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### **Academic Record**

- 1991 Ph.D. University of East Anglia. Title: 'Prediction of on- and off-shore wind speeds for wind energy applications.'
- 1984 B.Sc. Hons. University of East Anglia. Environmental Chemistry (Iii)  
Courses: Organic and Inorganic Chemistry, Meteorology, Geochemistry,  
Chemical Environment and Toxic Substances, Energy and Resources.

### **Appointments**

- 2008 → **Professor**, Atmospheric Science and Sustainability, Department of Geography, Indiana University, Bloomington, IN 47405, USA
- 2006 → **Professor and Ewart Farvis Chair of Renewable Energy**, Institute for Energy Systems, School of Engineering & Electronics, The University of Edinburgh, Edinburgh, Scotland.
- 2006-2009 **Honorary Professor**, School of Engineering and Physical Sciences, Heriot-Watt University, Edinburgh
- 1993-2006 **Senior Scientist**, Department of Wind Energy and Atmospheric Physics, Risø National Laboratory, Roskilde, Denmark
- 1995-2000 **Associate Scientist**, Atmospheric Science Program, Department of Geography, Indiana University, Bloomington, Indiana, USA (*Part-time 1995-2000, and visiting scientist position May 2000 onwards*)
- 1995 **Post-Doctoral Fellow**, Atmospheric Sciences Programme, Department of Geography, University of British Columbia, Vancouver, Canada (*part-time*)
- 1991-1992 **Senior Research Associate**, Climatic Research Unit, School of Environmental Sciences, University of East Anglia, Norwich, UK
- 1988-1991 **Ph.D. Student and part-time Research Associate**, Climatic Research Unit, School of Environmental Sciences, University of East Anglia, Norwich, UK.
- 1985-1988 **Research Associate**, Climatic Research Unit, School of Environmental Sciences, University of East Anglia, Norwich, UK.

**Research interests and expertise**

- Renewable energy resources and operationalization: Specific focus on offshore wind energy resources and wind turbine wake effects
- Global and regional climate change and variability: Specific focus on impacts on renewable energy resources
- Micrometeorology: Boundary layer structure and dynamics, including application of remote sensing technologies. Specific focus on wind shear and turbulence regimes in the near-surface layer.
- Global atmospheric composition change: Atmospheric chemistry with foci of biogenic species and particle fluxes, formation and chemistry

## **RESEARCH ACTIVITIES**

### **Grants and Awards**

- 2008  
In review      *Quantifying wind farm power losses due to wind turbine wakes*  
P.I.: Barthelmie, R.J. and Pryor, S.C.  
NSF Energy for Sustainability Program 0828655 (\$307,796)
- 2007  
In review      *Intensive field study of the mechanisms of particle growth and formation*  
P.I.: Hopke, P., Rossner, A., Pryor, S.C. and Barthelmie, R.J.  
Department of Energy (\$420,000)
- 2007-2010      *Climate and Energy Systems; Risks, potential, adaptation*  
P.I.: Snorasson, A. and partners.  
Nordic Energy Research (10 million NOK)
- 2007              *Derivation of meteorological measures for the comparison of different wind systems: On the view point of optimal performance of wind turbines.*  
P.I.: M.-S. Jang and Barthelmie, R.J.  
Korean Institute for Energy Research (€7,800)
- 2006-2009      *Development and evaluation of downscaling tools for near-surface wind climates*  
P.I.: Pryor, S.C., Barthelmie, R.J. and Takle, G.  
National Science Foundation: Geography and Regional Sciences (Pryor & Barthelmie: \$144,000, Takle: \$45,000)
- 2006              *Keynote speaker at New and Renewable Energy Workshop, Seoul.*  
Sponsored by the Korean Institute for Energy Research (\$10,000)
- 2006              *Speaker at Workshop on Arctic Weather Extremes*  
Sponsored by the Bjerkenes Climate Centre (7000 NOK)
- 2006-2009      *Particle nucleation events in the Ohio River Valley*  
P.I.: Pryor, S.C., Barthelmie, R.J., Mauldin, R. and Westberg, H.  
National Science Foundation: Atmospheric Chemistry (\$500,000)
- 2006-2010      *UPWind Integrated Project*  
P.I.: Hjuler Jensen, P., Frandsen, S.T. (Risø) and 38 partners.  
RJB Workpackage leader of WP8: Flow.  
European Commission: Energy and Environment (25 m EURO).
- 2005-2007      *12MW wind turbines: the scientific basis for their operation from 70 to 270 m height offshore*  
P.I.: Hasager, C.B., Mikkelsen, T., Barthelmie, R., Gryning, S.E., Antoniou, I.  
Danish Research Agency: Renewable Energy (2.5 m DKK).
- 2005-2008      *Prediction of waves, wakes and offshore wind (POWWOW).*  
P.I.: Giebel, G., Barthelmie, R. plus 13 partner institutions  
European Commission 6<sup>th</sup> Framework (Concerted Action) (1 m EURO)

- 2005 *Wind and wakes at Nysted II*  
P.I.: Frandsen, S.T. and Barthelmie, R.J.  
Energi E2 (100,000 DKK)
- 2005 *EU China Offshore Wind Energy Symposium*  
P.I.: Barthelmie, R.J.  
Personal service contract with European Commission (20,000 EURO)
- 2005 *Extreme wind analysis for London Array West Project – Phase I*  
P.I.: Barthelmie, R.J., Mann, J. and Ott, S.  
Energi E2 (165,000 DKK).
- 2005 *Wind resources at Klasården*  
P.I.: Barthelmie, R.J., Sørensen, L.L. and Badger, J.  
Vindkompaniet (86,000 DKK).
- 2005 *Wind resources at Lillgrund*  
P.I.: Barthelmie, R.J.  
Vattenfall (86,000 DKK).
- 2005-2007 *Offshore wind power – research related bottlenecks*  
P.I.: Frandsen, S.T., Hansen, E., Sørensen, P., Møhlenberg, F., Morthorst, P., Tarp-Johansen, N.J., Bak-Jensen, B., Nielsen, H.B., Hansen, S.O., Barthelmie, R.J., Larsen, S.E., Sørensen, J.N and Mann, J.  
Science and Technology Research Council of Denmark (10 m DKK).
- 2005 *Attendance at Nanoparticle workshop, PSI, Switzerland, January 2005*  
Sponsored by European Commission funded consortium: ACCENT (€400).
- 2005 *Operation and maintenance of offshore measurement systems 2005 (two contracts)*  
P.I.: Barthelmie, R.J.  
Energi E2 (200,000 DKK).
- 2004 *Operation and maintenance of offshore measurement systems 2004 (two contracts)*  
P.I.: Barthelmie, R.J.  
Energi E2 (343,682 DKK).
- 2004 *Design wind speed at Shell Flats*  
P.I.: Barthelmie, R.J.  
DNV (16,720 DKK).
- 2004-2006 *Dynamic wake models for detailed aeroelastic simulations of turbines in wind farms*  
P.I.: Larsen ; G. Madsen, H. Barthelmie, R., Ott, S., Nielsen, M., Sørensen, J., Okulov, V., Sønderby, O., Pedersen, J., Larsen, S.  
Danish Energy Ministry (6,144,000 DKK).
- 2003 *Operation and maintenance of offshore measurement systems 2003 (two contracts)*  
P.I.: Barthelmie, R.J.  
Energi E2 (294,446 DKK).

- 2003 *Danish offshore wind resources*  
P.I. Barthelmie, R. and Landberg, L.  
Dong (75,000 DKK)
- 2003-2007 *Dry deposition of particles: processes and parameterizations*  
P.I.: Pryor, S.C., Barthelmie, R.J. and Binkowski, F.  
National Science Foundation: Atmospheric Chemistry (\$324,448)
- 2003 *Offshore wind course*  
P.I.: Barthelmie, R.J.  
Personnel service contract to European Renewable Energy Centres Agency (EUREC)  
(2389 EURO).
- 2003 *Offshore wind course at Norsk Hydro*  
P.I. Frandsen, S. & Barthelmie, R.J. (54,600 DKK).
- 2003-2005 *Offshore wake effect study from earth observation (SAR)*  
P.I.: Hasager, C., Barthelmie, R., Skriver, H, Dall, J., Sørensen, P., Højstrup, J. and Furevik, B.  
Danish Technical Research Council (600,000 DKK)
- 2003 *Polish offshore wind resources*  
P.I.: Barthelmie, R.J.  
Personal service contract to Greentech (33,450 DKK)
- 2003 *Wind resources in Morecambe Bay*  
P.I.: Hansen, J.C., Barthelmie, R.J.  
DONG Denmark (56,000 DKK)
- 2003 *Offshore winds at North Hoyle*  
P.I.: Barthelmie, R.J.  
National Wind Power (187,000 DKK).
- 2002-2004 *Identifikation af nødvendig afstand mellem store mølleparker til havs - forstudie.  
(Identification of optimal distances between large wind farms at sea - prestudy).*  
P.I.: Frandsen, S.F., Højstrup, J., Larsen, S., Barthelmie, R. and Pryor, S.  
Danish Energy Ministry (1,586,000 DKK).
- 2003 *Taiwanese wind resource assessment*  
P.I.: Landberg, L. and Barthelmie, R.J.  
Industrial Technology Research Institute, Taiwan (EURO 22,682)
- 2002 *Operation and maintenance of offshore measurement systems 2002*  
P.I.: Barthelmie, R.J.  
SEAS (412,000 DKK).
- 2002 *Offshore wind course*  
P.I.: Barthelmie, R.J.  
Personnel service contract to EUREC (2389 EURO).

- 2002 *Offshore wind resource Poland*  
P.I.: Barthelmie, R.J.  
Personnel service contract to Global Green Energy (50,290 DKK).
- 2002-2003 *Motor vehicle nitrogen emissions and their impact on coastal waters*  
P.I.: Barthelmie, R.J., Sørensen, L.L., Pryor, S.C. and Bilde, M.  
Research Ministry: Natural Science Denmark (380,344 DKK).
- 2002 *Wind resources at Rødsand, Omø Stålgrunde and Gedser Rev*  
P.I.: Barthelmie, R.J.  
SEAS (142,050 DKK).
- 2001 *Operation and maintenance of offshore measurement systems 2001*  
P.I.: Barthelmie, R.J.  
SEAS (252,000 DKK).
- 2001-2004 *Wind energy assessment and wind engineering*  
P.I.: Landberg, L., Barthelmie, R., Rathmann, O., Fuglsang, P, Mann, J., Focken, U., Strack, M., Christensen, L., Teofiloyiannakos, D., Svenson, J., Lavagnini, A., Tammelin, B.  
European Commission: Energy and Environment (1,216,491 EURO).
- 2001 *Offshore wind farm in Sweden*  
P.I.: Barthelmie, R.J.  
Personnel service contract to Neg Micon (124,460 DKK).
- 2001 *Offshore windfarm in the Netherlands*  
P.I.: Barthelmie, R.J.  
Personnel service contract to E-Connection (10,300 DKK).
- 2001 *Stability at an offshore site in the UK*  
P.I.: Barthelmie, R.J.  
Personnel service contract to Renewable Energy Systems (25,750 DKK).
- 2000-2001 *Particulate formation from biogenic hydrocarbons*  
P.I.: Makar, P., Barthelmie, R.J. and Pryor, S.C.  
Environment Canada Meteorological Service (CAN \$31,000).
- 2000-2003 *Efficient development of offshore windfarms (ENDOW)*  
P.I.: Barthelmie, R.J., Lange, B., Larsen, G., Bergstrom, H., Smedman, A.S., Magnusson, M., Hassan, U., Rados, K., Wadl, H.P., Svenson, J., Neckelmann, S., Højstrup, J. and Schepers, G.  
European Commission: 5<sup>th</sup> Framework, Non-nuclear Energy, (700,000 EURO).
- 2000 *Preliminary technical concept for offshore wind farm near Helgoland.*  
P.I.: Hansen, C., Barthelmie, R.J., Thomsen, K.  
Private developer (270,000 DKK).
- 2000 *Operation and maintenance of offshore measurement systems 2000*  
P.I.: Barthelmie, R.J.

- SEAS (200,000 DKK).
- 2000 *Operation and maintenance at Middelgrunden 2000*  
P.I.: Barthelmie, R.J.  
SEAS (20,000 DKK).
- 2000 *Stability at an offshore site in the UK*  
P.I.: Barthelmie, R.J.  
Personnel service contract to Renewable Energy Systems (8900 DKK).
- 1999 *Operation and maintenance of offshore measurement systems 1999*  
P.I.: Barthelmie, R.J.  
SEAS (320,000 DKK).
- 1999 *Operation and maintenance at Middelgrunden 1999*  
P.I.: Barthelmie, R.J.  
SEAS (220,000 DKK).
- 1999-2002 *Acquisition and development of instrumentation to quantify atmospheric deposition pathways*  
P.I.: Pryor, S.C., and Barthelmie, R.J.  
National Science Foundation: Major Research Instrumentation (\$329,962).
- 1999-2002 *Measurement and modeling of carbon and nitrogen dynamics in a mid-latitude deciduous forest*  
P.I.: Pryor, S.C., Barthelmie, R.J. and Carreiro, M.  
US Department of Energy (\$446,000).
- 1999 *Updating wind resource estimates at Rødsand and Omø*  
P.I.: Barthelmie, R.  
SEAS (256,993 DKK).
- 1998-1999 *Modelling NH<sub>x</sub> deposition to different surface types*  
P.I.: Pryor, S.C. and Barthelmie, R.J.  
Environment Canada (\$40,000 CAN).
- 1998-2003 *Understanding the role of vehicle emissions in the formation of secondary organic aerosols*  
P.I.: Barthelmie, R.J. and Pryor, S.C.  
Ford Europe, Germany. Grant to foster research innovation (\$40,000).
- 1999 *Operation and maintenance of offshore measurement systems*  
P.I.: Barthelmie, R.J.  
SEAS (430,000 DKK).
- 1998 *Re-instrumenting Gedser Rev and Omø offshore masts*  
P.I.: Barthelmie, R.J., and Hansen, O.F.  
SEAS (450,000 DKK).
- 1998 *Measurements and modelling of atmospheric ammonia and ammonium*

- P.I.: Barthelmie, R.J.  
Environment Canada: Personal service contract (\$1000).
- 1998-2001 *Predicting offshore wind energy resources (POWER)*  
P.I.: Watson, S.J., Woods, J., Palutikof, J.P., Barthelmie, R.J., Coelingh, J. Cleine, J.W. and Van Wijk, A.J.M.  
European Commission: JOULE Non-nuclear Energy Programme (675,000 EURO).
- 1997-2001 *Parameterizing the chemistry of atmospheric aerosols*  
P.I.: Barthelmie, R.J. and Pryor, S.C.  
National Science Foundation: Atmospheric Chemistry Program. (\$260,000).
- 1997-1998 *REVEAL II - characterising aerosols in the Lower Fraser Valley (Part 2)*  
P.I.: Pryor, S.C. and Barthelmie, R.J.  
Fraser Valley Regional District, Lower Fraser Valley, Canada. (\$37,500 CAN).
- 1997-1998 *Aerosol dynamics in the ISOPART model*  
P.I.: Pryor, S.C. and Barthelmie, R.J.  
Environment Canada (\$83,000 CAN).
- 1997 *Size-resolved and speciated aerosol measurements in the Baltic Sea*  
P.I.: Sørensen-Geernaert, L.L., Barthelmie, R.J., Pryor, S.C. and Ellerman, T.  
Nordic Council of Ministers (40,000 DKK).
- 1996-1997 *Extension of the ACDEP model*  
P.I.: Barthelmie, R.J. and Pryor, S.C.  
Environment Canada (\$50,000 CAN).
- 1996-1999 *Measurements of fluxes and concentrations of CO<sub>2</sub> in and over a deciduous forest in the Midwest*  
P.I.: Grimmond, C.S.B., Pryor, S.C., Schmid, H.P. and Barthelmie, R.J.  
US Department of Energy (\$915,000).
- 1995-1996 *Gas to particle conversion in a trajectory model - application to the Fraser Valley*  
P.I.: Pryor, S.C. and Barthelmie, R.J.  
Atmospheric Environment Service, Canada (\$40,000 CAN).
- 1995-1996 *REVEAL II - construction of a database and preliminary analysis of aerosol data*  
P.I.: Pryor, S.C. and Barthelmie, R.J.  
Fraser-Cheam Regional District, Lower Fraser Valley, Canada. (\$30,000 CAN).
- 1995 Towards attendance at NATO/CCMS 21st International Technical Meeting on Air Pollution Modeling and Its Application. Baltimore November 6-10.  
NATO Travel Award (\$500).
- 1993-1994 *Methods for predicting and modelling coastal and offshore wind speeds*  
P.I.: Barthelmie, R.J.  
Marie Curie Fellowship.  
European Community Research Fellowship under the Human Capital and Mobility Programme (130,000 ECU).

- 1990 Travel to 1990 American Wind Energy Association Conference, Washington D.C. and to work experience at U.S. Windpower, Altamont, California.  
Nuffield Foundation Travel Award (£1200).
- 1988-1991 *Prediction of on- and off-shore wind speeds for wind energy applications*  
P.I.: Barthelmie, R.J.  
Science and Engineering Research Council Industrial Post-graduate Fellowship (£15,000).

## **Publications**

### **A. Refereed journal articles (84 in total)**

#### **In review**

Sempreviva, A.M., Barthelmie, R.J. and Pryor, S.C. 2008: Offshore wind resource assessment in European Seas, Surveys in Geophysics (submitted November 2007, GEOP-S-07-00035)

#### **In press**

Barthelmie, R.J., Murray, F. and Pryor, S.C. 2008: The economic benefit of short-term forecasting for wind energy in the UK electricity market, *Energy Policy*, **36(5)**, 1687-1696. [doi:10.1016/j.enpol.2008.01.027](https://doi.org/10.1016/j.enpol.2008.01.027)

Pryor, S.C., Barthelmie, R., Sørensen, L.L., Larsen, S.E. Sempreviva, A.M. Groenholm, T., Rannik, U., Kumula, M., Vesala, T. 2008: Upward fluxes of particles over forests: When, where, why? *Tellus* doi: 10.1111/j.1600-0889.2008.00342.x. Online early article 29 March 2008.

Pryor, S.C., Larsen, S.E., Sørensen, L.L. and Barthelmie, R.J. 2008: Quantifying particle fluxes above forests: Observations, methodological considerations and method comparisons. *Environmental Pollution*, 152(3), 667-678. Available on line 30 August 2007. [doi:10.1016/j.envpol.2007.06.068](https://doi.org/10.1016/j.envpol.2007.06.068)

#### **Published**

Pryor, S.C., Gallagher, M., Sievering, H., Larsen, S., Barthelmie, R.J., Birsan, F., Nemitz, E., Kulmala, M., Rinne, J., Gronholm, T., Taipale, R. and Vesala, T. 2008: A review of measurement and modelling tools for quantifying particle atmosphere-surface exchange. *Tellus*, **60B**, 42–75.

Barthelmie, R.J., Badger, J., Pryor, S.C., Hasager, C., Christiansen, M.B. and Jørgensen, B.H. 2007: Wind speed gradients in the coastal offshore environment: Issues pertaining to design and development of large offshore wind farms, *Wind Engineering*, **31(6)**, 369-382.

Pryor, S.C., Barthelmie, R.J., Schoof, J.S., Binkowski, F.S., Monache, L.D., and Stull, R. 2007: Modeling the impact of sea spray on particle concentrations in a coastal city, *Science of the Total Environment*, **391**, 132-142.

Barthelmie, R.J., Frandsen, S.T., Nielsen, N.M., Pryor, S.C., Rethore, P.E. and H.E. Jørgensen, 2007: Modelling and measurements of power losses and turbulence intensity in wind turbine wakes at Middelgrunden offshore wind farm, *Wind Energy* doi: 10.1002/we.238. **10**, 217-228.

- Barthelmie, R.J. 2007: Wind energy: Status and trends. *Geography Compass*, 1 (3), 275–301. doi:10.1111/j.1749-8198.2007.00030.x (Featured in DG Environment News Alert 2007: Science for Environment Policy Newsletter 29 July 2007. Wind energy. Status and trends. <http://ec.europa.eu/environment/integration/research/newsalert/pdf/75na2.pdf>)
- Barthelmie, R.J., Sempreviva, A.M. and Pryor, S.C. 2007: The influence of humidity fluxes on offshore wind speed profiles, *e-WindEng* (005). pp. 1-5. ISSN 1901-9181. <http://ejournal.windeng.net/9/>
- Pryor, S.C., Larsen, S., Sørensen, L.L., Barthelmie, R.J., Gronholm, T., Kumula, M., Launiainen, S., Rannik, U. and Vesala, T. 2007: Analysis of flux methods and functionality, *Journal of Geophysical Research*, **112**, D07205.
- Barthelmie, R. J. and Pryor, S.C. 2006: Challenges in predicting power output from offshore wind farms. *Journal of Energy Engineering (Special issue on Sustainable Energy System)*, **132(3)**, 91-103.
- Barthelmie, R., Folkerts, L., Larsen, G., Pryor, S.C., Frandsen, S.T. and Schepers, G. 2006: Comparison of wake model simulations with offshore wind turbine wake profiles measured by sodar, *Journal of Atmospheric and Oceanic Technology*, **23(7)**, 888-901.
- Pryor, S.C., Schoof, J. and Barthelmie, R.J. 2006: "Winds of change? Projections of near-surface winds under climate change scenarios". *Geophysics Research Letters*, **33(11)**, L11702.
- Frandsen, S.T., Barthelmie, R.J., Pryor, S.C., Rathmann, O., Larsen, S. Højstrup, J. and Thøgersen, M. 2006: Analytical modelling of wind speed deficit in large offshore wind farms. *Wind Energy* , **9**, 39-53.
- Hasager, C.B., Barthelmie, R.J., Christensen, M., Nielsen, M. and Pryor, S.C. 2006: Quantifying offshore wind resources from satellite wind maps: study area the North Sea, *Wind Energy* , **9**, 63-74.
- Pryor, S.C., Barthelmie, R.J. and Schoof, J. 2006: Inter-annual variability of wind indices over Europe. *Wind Energy*, **9**, 27-38.
- Pryor, S.C., Barthelmie, R.J. and Kjellstrom, E. 2005: Potential climate change impact on wind energy resources in northern Europe: Analyses using a regional climate model. *Climate Dynamics*, **25**, 815-835.
- Pryor, S.C., Schoof, J. and Barthelmie, R.J. 2005: Potential climate change impacts on wind speeds and wind energy density in northern Europe: Results from empirical downscaling of multiple AOGCMs, *Climate Research*, **29**, 183-198.
- Pryor, S.C., Barthelmie, R.J. and Schoof, J. 2005: Empirical downscaling of wind speed probability distributions. *Journal of Geophysical Research*, **110**, (D19), D19109.
- Pryor, S.C. and Barthelmie, R.J. 2005: Liquid and chemical fluxes in precipitation, throughfall and stemflow: Observations from a deciduous forest in the Midwestern USA. *Water, Air and Soil Pollution*, 163, 203-227.

- Pryor, S.C., Schoof, J. and Barthelmie, R.J. 2005: The impact of non-stationarities in the climate system on the definition of a 'normal wind year': A case study from the Baltic. *International Journal of Climatology*, **25**, 735-752.
- Motta, M., Barthelmie, R.J. and Vølund, P. 2005: Stability effects on predicted wind speed profiles and power output at the offshore wind farms. *Wind Energy*, **8**, 219-236.
- Barthelmie, R., Hansen, O.F., Enevoldsen, K., Højstrup, J., Frandsen, S., Pryor, S.C., Larsen, S., Motta, M. and Sanderhoff, P. 2005: Ten years of meteorological measurements for offshore wind farms. *Journal of Solar Energy Engineering*, **127(2)**, 170-176.
- Pryor, S.C., Barthelmie, R.J., Prip, H. and Sørensen, L. 2005: Observations of ultra-fine particles above a deciduous forest in Denmark. *Geophysical Research Letters*, **32(6)**, L06804.
- Hasager, C.B., Nielsen, M., Astrup, P., Barthelmie, R., Dellwik, E., Jensen, N.O., Jørgensen, B., Pryor, S., Rathmann, O. and Furevik, B. 2005: Offshore wind resource assessed from satellite SAR wind field maps. *Wind Energy*, **8**, 403-419.
- Barthelmie, R., Larsen, G., Pryor, S., Jørgensen, H., Bergström, H., Magnusson, M., Schlez, W., Rados, K., Lange, B., Vølund, P., Neckelmann, S., Mogensen, S., Schepers, G., Hegberg, T., and Folkerts L. 2004: ENDOW: Efficient Development of Offshore Windfarms: modelling wake and boundary-layer interactions. *Wind Energy*, **7**, 225-245.
- Sempreviva, A.M. Barthelmie, R. Landberg, L., Larsen, X., Mann, J., Motta, M., Paus, T., Focken, U., Heinemann, D., Durante, F., Strack, M., Christensen, L., Danielan, R., Muri, H., Perstrup, C., Stefanatos, C., Lavagnini, A. Gregow, A. and Tammelin, B. 2004 Wind-Eng. Research activity in a training network. *Wind Engineering*, **28**, 325-337.
- Pryor, S.C., Nielsen, M., Barthelmie, R.J. and Mann, J. 2004: Can satellite sampling of offshore wind speeds realistically represent wind speed distributions. Part II. Quantifying uncertainties associated with sampling strategy and distribution fitting methods. *Journal of Applied Meteorology*, **43(5)**, 739-750.
- Lange, B., Larsen, S. Højstrup, J. and Barthelmie, R. 2004: The influence of thermal effects on the wind speed profile of the coastal marine boundary layer. *Boundary-Layer Meteorology*, **112(3)**, 587-617.
- Lange, B., Larsen, S. Højstrup, J. and Barthelmie, R. 2004: Importance of thermal effects and sea surface roughness for offshore wind assessment. *Journal of Wind Engineering and Industrial Aerodynamics*, **92**, 959-988.
- Motta, M., Barthelmie, R.J. and Vølund, P. 2003: Stability effects on predicted wind speed profiles and power output at the Vindeby offshore wind farm, *Wind Eng Journal*, [http://ejournal.windeng.net/archive/00000001/01/e-paper\\_motta.pdf](http://ejournal.windeng.net/archive/00000001/01/e-paper_motta.pdf)
- Henderson, A., Morgan, C, Barthelmie, R., Smith, B, Sørensen, H.C. and Boesmans, B. 2003: Offshore wind energy in Europe - a review of the state of the art, *Wind Energy*, **6**, 23-34.
- Lange, B., Waldl, H.P., Barthelmie, R.J and Guerrero, A.G. 2003: Modelling of offshore wind turbine wakes with the wind farm program FlaP. *Wind Energy*, **6**, 87-104.

- Barthelmie, R.J., Folkerts, L., Ormel, F.T., Sanderhoff, P., Eecen, P.J., Stobbe, O. and Nielsen, M. 2003: Offshore wind turbine wakes measured by sodar, *Journal of Atmospheric and Oceanic Technology*, **20(4)**, 466-477.
- Lavagnini A., Sempreviva A.M. and Barthelmie R.J., 2003: Evaluation of methods of estimating wind energy potential in Mediterranean areas. *Wind Energy*, **6**, 35-52.
- Pryor, S.C. and Barthelmie, R.J. 2003: Long term trends in near surface flow over the Baltic. *International Journal of Climatology* , **23**, 271-289.
- Barthelmie, R.J. and Pryor, S.C. 2003: Can satellite sampling of offshore wind speeds realistically represent wind speed distributions. *Journal of Applied Meteorology*, **42(1)**, 83-94.
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- Barthelmie, R.J., Grisogono, B. and Pryor, S.C. 1996: The influence of surface characteristics on diurnal cycles of near-surface wind speeds. *American Association of Geographers Annual Conference*, Charlotte. April 1996.
- Barthelmie, R.J. 1996: Where the wind blows. Colloquium Series, Department of Geography, Indiana University. February 1996.
- Barthelmie, R.J. and Pryor, S.C. 1995: The role of ammonia in fine aerosol formation and visibility impairment. *International Conference on Atmospheric Ammonia*, Oxford, UK. October 1995.
- Barthelmie, R.J. and Pryor, S.C. 1995: Atmospheric ammonia in the Lower Fraser Valley. Department of Meteorology and Wind Energy, Risø National Laboratory, Denmark. September 1995.
- Barthelmie, R.J. 1995: Coastal wind power - how advantageous is going offshore? *Canadian Meteorological and Oceanographic Society Conference*, Kelowna, British Columbia. June 1995.
- Steyn, D.G., Suzuki, N.M., Cai, X.-M., Pryor, S.C. and Barthelmie, R.J. 1995: Combined meteorological and photochemical modelling of ozone episodes in the Lower Fraser Valley. *Canadian Meteorological and Oceanographic Society Conference*, Kelowna, British Columbia, June 1995.

Barthelmie, R.J. and Jensen, N.O. 1995: Surface meteorological measurements in TRACT database#4. *European Geophysical Society*, Hamburg. April 1995.

Barthelmie, R.J. 1995: The Vindeby Project: research in an offshore coastal environment. *Third Annual Oceanography Symposium*, University of British Columbia, Vancouver. February 1995.

Barthelmie, R.J. 1994: Results from the Vindeby Monitoring Project. Presentation to the Department of Meteorology and Wind Energy, Risø National Laboratory, Denmark. December 1994.

### **Conferences and meetings attended**

- April 2008      *European Wind Energy Conference and Exhibition*, Brussels 31 March- 3 April 2008. (Scientific committee, session chair (2) and speaker)
- January 2008      *Wind resource characterisation research needs*. DOE workshop. Boulder, 14-16 January 2008. (Invited participant)
- December 2007      *European Offshore Wind Energy Conference*, Berlin, 4-6 December 2007 (speaker).
- October 2007      *Applied Geography Conference*, Indianapolis, 16-18 October 2007 (speaker).
- October 2007      *Regional climate variability, predictability and change in the Midwest*. Indiana University. 15-17 October 2007 (speaker).
- September 2007      *The Science of Making Torque from Wind*. Copenhagen, 27-31 August 2007. (Paper presenter (2) and chair of session).
- August 2007      *17<sup>th</sup> International on Nucleation and Atmospheric Aerosols*. Galway, 13-17 August 2007 (poster presenter).
- October 2006      *British Wind Energy Association Annual Conference*, 10-12 October 2006, Glasgow, Scotland. (speaker)
- September 2006      *New and renewable energy seminar*, 27-28<sup>th</sup> September 2006, Seoul, Korea (Invited keynote speaker)
- September 2006      *International Energy Agency Annex XXIII: Wake model benchmarking*. 6-7 September 2006, Billund, Denmark (Invited speaker and chair of session).
- June 2006      *Workshop on Arctic Weather Extremes*, 19-20 June 2006, Bergen, Norway (Invited speaker).
- June 2006      *DTI & BWEA Offshore Wind R&D Workshop*, 8 June 2006, London, UK (speaker).
- June 2006      *EURENEW 2006: European conference on impacts of climate change on renewable energy sources*, 5-9 June 2006, Reykjavik, Iceland (speaker).
- April 2006      *Offshore Wind Energy in Mediterranean and Other European Seas*, Civitavecchia, Italy, 20-22 April 2006 (Speaker, technical committee, poster committee and session chair).

- February 2006 *2006 European Wind Energy Conference and Exhibition*, Athens, 27 February -2 March 2006 (Session chair and poster presenter).
- December 2005 *International Energy Agency Annex XXIII: Offshore wind energy technology and deployment workshop on external conditions, layouts and design of offshore wind farms*. Risø National Laboratory, 12-13 December 2005 (Invited speaker).
- October 2005 *Copenhagen Offshore Conference*, Copenhagen, 26-28 October 2005 (speaker).
- June 2005 *Symposium on renewable energy in Pisa*, 15 June 2005 (Keynote speaker) (Interviewed for Italian Education and Science television channel).
- April 2005 *Off Shore Wind Energy Technologies Seminar*, Beijing, April 25, 2005. (Keynote speaker).
- March 2005 *CLIVAR/CMEP: IPCC AR4 Climate Model Simulations Analysis Workshop*, Hawaii, 1-4 March 2005 (participant).
- January 2005 *Nanoparticle Workshop* (co-sponsored by ACCENT), Paul Scherrer Institute (PSI) in Villigen, Switzerland, January 17-19, 2005 (participant).
- January 2005 *Offshore modelling needs workshop*, International energy Agency Annex XXIII, Offshore Wind Energy Technology and deployment, Subtask2 – Technical Research for Deeper Water. January 13-14, 2005 (speaker).
- November 2004 *European Wind Energy Conference and Exhibition*. London. (speaker and Chair of resource assessment session).
- April 2004 *The science of making torque from wind*, Scientific Conference, Delft, The Netherlands, 20-22 April 2004 (speaker).
- March 2004 *IEA Topical Expert Meeting #43 on Critical Issues regarding offshore technology and deployment*, Frederica, Denmark, March 2004 (Invited speaker).
- November 2003 *Fokus på vindenergi*. Danish Meteorological Office, November 2003 (speaker).
- November 2003 *Nordic Aerosol Society Symposium*, Copenhagen, Denmark, November 2003 (presenter).
- November 2003 *Nordic Centre of Excellence on Biosphere-Aerosol-Cloud-Climate Interactions Workshop on surface flux, micrometeorology and chemistry* at Risø National Laboratory, Roskilde, Denmark (presenter).
- October 2003 *American Association of Aerosol Research Annual Conference*, Anaheim, October 2003. (Presenter and Chair of two sessions - Marine Aerosols and Carbonaceous Aerosol).
- September 2003 Seminar on '*Results of the BALTEX/BRIDGE period 1999-2002*', Risø, Denmark (Invited speaker)

- June 2003 *EUREC Professional Course: Offshore wind energy*, Madrid, Spain (Invited Speaker).
- April 2003 OWEMES 2003: *Offshore Wind Energy in Mediterranean and Other European Seas*, Rome, Italy (Technical committee, speaker & poster presentation).
- April 2003 *European Geophysical Society/American Geophysical Society Conference*, Nice, France (Session Convenor, Session Chair, Speaker and poster presentation)
- September 2002 *2002 Taiwanese Wind Energy Symposium*, Taipei, Taiwan (Invited speaker).
- June 2002 *WAsP Engineering Course*, Risø National Laboratory, Denmark (Presenter)
- April 2002 *EUREC Professional Course: Offshore wind energy*, Paris, France (Invited Speaker)
- April 2002 *Global Wind Conference 2002*, Paris, France (Speaker & poster presentation).
- February 2002 *ENDOW: Offshore wakes: measurements and modelling*, Risø Roskilde, Denmark (Organiser and speaker).
- August 2001 *2001 Taiwanese Wind Energy Symposium*, Chungli, Taiwan (Invited speaker).
- July 2001 *European Wind Energy Conference and Exhibition*, Copenhagen, Denmark (Speaker & poster presentation).
- June 2001 *The second informal conference on reaction kinetics and atmospheric chemistry*, Helsingør, Denmark (Speaker & poster presentation).
- November 2000 *American Association for Aerosol Research Annual Conference*, St Louis, USA (Speaker).
- September 2000 *European Aerosol Conference 2000*, Dublin (Invited speaker).
- June 2000 *Customer satisfaction workshop on the proposal preparation process European Commission Fifth Framework*, Brussels, Belgium (Invited participant).
- April 2000 OWEMES 2000: *Offshore Wind Energy in Mediterranean and Other European Seas*, Siracusa, Italy (Poster award committee, Technical Committee, speaker & poster presentation).
- March 2000 *Institute for Mathematics and its Applications Workshop on Atmospheric Modeling*, Minneapolis, USA. (Invited participant and speaker).
- November 1999 *American Meteorological Society Conference on Coastal and Oceanic Prediction*, New Orleans, USA (Poster presentation).
- October 1999 *Workshop on Nitrogen Deposition to and Cycling in Forest Ecosystems and Linkages to Carbon sequestration*, Indiana University, USA (co-organizer and presenter)

- October 1999 *American Association for Aerosol Research Annual Meeting*, Tacoma, USA (Speaker).
- September 1999 *International Global Atmospheric Chemistry Conference*, Bologna, Italy (Poster presentation).
- September 1999 *European Aerosol Conference*, Prague, Czech Republic (Poster presentation).
- September 1999 *British Wind Energy Association Conference*, Cambridge, UK (Speaker & poster presentation).
- April 1999 *Workshop on issues of Night-time Carbon Exchange, Local Divergence and Drainage Flow*, Indiana University, USA.
- April 1999 *European Geophysical Society Annual Conference*, The Hague, The Netherlands (Poster presentation).
- March 1999 *Aerosol modelling workshop*, Environment Canada, Vancouver (Speaker).
- March 1999 *European Wind Energy Conference and Exhibition*, Nice, France (Poster presentation).
- December 1998 *American Geophysical Union*, San Francisco, USA (Speaker & poster presentation).
- September 1998 *Just add water*, Seminar on Ion Chromatography hosted by DIONEX, Indianapolis, USA.
- September 1998 *5<sup>th</sup> International Aerosol Conference*, Edinburgh, UK (Speaker).
- July 1998 *4<sup>th</sup> International Aerosol Symposium*, St. Petersburg, Russia (Speaker).
- May 1998 *Atmospheric Ammonia Workshop*, Environment Canada, Edmonton, Canada (Invited speaker).
- March 1998 *American Association of Geographers Annual Conference*, Boston, USA (Speaker).
- January 1998 *A&WMA Speciality Conference on PM<sub>2.5</sub>: A fine particle standard*, Long Beach, USA (Speaker).
- October 1997 *American Association for Aerosol Research Annual Meeting*, Denver, USA (Speaker).
- September 1997 *A&WMA/AGU Speciality Conference on Visual Air Quality, Aerosols, and Global Radiation Balance*, Bartlett, USA (Speaker).
- April 1997 *OWEMES Seminar on Offshore Wind Energy in Mediterranean and other European Seas*. Sardinia, Italy (Speaker).
- March 1997 *Techniques and problems in modelling size distributed aerosol formation and*

- composition workshop*. Environment Canada, Toronto, Canada (Speaker).
- October 1996 *Acidifying Emissions Workshop*, Environment Canada, Toronto, Canada (Speaker).
- June 1996 *Air and Waste Management Association Annual Conference*, Nashville, USA (Speaker).
- May 1996 *European Union Wind Energy Conference*, Göteborg, Sweden (Presenter).
- April 1996 *American Association of Geographers Annual Conference*, Charlotte, USA. (Presenter and Chair of Session on 'Atmosphere: Land Surface Interaction')
- January 1996 *American Meteorological Society Conference*, Atlanta, USA (Presenter).
- November 1995 *NATO/CCMS 21st International Technical Meeting on Air Pollution Modeling and Its Application*, Baltimore, USA. ((Presenter and Rapporteur of session on 'New Developments').
- October 1995 *International Conference on Atmospheric Ammonia*, Oxford, UK (Presenter).
- July 1995 *British Wind Energy Association 17th Annual Conference*, Warwick, UK (Presenter).
- June 1995 *Canadian Meteorological and Oceanographic Society Conference*, Kelowna, Canada. (Presenter and Chair of session on 'Photochemical Modeling in the Lower Fraser Valley').
- April 1995 *European Geophysical Assembly*, Hamburg, Germany (Presenter).
- February 1995 *Third Annual Oceanography Symposium*, University of British Columbia, Vancouver, Canada (Presenter).
- October 1994 *Air-Sea Exchange Workshop*, Risø National Laboratory, Denmark (Presenter).
- September 1994 *Second International Conference on Air-Sea Interaction and Meteorology and Oceanography of the Coastal Zone*, Lisbon, Portugal (Presenter).
- May 1994 *Windpower '94. American Wind Energy Association Conference*. Minneapolis, USA (Presenter).
- February 1994 *OWEMES: European Seminar on Offshore Wind Energy in Mediterranean and other European Seas*, Rome, Italy (Presenter).
- October 1993 *British Wind Energy Association 15th Annual Conference*, York, UK. (Presenter).
- September 1993 *Global Change: Climate Change and Climate Change Impacts, Focusing of European Research Symposium*, Copenhagen, Denmark (Presenter).
- June 1993 *British Wind Energy Association/Department of Trade and Industry Seminar: Prospects for Offshore Wind Energy: The state of the art and future opportunities.*

- Harwell, UK (Presenter).
- March 1992 *British Wind Energy Association 14th Annual Conference*, Nottingham, UK (Presenter).
- October 1991 *European Wind Energy Conference and Exhibition*, Amsterdam, Netherlands (Presenter).
- October 1991 *New Trends in Wind Energy Seminar*, Chania, Crete (Presenter).
- September 1990 *Windpower '90, American Wind Energy Association Conference*, Washington, D.C. (Presenter).
- July 1990 Science and Engineering Research Council Graduate School, Sheffield, UK. (Presenter).
- April 1990 *European Geophysical Assembly*, Copenhagen, Denmark (Presenter).
- March 1990 *British Wind Energy Association 12th Conference*, Norwich, UK. (Presenter).
- July 1989 *European Wind Energy Conference and Exhibition*, Glasgow, UK. (Presenter).
- September 1988 Course on *Climate Change and Impacts: A General Introduction*, Florence, Italy. (Presenter).
- June 1988 Workshop on *Site Windspeed Estimation*, University of East Anglia, UK. (Presenter).
- September 1987 *International Conference on Acid Rain*, Lisbon, Portugal. (Presenter).
- August 1987 *International Geographical Union: Conference on Recent Climatic Change*, Sheffield, UK. (Presenter).
- March 1987 *Association of British Climatologists Meeting on Acid Rain*, UMIST. UK. (Presenter).
- December 1986 *Royal Meteorological Society Meeting on Acid Rain*, Imperial College, London, UK. (Presenter).

## **EDUCATIONAL ACTIVITIES**

### **Instructional experience in formalized courses**

- 2008 Sustainable Energy Systems (G442/G542). Course for fourth year undergraduates and graduate students in the Department of Geography, Indiana University. 20 students. Spring semester.
- 2007 Principles of wind energy (P02209). Course for M.Sc. Renewable Energy at the University of Edinburgh, School of Engineering and Electronics. 32 students. Autumn semester.
- 2006 Principles of wind energy (P02209). Course for M.Sc. Renewable Energy at the University of Edinburgh, School of Engineering and Electronics. 35 students. Autumn semester.
- 2005 Offshore wind energy course at Risø, October 2005. Course organiser and presenter of 'Introduction to offshore wind resources'.
- 2004 Offshore wind energy course at Risø, September 2004. Course organiser and presenter of 'Offshore wind resources' and 'Offshore wakes'.
- 2003 Offshore wind energy course at Risø, September 2003. Presenter of 'Offshore wind resources' and 'Offshore wakes'.
- 2003 Offshore wind energy course at NorskHydro, Oslo: Co-convenor with S. Frandsen, September 2003.
- 2003 Invited lecturer on '*Offshore Wind Resources*' at EUREC Agency Professional Course on Offshore Wind Energy, Madrid, June 2003.
- 2002 *WAsP Engineering*, Informal Tutorial, Taiwan, October 2002
- 2002 *WAsP Course*, Team Member Nairobi, Kenya, September 2002.
- 2002 Invited lecturer on '*Offshore Wind Resources*' at EUREC Agency Professional Course on Offshore Wind Energy, Paris, April 2002.
- 2001 *WAsP Course*, Team Member Risø, Denmark, June 2001.
- 1999 Guest lecturer (multiple sessions) in G434 '*Air pollution meteorology*' Course, Indiana University, Indiana, USA.
- 1999 Instructor for G840 *Analysis, construction and evaluation of emission inventories*. Indiana University.
- 1997 Guest lecturer (multiple sessions) in G434 '*Air pollution meteorology*' Course, Indiana University, Indiana, USA.
- 1996 Guest lecturer (multiple sessions) in G305 '*Environmental Change*' Course, Indiana

- University, Indiana, USA.
- 1996 Guest lecturer in '*Introduction to Micrometeorology*' Course, University of Lund, Sweden
- 1995 Guest lecturer in '*Introduction to Micrometeorology*' Course, University of Lund, Sweden.
- 1991 Invited lecturer on a course in '*New Trends in Wind Energy*', Chania, Crete
- 1987-1992 Co-convenor of final year under-graduate course ENV353 '*Climate Change*', Department of Environmental Sciences, University of East Anglia, UK.

### **Student supervision**

- 2008 Faculty sponsor for Research and Readings Course Pamela Geschellen on Peak Oil, Indiana University
- 2007 Project supervisor for three 5<sup>th</sup> year M.Eng. students in the School of Engineering and Electronics, University of Edinburgh.  
Eoghan MacManus *Urban wind resources in Edinburgh*  
Gareth Brown *Applicability of design standards for wind turbines in Europe and Asia*  
Alan Duckworth *Assessment of wind turbine wake models*
- 2007 Director of Studies for ten first year students in the School of Engineering and Electronics, University of Edinburgh
- 2007 Supervision of two industrial placement students in the School of Engineering and Electronics, University of Edinburgh. Alan Duckworth and Gareth Brown.
- 2007 Supervision of four student dissertations for M.Sc. Sustainable Energy Systems; University of Edinburgh.  
Simon Morris *Calculating the carbon footprint of Biggar*  
Wenguang Qi *Wind climatology of Texas and California*  
Paul Schechter *Reducing carbon emissions as part of Carbon Neutral Biggar*  
Ersi Zachmanoglou *Interconnection of wind and hydropower*
- 2006-2008 Member of graduate supervision committee. M.Sc. Fredi Birsan. Indiana University. Title: *Turbulent Transport and Deposition of Particles in Forest Canopies*. Indiana University.
- 2006-2008 Member of graduate supervision committee. Ph.D. Alexandros Makridis. School of Engineering and Electronics, University of Edinburgh..
- 2006-2007 Member of graduate supervision committee. Ph.D. Christopher Elkinton. University of Massachusetts. Title: *Offshore wind farm layout optimisation*. Graduated August 2007.

- 2004-2006 Member of graduate supervision committee. M.Sc. Fredi Birsan. Indiana University. Title: *Particle dry deposition to a forest canopy. A flux based analytical model* Graduated Indiana University, October 2005.
- 2006 Project supervisor for two 5<sup>th</sup> year M.Eng. students in the School of Engineering and Electronics, University of Edinburgh  
Fatma Murray *The value of short-term forecasting for wind energy in Scotland*  
Zafer Ozveren *Impact of high wind speeds on wind energy output in Scotland*
- 2005 Niels Bohr Institute at Copenhagen University 4 physics students- supervision of first year project on wind turbine wakes. Team lead by Sara Eisenhardt
- 2005- Member of graduate supervision committee. Ph.D. Indiana University. Fredi Birsan.
- 2004 Supervisor of Chris Elkinton (Ph.D. candidate from University of Massachusetts) during 4 month visit to Risø National Laboratory.
- 2004-2005 Member of graduate supervision committee. M.Sc. Fredi Birsan. Indiana University. Title: *Particle dry deposition to a forest canopy. A flux based analytical model* Graduated Indiana University, October 2005.
- 2003-2004 Supervisor of Maurizio Motta for 2 year position on the WindEng education and training network funded by the European Commission.
- 2000-2004 Member of graduate supervision committee. Justin Schoof Ph.D. Thesis title: *Generation of regional climate change scenarios using general circulation models and empirical downscaling*. Graduated Indiana University September 2004.
- 1999-2001 Member of graduate supervision committee. Kurt Hirzy M.Sc. Indiana University (Incomplete due to ill health).
- 1997-1999 Member of graduate supervision committee. Brooks Pearson. Ph.D.: *An estimation of potential production of agri-based ethanol and its contribution to transportation emissions*. Graduated Indiana University December 1999. Winner of the 2000 Dissertation Award from the AAG Transportation Geography Speciality Group.
- 1996-1998 Member of graduate supervision committee. Kelley Hook M.Sc.: *Development and application of a mathematical time series model to simulate daily total wind energy*. Indiana University October 1998.
- 1996 Elected as an Associate Member of Indiana University Graduate Faculty School.

**SERVICE ACTIVITIES**

**Editorial boards of international journals**

2007→	Wind Energy
2006-2007	Wind Engineering (Editor for Meteorology)

**Membership of conference organization and other committees**

2008	Member of scientific committee for European Wind Energy Conference and Exhibition, Brussels, 2008 (76 abstracts, 2 papers in scientific track)
2008	Wind Energy Group of the World Renewable Energy Conference X (14 abstracts)
2007-	European Union Technology Platform. Wind resource committee member.
2007	The science of making torque from wind conference. Abstract reviewer (3). Paper reviewer (3)
2006-	British Wind Energy Association Resource Group – informal committee dealing with meteorological issues relating to wind energy
2006-2007	WINDPOWER 2007 Conference Program Committee, Los Angeles June 2007 (48 abstracts)
2006-2007	Member of scientific committee for European Wind Energy Conference and Exhibition, Milan, 2007 (Reviewer for scientific session ~80 abstracts and for resource and short-term forecasting sessions ~8 abstracts, Scientific review 1 paper)
2005-2006	ACCENT WP6 Data quality control Steering Group (invited member)
2004	The science of making torque from wind – EWEA Special Topic Conference. Abstract reviewer (2).
2003, 2004, 2005, 2006	Convenor session on Wind energy: European Geophysical Society
2000, 2003, 2006	Technical Committee for Conference on Offshore Wind Energy in Mediterranean and Other European Seas (and Session Chair 2003 and 2006, Poster Award Committee member 2000, 2006) 2005: Reviewed 43 abstracts for 2006 conference
2001	Member of EWEA Offshore Wind Energy Special Topic Conference Technical Committee (10 abstracts)
1997-1998	Working Group on Visibility Air and Waste Management Association

1997, 1998, 2000, 2003 Working Group on Atmospheric Aerosols American Association for Aerosol Research

**Reviewer for professional agencies and organizations: 2001 to date**

<b>Year &amp; # reviews</b>	<b>Agency</b>
<b>2008</b>	
1	UK Engineering and Physical Sciences Research Council (proposal)
<b>2007</b>	
1	Estonian Science Foundation (proposal)
1	UK Engineering and Physical Sciences Research Council (proposal)
8	External assessor for Chair, Newcastle University
2	National Science Foundation Atmospheric Chemistry Program
<b>2006</b>	
2	National Science Foundation Atmospheric Chemistry Program
1	Swedish Space Science Foundation
<b>2005</b>	
1	National Science Foundation Atmospheric Chemistry Program
2	Global Change and Environment Program (GCEP) projects in renewable energy
<b>2004</b>	
39	Swedish National Research Council
1	Panel member for a scientist position at the Danish Environmental Research Laboratory
1	National Science Foundation Atmospheric Chemistry Program
<b>2003</b>	
1	National Science Foundation Atmospheric Chemistry Program
<b>2001</b>	
1	UK National Environment Research Council

**Reviewer for international journals: 2001 to date**

<b>Year &amp; # reviews</b>	<b>Journal</b>
<b>2008</b>	
6	Wind Energy (Editorial role, not reviewer)
1	Choice (1 book)
1	Quarterly Journal of the Royal Meteorological Society
2	Reviews for two chapters in Midwestern Climate book
1	Atmospheric Environment
<b>2007</b>	

11	Wind Energy (Editorial role, not reviewer)
2	Wind Engineering
2	International Journal of Climatology
1	ASME Journal of Solar Energy Engineering
4	Choice (1 web-site, 3 books)
1	Theoretical and Applied Climatology
1	Boundary-layer Meteorology
2	IET Renewable Power Generation
1	Environmental Research Letters
<b>2006</b>	
1	Atmospheric Environment
1	Journal of Geophysical Research
2	Choice (Reviews of science and technology resources for academic libraries) (2 books)
1	Journal of Applied Meteorology
1	Proceedings of the Institution of Mechanical Engineers, Part A, Journal of Power and Energy
7	Wind Engineering
1	International Journal of Climatology
1	The Professional Geographer
<b>2005</b>	
1	Ecological Applications
1	Annals of the American Geographer
1	Water, Air and Soil Pollution
2	Wind Energy
3	Choice (Reviews of science and technology resources for academic libraries) (1 book, 2 web sites)
<b>2004</b>	
1	Journal of Wind Engineering and Industrial Aerodynamics
1	Wind Energy
1	Choice (Reviews of science and technology resources for academic libraries) (1 book)
<b>2003</b>	
1	Atmospheric Environment
1	Journal of Atmospheric and Oceanic Technology
1	Theoretical and Applied Climatology
1	Wind and Structures
1	Wind Energy
1	Wind Engineering
1	James & James Scientific Publishers (1 book)
<b>2002</b>	
1	Atmospheric Environment
1	Boundary-Layer Meteorology
2	Environmental Science & Pollution Research
1	Wind Engineering

**2001**

2 Atmospheric Environment  
2 Journal of Geophysical Research  
2 CHOICE (1 web site, 1 book)

**Review activities prior to 2001**

**Funding agencies:** Atmospheric Environment Service Canada, National Institute for Global Environmental Change SouthCentral Region, National Science Foundation CAREER and Atmospheric Chemistry Programs, US Department of Defence.

**Journals:** Atmospheric Environment, Choice: Reviews for Academic Libraries, Geophysical Research Letters, Journal of the Air and Waste Management Association, Journal of Geophysical Research, Journal of Wind Engineering and Industrial Aerodynamics, Ohio Journal of Science, Wind Energy, Wind Engineering.

**Membership of professional societies**

American Geophysical Union  
Marie Curie Research Fellowship Association  
Offshore Wind Energy Network  
(Previously member of American Meteorological Society 1996-2000, Air and Waste Management Association 1996-2000, American Association for Aerosol Research)

**Languages**

English Fluent  
Danish Conversational (Intermediate course Risø, 2003; Beginners Course taken at EOF Roskilde, Denmark, 1992-1993; Scandinavian Languages course taken at Indiana University, 1996)  
German Minimal  
French Minimal

*28 April 2008*