marcus Wallenberg Prize (1994).

Member of the Programme Committee for Earth Sciences (PUG) within the Swedish Natural Science Research Council (from 1 July 1995-31 December 2001).

Member of the Energy Committee at the Swedish Natural Science Research Council (from 1 January 1996 – 31 December 2001).

Member of the Biogeosphere Dynamics Committee at the Swedish Natural Science Research Council (from 1 January 1996 – 31 December 2001)

Member of the Swedish IHP Committee at the Swedish Natural Science Research Council (from 1 January 1996 – 31 December 2001).

Member of the expert group on "Sustainable Production of Fuels from Forestry" at the Swedish National Board for Industrial and Technical Development (NUTEK) from October 1996 - 2000.

Member of the Standing Committee for Life and Environmental Sciences (LESC) of the European Science Foundation from January 1998 – 31 December 2003.

Member of the European Science Foundation LESK core group 2000-2003.

Member of the Swedish National Committee for IGBP and WCRP, the Royal Swedish Academy of Sciences, from

August 1998 – 31 December 2003.

Member of the Swedish National Committee for Geography, the Royal Swedish Academy of Sciences, from March 1999 – 31 December 2005.

Deputy member of the board of the Research Council for Environment, Agricultural Sciences and Spatial Planning 1 January 2004 - 2006.

Member of the board of the Research Council for Environment, Agricultural Sciences and Spatial Planning 2007 -.

Publications

Dissertation

Lindroth, A. 1984. Seasonal variation in pine forest evaporation and canopy conductance. Acta Univ. Upsaliensis 758. 35 pp. (Doctoral thesis).

Journal articles (2000-2009)

[56] Morén, A-S. and Lindroth, A. 2000. CO₂ exchange at the floor of a boreal forest. **Agricultural and Forest Meteorology** 101:1-14.

[57] Valentini, R., Matteucci, G., Dolman, A.J., Schulze, E.-D., Rebman, C., Moors, E.J., Granier, A., Gross, P., Jensen, N.O., Pilegaard, K., Lindroth, A., Grelle, A., Bernhofer, C., Grünwald, T., Aubinet, M., Ceulemans, R., Kowalski, A.S., Vesala, T., Rannik, U., Berbigier, P., Loustau, D., Gudmundsson, J., Thorgeirsson, H., Ibrom, A., Morgenstern, K., Clement, J., Moncrieff, J., Montagnani, L., Minerbi, S., Jarvis, P.G. 2000. Respiration as the main determinant of carbon balance in European forests. **Nature** 404:861-865.

[58] Moren, A-S., Lindroth, A., Flower-Ellis, J.G.K., Cienciala, E. and Mölder, M. 2000. Branch transpiration of a boreal forest scaled to tree and canopy using needle biomass distributions. **Trees** 14:384-397.

[59] Mölder, M., Lindroth, A. and Halldin, S. 2000. Water vapor, CO₂, and temperature profiles in and above a forest – accuracy assessment of an unattended measurement system. **Journal of Atmospheric and Oceanic Technology** 17(4):417-425.

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[61] Mölder, M. and Lindroth, A., 2001. Dependence of kB-1 factor on roughness Reynolds number for barley and pasture. **Agricultural and Forest Meteorology**, 106: 147-152.

[62] Morén, A-S., Lindroth, A. and Grelle, A. 2001. Water-use efficiency as a means of modelling net assimilation in a mixed pine and spruce forest. **Trees** 15: 2, 67-74

[63] Janssens, I.A., Lankreijer, H., Matteucci, G., Kowalski, A.S., Buchmann, N., Epron, D., Pilegaard, K., Kutsch, W., Longdoz, B., Grünwald, T., Montagnani, L., Dore, S., Rebmann, C., Moors, E.J., Grelle, A., Rannik, Ü., Morgenstern, K., Oltchev, S., Clement, R., Gudmundsson, J., Minerbi, R., Berbigier, P., Ibrom, A., Moncrieff, J., Aubinet, M., Bernhofer, C., Jensen, N.O., Vesala, T., Granier, A.,

- Schulze, E-D., Lindroth, A., Dolman, A.J., Jarvis, P.G., Ceulemans, R., Valentini, R.. 2001. Productivity overshadows temperature in determining soil and ecosystem respiration across European forests. **Global Change Biology** 7(3):269-278.
- [64] Iritz, Z., Tourula, T., Lindroth, A. and Heikinheimo, M. 2001. Simulation of willow short rotation forest evaporation using a modified Shuttleworth-Wallace approach. **Hydrological Processes** 15:97-113.
- [65] Jarvis P.G.; Dolman A.J.; Schulze E.-D.; Matteucci G.; Kowalski A.S.; Ceulemans R.; Rebmann C.; Moors E.J.; Granier A.; Gross P.; Jensen N.O.; Pilegaard K.; Lindroth A.; Grelle A.; Bernhofer Ch.; Grünwald T.; Aubinet M.; Vesala T.; Rannik Ü.; Berbigier P.; Loustau D.; Guomundson J.; Ibrom A.; Morgenstern K.; Clement R.; Moncrieff J.; Montagnani L.; Minerbi S.; Valentini R. 2001. Carbon balance gradient in European forests: Should we doubt 'surprising' results? A reply to Piovesan & Adams. **Journal of Vegetation Science** 12(1):145-150.
- [66] Lundblad, M., Lagergren, F. and Lindroth, A. 2001. Evaluation of heat balance and heat dissipation methods for sapflow measurements in pine and spruce. **Annals of Forest Science** 58 :625-638.
- [67] Lundblad, M. and Lindroth, A. 2002. Transpiration of a coniferous forest in relation to weather and stand characteristics. **Basic and Applied Ecology** 3 :229-243.
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- [69] Lagergren F. and Lindroth, A. 2002. Transpiration response to soil moisture in pine and spruce trees in Sweden. **Agricultural and Forest Meteorology** 112 :67-85.
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- techniques for measuring soil CO₂ efflux. **Agricultural and Forest Meteorology** 123:159-176.
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