Curriculum Vitae

Name: Dr. Helén C. Andersson

Born 1968, married, one daughter born 2006.

Academic Qualifications and Employment

2003: Ph.D. in Oceanography, Göteborg University, Sweden,

1998: M.Sc. in Physical Oceanography, Göteborg University, Sweden,

1992: B. Sc. in Mathematics, Linköping University, Sweden

2015-: Swedish Meteorological and Hydrological Institute, Head of Oceanographic Research

2011-2015 : Swedish Meteorological and Hydrological Institute, Research Coordinator/Project leader /Researcher

2009-2011: Swedish Meteorological and Hydrological Institute, Researcher

2009-2009: Department of Oceanography, Göteborg University, Project Leader 20% of full time.

2009: Maternity leave 80% of full time.

2004-2008: Department of Oceanography, Göteborg University, Project Leader,

2006-2007: Full and part-time maternity leave

2003-2004: Department of Oceanography, Göteborg University, Project Assistant

1999-2002: Department of Oceanography, Göteborg University, Research Assistant to Prof. Anders Stigebrandt

1992-1997: Arbetsförmedlingen (Swedish Public Employment Service), Borås & Bollebygd, Career's adviser.

Research activities

2016-2019: PI for the project "CERES: Climate change and European aquatic RESources" funded by EU - H2020).

2015-2016: PI for the project "Hazard Support: Risk-based decision support for adaptation to future natural hazards" financed by Swedish Civil Contingencies Agency

2015-2016: PI for the project on "Risk of Future coastal flooding" funded by insurance company "Länsförsäkringar"

2016: Project leader for the scientific contribution of SMHI commission from Ministry of Climate and Environment on "Dimensional sea levels due to climate change".

2015-2016: Member of the international network producing the Baltic Sea Health Index (<u>www.ohiscience.org</u>), coordinated by Stockholm Resilience Centre, Stockholm University.

2014-2017: Researcher, PI and WP leader on the BONUS project BIO-C3 (Biodiversity changes – causes, consequences and management implications).

2011-2015: Researcher in the NorMER (Climate Change on Marine Ecosystems and Resource Economics) top-level research initiative and Nordic Center of Excellence (Climate expert and administrative/project leader tasks).

2009-2011: Research and Project co-ordination on the BONUS+ project ECOSUPPORT (Advanced tool for scenarios of the Baltic Sea ECOsystem to SUPPORT decision making). (Arranging workshops, steering group meetings, web-page updates, internal and external project communication and information (partners, stakeholders, public and scientific), ECOSUPPORT/AMBIO special issue editorial board, work package status reports, annual scientific reports, stakeholder and scientific dissemination etc.)

2009: Research work on finfish modelling and fishfarm impact on the environment. Responsible for website information on the BOX-project (Baltic Deepwater Oxygenation), www.marsys.se.

2005-2008: Project leader for the Gothenburg University partner on the European Commission contract project SPEAR (Sustainable options for PEople, catchment and Aquatic Resources, Sixth Framework

Programme FP6-2002-INCO-DEV-1, €172200)). Member of the Steering Group Committee and representative for Göteborg University on meetings and workshops in: Kunming, China (2007), Cape Town, South Africa (2006), Azores (2006), Quingdao and Ningbo China (2005).

2006-2007: Scientific planning and writing of applications for 1.) National Research School in development of scientifically based systems of coastal management and 2) Pre-proposal for Linnaeus application in Dynamics of the global coastal zone in a changing Environment.

2005-2006: Project participant for the Gothenburg University partner on the European Commission contract project and ECASA (ECosystem Approach for Sustainable Aquaculture, €210000). Representative for Gothenburg University at meeting and workshop in: Oban, Scotland (2004).

2005-2007: Researcher (main applicant) in the Swedish Research Council funded project 'The Indonesian Throughflow – regulation of flow magnitudes and pathways in the Indian Ocean'. (567000 SEK)

2005: Member of Steering Group Committee for the multidisciplinary faculty platform application 'Forcing Factors in the Coastal Ocean'.

2003: Research in the project Marine Research on Eutrophication (MARE), funded by MISTRA, principal investigator Prof. Anders Stigebrandt, Gothenburg University, Sweden.

2000 –2002: Research in the project Oceanic response to atmospheric freshwater fluxes, funded by Swedish Natural Science Research Council by a grant to Prof. Anders Stigebrandt, Dept. of Oceanography, Gothenburg University, Sweden.

2002: Guest student at the Geophysical Fluid Dynamics 2002 Program at the Woods Hole Oceanographic Institution: Bounds on Turbulent Transports. (Office of Naval Research International Field Office (ONRIFO), Visitor Support Program.)

2001: Fellowship at the Geophysical Fluid Dynamics 2001 Program at the Woods Hole Oceanographic Institution: Conceptual Models of the Climate. (The Fellowship Committee, Woods Hole Oceanographic Institution, stipend for Geophysical Fluid Dynamic Program 2001.

1998: Field study at Inhaca Island, Mozambique, Tidal dynamics and water exchange in a shallow bay, (SIDA (Swedish International Development Agency) through The International consultancy group of the National Board of Fisheries (SWEDMAR).

Teaching Experience

2015: Lecturer on BONUS BIO-C3/BAMBI /INSPIRE PhD summer school "The Baltic Sea: a model for the global future ocean?". Kiel, Germany (to be on 5 – 11 July).

2014: Organization of a one-day PhD workshop in Climate change and climate modelling (as part of the NorMER project). Lecture on climate-change impacts on the marine ecosystem and exercise on climate modelling.

2013: Lecture on "The Baltic Sea – a sea under constant changes" (in Swedish): Part of master course on Baltic Sea Ecosystems at Åbo Akademi, 10 December, Åbo, Finland.

2011: Lecture on "The Baltic Sea – a sea under constant changes" (in Swedish) at the lecture series of the Norrköping Senior University.

2005-2009: Lectures on 'Aquaculture and MOM model for fish farming and environmental impact, Gothenburg University.

2005: Lecture on 'The Ocean in the climate system', Gothenburg University.

2004: Supervisor on the course LAU 250: Man in the world: Bridges, garbage and genes – sustainable development, 6 course points, Gothenburg University.

2004: Lecturer and supervisor on the course LAU 160: Knowledge takes form in a sustainable society, 4 course points, Gothenburg University.

2003: Supervisor on the course LAU 250: Man in the world: Bridges, garbage and genes – sustainable development, 5 course points, Gothenburg University.

2003: Lecturer and supervisor on the course LAU 160: Knowledge takes form in a sustainable society, 4 course points, Gothenburg University.

Publications

Peer-reviewed:

- **2015:** Wiegel. B., Andersson, H.C., Meier, H.E.M., Blenckner, T., Snickars. M., Bonsdorff, E. Long-term progression and drivers of coastal zoobenthos in a changing systems. Marine Ecology Progress Series (in press)
- **2014:** Jutterström, S., Andersson, H.C., Omstedt, A., Malmaeus, M. Multiple stressors threatening the future of the Baltic Sea-Kattegat marine ecosystem: Implications for Policy and Management. Marine Pollution Bulletin, 86, 468-480, DOI: 10.1016/j.marpolbul.2014.06.027
- **2014:** Meier, H.E.M, Andersson, H.C., Arheimer, B., Donnelly, C., Eilola, K., Gustafsson, B.G., Kotwicki, L., Neset, T.S., Niiranen, S., Piwowarczyk, J., Savchuk, O.P., Schenk, F., Węsławski, J.M. and E. Zorita. Ensemble modeling of the Baltic Sea Ecosystem to Provide Scenarios for Management. AMBIO. 43
- **2012:** H.E.M Meier and H.C. Andersson: ECOSUPPORT A pilot study on decision support for Baltic Sea environmental management. AMBIO, Special Issue: ECOSUPPORT Different Ecosystem Drivers Under Future Climate Scenarios in the Baltic Sea, 41, 6, 529-533.
- **2012:** H E Markus Meier, Helén C Andersson, Berit Arheimer, Thorsten Blenckner, Boris Chubarenko, Chantal Donnelly, Kari Eilola, Bo G Gustafsson, Anders Hansson, Jonathan Havenhand, Anders Höglund, Ivan Kuznetsov, Brian R MacKenzie, Bärbel Müller Karulis, Thomas Neumann, Susa Niiranen, Joanna Piwowarczyk, Urmas Raudsepp, Marcus Reckermann, Tuija Ruoho-Airola, Oleg P Savchuk, Frederik Schenk, Semjon Schimanke, Germo Väli, Jan-Marcin Weslawski and Eduardo Zorita: Future climate warming may unprecedentedly alter the Baltic Sea ecosystem compared to the past 150 yrs., Environmental Research Letters, 7 034005 doi:10.1088/1748-9326/7/3/034005.
- **2012:** Meier, H.E.M., H. Andersson, C. Dieterich, K. Eilola, B.G. Gustafsson, A. Höglund, R. Hordoir, and S. Schimanke, 2012: Modeling the combined impact of changing climate and changing socioeconomic development on the Baltic Sea environment in an ensemble of transient simulations for 1961-2099. Climate. Dynamics, DOI: 10.1007/s00382-012-1339-7
- **2012:** Meier, H. E. M., B. Müller-Karulis, H. C. Andersson, C. Dieterich, K. Eilola, B. G. Gustafsson, A. Höglund, R. Hordoir, I. Kuznetsov, T. Neumann, Z. Ranjbar, O. P. Savchuk, and S. Schimanke, 2012: *Impact of climate change on ecological quality indicators and biogeochemical fluxes in the Baltic Sea a multi-model ensemble study*. AMBIO, 41, 6, 558-573..
- **2011:** H.E.M Meier, Höglund, A., Döscher, R., Andersson, H., Löptien, U., and Kjellström, E., *Quality assessment of atmospheric surface fields over the Baltic Sea from an ensemble of regional climate model simulations with respect to ocean dynamics*. Oceanologia no. 53 (1-TI), pp 193-227.
- **2010:** H.C. Andersson, P. Wallman and C. Donnelly, *Visualization of hydrological, physical and biogeochemical modeling of the Baltic Sea using a GeoDome*TM. SMHI report series, Oceanography No. 105, 2010, 22 pp.
- **2011:** H.E.M Meier, H.C Andersson, K. Eilola, B.G. Gustafsson, I. Kuznetsov, B. Müller-Karulis, T. Neumann and O.P. Savchuk, *Hypoxia in future climates: A model ensemble study for the Baltic Sea*, GRL, Vol. 38, L24608, doi: 10.1029/2011GL049929 (highlighted by Nature Climate Change): 37-48. DOI 10.1007/s13280-013-0475-6.
- **2005:** Andersson, H. C. and A. Stigebrandt, *Regulation of the Indonesian Throughflow by baroclinic draining of the North Australian Basin.* Deep-Sea Res. I, 52, 2214-2233.
- **2004:** Andersson, H. C. and G. Veronis, , *Thermohaline circulation in a two-layer model with sloping boundaries and a mid-ocean ridge.* Deep-Sea Res. I, 51(1), 93-106.
- **2003:** Andersson, H. C. *Effects of topography on ocean thermohaline circulation and of climate Variability on Baltic Sea water exchange.* Doctoral Thesis A84 2003, Göteborg University, Sweden, 172 pp.

2002: Andersson, H.C., *Influence of long-term regional and large-scale atmospheric circulation on the Baltic sea level.* Tellus, 54A, 76-88.

2001:Gustafsson, B.G. and H.C. Andersson, , *Modeling the exchange of the Baltic Sea from the meridional atmospheric pressure difference across the North Sea.* J. Geophys. Res. 106, C9, 19,731-19,744.

Reports:

2014: Andersson, H.C., Bram Eriksson, L., Hjerdt, N., Lindström, G., Löptien, U., Strömqvist, J. Översikt av beräkningsmodeller för bedömning av fiskodlingars näringsämnesbelastning på sjöar, vattendrag, magasin och kustvatten. Rapport till Havs- och Vattenmyndigheten (in Swedish, under revision (Review of numerical models för assessment of water-quality impacts from fish farms on lakes, rivers, reservoirs, and coastal waters)).

2014: Jutterström, S., Malmaeus, M., Andersson, H., Omstedt, A. Marin Syntes – Eutrofiering, försurning och klimatförändring i Östersjön. I *Klimatförändringen och miljömålen* (In *Climate Change and the Environmental Objectives – CLEO*) Rapport till Naturvårdsverket inför fördjupad utvärdering 2015. http://www.cleoresearch.se/publications, IVL Svenska Miljöinstitutet 2014, Stockholm, Sverige, 200 pp. (In Swedish: Eutrophication, acidification and climate change in the Baltic Sea).

2011: H.E.M Meier, Andersson, H., Dietrerich, C., Eilola, K., Gustafsson, B., Höglund, A., Hordoir, R. and Schimanke, S., *Transient scenario simulations for the Baltic Sea Region during the 21st century.* SMHI report series, Oceanography.108, Norrköping, Sweden, 81 pp.

2008: Ferreira, J.G., Andersson, H.C., Corner, R.A., Desmit, X., Fang, Q., De Goede, E.D., Groom, S.B., Gistafsson, B.G., Hawkins, A.J.S., Hutson, R., Jiao, H., Lan, D., Lencart-Silva, Li, R., Liu, X., Luo, Q., Musango, J.K., Nobre, A.M., Nunes, J.P.,Pascoe, P.L., Smits, J.G.C., Stigebrandt, A., Telfer, T.C., de Wit, M.P., Yan, X., Zhang, X.L., Zhang, Z., Zhu, M.Y., Zhu, C.B., Bricker, S.B., Xiao, Y., Nauen, C.E., Scalet, M., SPEAR | *Sustainable options for people, catchment and aquatic resources.* IMAR- institute of Marine Research, ISBN 978-972-99923-2-2, 180 pp. www.biaoqiang.org.

2008: Andersson, H.C., *Oceanographic description of Huangdun Bay, China*, SPEAR report, 41 pp, www.biaoqiang.org/deliverables.

2008: Andersson, H.C., and Öberg J., *Oceanographic description of Sanggou Bay China*, SPEAR report, 19 pp, www.biaoqiang.org/deliverables

2008: Andersson, H.C., *Aquaculture impact on water quality in Sanggou Bay, China*, SPEAR report, 23 pp, www.biaoqiang.org/deliverales.

2008: Andersson, H.C., Gustafsson, B.G., Stigebrandt, A., *Modelling finfish and shellfish growth, their interaction and impact on the water quality in the Xiangshan Bay, China*, SPEAR report, 36 pp, www.biaoqiang.org/deliverables.

2006: Ferreira, J.G., Andersson, H.C., Corner, R.A., Groom, S.B., Hawkins, A.J.S., Hutson, R., Lan, D. Nauen, C., Nobre, A.M., Smits, J., Stigebrandt, A., Telfer, T.C., de Wit, M., Yan, X.J., Zhang, X.L., Zhu, M.Y., *Sustainable options for people, catchment and aquatic resources.* IMAR- institute of Marine Research, ISBN 972-99923-0-4, 71 pp.

2001: Andersson, H.C., *Abyssal flow in a two-layer model with sloping boundaries and a mid-ocean ridge,* Geophysical Fluid Dynamics Proceedings volume 2001, Woods Hole, USA, 17 pp.

1999: Andersson, H. and M. Green, , *Tidal dynamics and water exchange in a shallow bay at Inhaca Island, Mozambique*, Swedmar Working paper 23/99, Göteborg, Sweden, ISSN 1400-7495, 21pp.

1998: Andersson, H. *Geostrophic calculations in the Arctic Ocean based on the ARK XII data*, Master Thesis B167, Göteborg University, Sweden, ISSN 1400-3821, 30pp.

1992: Andersson, H. and C. Österberg, *A sequential linear programming method for nonlinear optimization*, Bachelor Thesis LIU-MAT-EX-92-02, Linköping University, Sweden, 70pp.

Newsletters, popular articles etc.:

- **2013:** Meier, M., Andersson, H., Reckermann, M.: ECOSUPPORT: Decision Support for Baltic Sea Environmental Management in the light of climate change. BALTEX Newsletter, 15, 5-6.
- **2012:** Andersson, H.C., Scenarios of climate change for the Baltic Sea. NORMER annual report 2012, p 25, http://www.normer.uio.no/news/normer-2012-report/normer-2012-hq.pdf
- **2002:** Andersson, H, *Vindarna över Nordsjön bestämmer vatteninflödet till Östersjön*, Havsutsikt, Göteborg Universitet, Ideella Föreningen Västerhavet och de marina forskningscentra vid universiteten i Göteborg, Stockholm och Umeå, Sverige, 2, 4-5. (In Swedish)
- **2002:** Andersson, H, *Vindarna över Nordsjön bestämmer vatteninflödet till Östersjön*, Yrkesfiskaren, 26(20),12 (In Swedish).
- **2001:** Omstedt A., Gustafsson B.G. and Andersson, H.C., *Improved possibility for climate scenario modelling of the Baltic Sea circulation*, SweClim Newsletter, Rossby Centre, Norrköping, Sweden, 10, 24-27.

Conferences, symposiums, seminars etc.

- **2014:** Löwendal, E., Andersson, H.C. and Neset, T.S: Climate and Environmental Visualization, Climate Science and Policy Research Experiences and Visions building on 10 years of Collaboration CSPR-SMHI, 8 May, Norrköping, Sweden.
- **2013:** Andersson, H.C.: The Baltic Sea A climate-sensitive enclosed sea. Linköping University Climate Week, 26 November, Norrköping, Sweden.
- **2013:** Andersson, H.C., Axe. P., Jutterström, S., Malmaeus, M., Meier, H.E.M., and Omstedt, A.: Multiple stressors impacting the future marine ecosystems: implications for management and monitoring. ICES Annual Science Coference, Reykjavik, Island 23-27 September, 2013.
- **2013:** Presentations of "Baltic Vision" for invited guests (H.M King Carl XVI Gustaf, King of Sweden, Chair of Borgholm City Council, Director General SMHI, Official Secretary of Helsinki Commission), the general public (including stakeholders at Borgholm City Council) and scientists at the 7th Study Conference of BALTEX, Borgholm, Island of Öland, Sweden, 10-14 June, 2013
- **2013:** Andersson, H: Marina miljöer under påverkan av klimatförändring och andra antropogena aktiviteteter (Marine environments under the impact of climate change and other anthropogenic activities), Seminar at SMHI on Climate Adaptation, March 21, Norrköping, Sweden.
- **2012:** H. Andersson: God miljöstatus i Östersjön (Good environmental status in the Baltic Sea), Riksdag (Swedish Chambers) seminar on the Baltic Sea Strategy, Riksdagen, Stockholm, 29 May.
- **2012:** H. Andersson: Baltic Vision presentation of the future marine eutrophication condition in the Baltic Sea in a GeoDome for Motala Ströms Vattenvårdsförbund, Visualization Center C, Norrköping, 25 May.
- **2012:** H. Andersson: Marin eutrofiering Östersjöns miljö i ett framtida klimat (In Swedish: Marine Eutrophication The Baltic Sea in a future climate), CLEO Stakeholder seminare (Climate Change and Environmental Objectives), Stockholm, Sweden, 21 May.
- **2012:** H. Andersson, SMHI and Ida Reuterswärd, Swedish Ministry of the Environment: Visualization as a tool for climate and environmental policy decisions for the Baltic Sea, iDays Virtual possibilities within climate and sustainability, Norrköping, Sweden, 2 May, 2012.
- **2012:** H. Andersson: Baltic Sea Projection Modelling in ECOSUPPORT, ICES Working Group WGIPEM annual meeting, Copenhagen, 16 March.
- **2011:** Helén Andersson and Patrik Wallman: Baltic Vision Visualisation of a future Baltic Sea environment, ECOSUPPORT and RECOCA (BONUS+) Stakeholder conference: An outlook to the future Baltic Sea: how can we reach the targets of the Baltic Sea Action Plan?, Stockholm, Sweden, 7 December.
- **2011:** Climate expert at the Climate Forum arranged by SMHI and Swedish EPA, Stockholm University, 30 November.
- **2011:** H.C. Andersson, H.E.M Meier, C. Dieterich, K. Eilola, B.G. Gustafsson, A. Höglund, R. Hordoir, I. Kuznetsov, T. Neumann, O. Savchuk and S. Schimanke: Baltic Sea Ecosystem Changes in Future Climate, Visions of the Sea, The Swedish Society for Marine Sciences, Stockholm, Sweden, 21-23 November.

- **2011:** Presentation of ECOSUPPORT results in the GeoDome, "Baltic Vision" at "Kvalitetsmässan", Gothenburg, Sweden, 15-16 November.
- **2011:** Presentation of ECOSUPPORT project highlights to the European Community, Brussels, Belgium, 8 November.
- **2011:** Presentation of ECOSUPPORT results in the GeoDome, "Baltic Vision" at the 13th Baltic Development Forum Summit and the European Commission's 2nd Annual Forum on the EU strategy for the Baltic Sea region (EUSBSR), Gdansk, Poland, 24-26 October.
- **2011:** H.E.M Meier, H.C. Andersson, C. Dieterich, K. Eilola, B.G. Gustafsson, A. Höglund, R. Hordoir, I. Kuznetsov, T. Neumann, O. Savchuk and S. Schimanke: Projected Baltic Sea Ecosystem Changes in Future Climates, ICES Annual Science Conference, extended abstract in ICES CM Documents 2011, contribution to Theme session R, No. R18 http://www.ices.dk/products/CMdocs/CM-2011/CM2011.pdf Gdansk, Poland, 19-23 September.
- **2011:** ECOSUPPORT consortium: Selected highlights from the ECOSUPPORT project (poster presentation), ICES Annual Science Conference, Gdansk, Poland, 19-23 September.
- **2011:** H.E.M. Meier, H. Andersson, C. Dieterich, K. Eilola, B. Gustafsson, A. Höglund, R. Hordoir, I. Kuznetsov, T. Neumann, O. Savchuk and S. Schimanke, Nutrient load reductions in future climate of the Baltic Sea assessment of uncertainties. 8th Baltic Sea Science Congress, St. Petersburg, Russia, August 22-26, 2011.
- **2011:** ECOSUPPORT consortium: Selected highlights from the ECOSUPPORT project (poster presentation), Baltic Sea Science Congress, St Petersburg, Russia, 22-26 August.
- **2011:** H.C Andersson, P. Wallaman, J. Dahné, C. Donnelly, K. Eilola and H.E.M Meier, Visualization of hydrological, physical and biogeochemical modelling of the Baltic Sea using a GoeDome (poster presentation), Baltic Sea Science Congress, St Petersburg, Russia, 22-26 August.
- **2011:** Presentation of ECOSUPPORT project at Linköping University for CSPR (Centre for Climate Science and Policy Research) and SEI (Stockholm Environmental Institute), 9 June.
- **2011:** SMHI & CSPR (ECOSUPPORT): Baltic Vision: Research results from the ECOSUPPORT project visualized by 30 mins presentations using a Geodome. Baltic Sea Day, St Petersburg, Russia, 22-23 March.
- **2010:** Climate expert at the Climate Forum arranged by SMHI and Swedish EPA, Stockholm University, 24 November.
- **2010:** SMHI & CSPR (ECOSUPPORT): Baltic Vision: Research results from the ECOSUPPORT project visualized by 30 mins presentations using a Geodome. Stockholm University and at the Government Offices of Sweden, 11-12 November.
- **2010:** Presentation of ECOSUPPORT results on eutrophication in a changing climate at the East Sweden Region "Östsam" a one-day conference held in conjunction with the Open Days in Brussels, discussing the Baltic Sea Strategy of the European Union. Among others visited by member of the European Parliament, 28 October, 2010.
- **2010:** Presentation of ECOSUPPORT project results on eutrophication in a changing climate at "Discussion Baltic Sea" at Linköping University, Sweden. Visited among others by local politicians, scientists, member of European Parliament, representative from World Wide Fund for Nature (WWF) and the Federation of Swedish Farmers.
- **2010:** SMHI & CSPR (ECOSUPPORT): Baltic Vision: Research results from the ECOSUPPORT project visualized by 30 mins presentations (ca 7/day) using a Geodome. Presenters P. Wallman and H. Andersson, Stockholm World Water Week, 7-9, September.
- **2010:** H.E.M. Meier, Andersson, H.C., Eilola, K., Ĥordoir, R., Höglund, A., *New scenario simulations of the Baltic Sea ecosystem to support decisiom making*. EUTRO 2010, Nyborg, Denmark, 15-18 June.
- **2010:** The ECOSUPPORT consortium (poster presented by H.C. Andersson), *Selected Highlights from the ECOSUPPORT project*. BONUS annual conference 2010 (Vilnius, Lithuania).
- **2007:** Andersson, H.C and A. Stigebrandt, *Sustainable aquaculture, impact of feed composition in different climate zones*. The annual National Marine Sciences Meeting, Swedish Society for Marine Sciences (Tjärnö, Sweden).

2003: Andersson, H. C. and A. Stigebrandt, *Regulation of the Indonesian Throughflow by baroclinic draining of the North Australian Basin*, IUGG 2003, XXIII General Assembly of the International Union of Geodesy and Geophysics (Sapporo, Japan).

2002: Andersson, H. C., *Remote wind forcing of Baltic sea level variability and water exchange*, European Geophysical Society 2002: XXVII General Assembly (Nice, France).

2001: Gustafsson, B.G. and Andersson, H.C, *On the forcing of Baltic Sea water and salt exchange*, Third Study Conference on BALTEX, Baltic Sea Experiment, Mariehamn (Åland, Finland).

2001: Andersson, H.C., *Influence of long-term regional and large-scale atmospheric circulation on the Baltic sea level*, The annual National Marine Sciences Meeting, Swedish Society for Marine Sciences (Göteborg, Sweden).

2001: Gustafsson, B.G. and Andersson, H.C, *On the forcing of Baltic Sea water and salt exchange*, Third Study Conference on BALTEX, Baltic Sea Experiment, Mariehamn (Åland, Finland).

2000: Andersson, H.C. and B.G Gustafsson, *Wind climate influence on Baltic Sea deep-water Renewals*, AGU Chapman Conference on the North Atlantic Oscillation, University of Vigo (Orense, Spain).

2000: Gustafsson, B.G. and H.C Andersson, *Wind climate influence on Baltic Sea deep-water renewals*, Göteborg University and Chalmers Technical Institute Climate Seminar, Earth Sciences Center (Göteborg, Sweden).

2000: Andersson, H.C., *The Baltic sea level as an indicator of regional climate variability*, UK Marine Science 2000, Challenger Society, University of Norwich (Norwich, UK).

Media appearance etc.

2015: Interview for Swedish Radion P4 Kalmar about BONUS BIO-C3 Summer School, July 6 http://sverigesradio.se/sida/avsnitt/567648?programid=4301 (1.20 hours into program)

2015: Article "The Future of the Baltic Sea takes place in SMHI's ocean models" in the campaign "Save the Baltic Sea" supplementary issue distributed with the Swedish national newspaper Svenska Dagbladet. (In Swedish: *Framtiden för Östersjön tar form i SMHIs havsmodeller* i "Rädda Östersjön", 28 sidig bilaga distribuerad med Svenska Dagbladet 2015-03-31).

2013: Interview for newspaper Östran, published 11 June 2013: "The Geodome makes science understandable" (In Swedish "Geodomen gör vetenskapen begriplig"),

2012: Interview for newspaper Östgötacorrespondenten on Hypoxia in the Baltic Sea.

2012: Material, manuscripts and presentations for the Norrköping Visualization Centre C exhibition "Water – a world of life", 21 January – 18 August 2012.

2011: Interview for Swedish Radio P4: "SMHI awarded in Baltic Sea project" (SMHI prisas för Östersjöprojekt, in Swedish: http://sverigesradio.se/sida/artikel.aspx?programid=160&artikel=4765571)

2011: Participation in the film production made as Baltic 21 promotion material

http://vimeo.com/23634803 (draft version) by Council of the Baltic Sea States (CBSS).

2011: Interview for Russian television news on Baltic Sea marine environment research and presentations in a Geodome, St Petersburg, Russia, 22 March.

2010: Interview re: ECOSUPPORT-project for an article in the BONUS Bulletin 2/2011 http://www.bonusportal.org/bulletin/3_2011_bulletin_18.3.2011

2008: Participation in the Swedish radio program "Miljölarm", Vetenskapsradion P1, 11 January, 2008.

Arrangement of workshops and conferences:

2013: Exhibition booth at the IAHS-IAPSO-IAPSEI Joint Assembly, Gothenburg, Sweden, 22-26 July.

2013: Exhibition booth with GeoDome and information material at BALTEX 7th study conference, Borgholm, Sweden, 10-14 June.

2011: ECOSUPPORT & RECOCA Stakeholder conference, Stockholm University, Stockholm 7 December.

2011: ECOSUPPORT final scientific conference, Stockholm, 5-6 December.

2011: Exhibition booth with GeoDome and information material at the 13th Baltic Development Forum Summit and the European Commission's 2nd Annual Forum on the EU strategy for the Baltic Sea region (EUSBSR), Gdansk, Poland, 24-26 October.

2011: ECOSUPPORT workshop at Baltic Nest Institute, Stockholm, 8-10 March.

2010: ECOSUPPORT annual meeting at SMHI, Norrköping, 15 October.

2010: BONUS cluster activity: workshop on Uncertainties of Scenario Simulations, 14 October.

2010: AMBER PhD Climate Modelling School at SMHI, Norrköping, 13 October.

Grants and awards

2013: Formas Grant no 219-2013-2041 (Swedish research council for Environment, agricultural sciences and spatial planning) and BONUS/EU for the BIO-C3 project (1 760 000 SEK)

2011: BONUS+ award 2011 for the Best Public Engagement activity or product: ECOSUPPORT GeoDome –Stakeholder decision support by scientific communication, October 2011.

2011: BONUS secretariat, ca. €15000 for attendance with the GeoDome at the EUSBR stakeholder conference in Poland, October 2011.

2011: Swedish EPA, ca. 200000 SEK (actual costs) for attendance with the GeoDome (SMHI/ECOSUPPORT) at the Baltic Sea Days in Russia, March 2011.

2004: Swedish Research Council, research grant no 2004-5205, 567000 SEK, H.C Andersson: The Indonesian Throughflow – regulation of flow magnitudes and pathways in the Indian Ocean.

2003: Paul and Marie Berghaus donation fund, travel stipend 5000 SEK for conference attendance.

2002: Office of Naval Research International Field Office (ONRIFO), Visitor Support Program,

\$2,432.00. The grant enabled me to continue my work with Prof. Veronis of Yale University and to attend as a guest student at the Geophysical Fluid Dynamics 2002 Program at the Woods Hole Oceanographic Institution: Bounds on Turbulent Transports.

2001: Professor Sven Lindqvist Research Foundation, travel stipend 10,000 SEK for conference attendance.

2001: The Fellowship Committee, Woods Hole Oceanographic Institution, stipend for Fellowship at the Geophysical Fluid Dynamic Program 2001 at the Woods Hole Oceanographic Institution on Conceptual Models of the Climate, \$4,150.00 + \$450.00.

2001: Paul and Marie Berghaus donation fund, travel stipend 7000 SEK for conference attendance.

2000: AGU (American Geophysical Union) travel grant \$450.00 to attend multidisciplinary symposium on the understanding of causes and impacts of the North Atlantic Oscillation.

1998: Swedish International Development Agency grant through The International consultancy group of the National Board of Fisheries (SWEDMAR) for field study at Inhaca Island, Mozambique of Tidal dynamics and water exchange in a shallow bay. 27 555 SEK.

Miscellaneous

- Swedish representative in SCOR (Scientific committe on Oceanographic Research), 2015.
- Member of the Swedish National Committee for Geophysics, 2015-
- Member of ICES Working Group on Integrated Physical-biogeochemical and Ecosystem Modelling (WGIPEM, Chair Myron Peck), 2012-
- Member of Baltic Earth Working Group on Outreach and Communication (Chair: Carin Nilsson), 2013-
- Member of OSPAR ICG-EMO Correspondence Group on Eutrophication Modelling, 2012-
- Appointed reviewer for International Journals
- Editorial board member for ECOSUPPORT special issue in AMBIO (Issue 6, 2012)
- Administrative task in conjunction with international scientific project meetings (meeting agenda, minutes etc.)
- Administrative task in conjunction with FoUo division meetings (meeting agenda, minutes etc.)

- Participating in FoUo division recruitment interviews.
- Part of the SMHI working group for formulations of SMHI Oceanographic Strategy (2014).
- Writing the oceanographic parts for the SMHI research unit's strategy documents to the Department of Education and for internal SMHI purposes.
- Writing of FoUo research applications (e.g. MSB (Hazard Support: Risk-based decision support
 for adaptation to future natural hazards) Länsförsäkringar (Risk of flooding at the Swedish Coast:
 extreme situations in present and future climate (insurance company, funded with 2090 kSKR),
 BONUS: (BALTASSESS, BIO-C3 (funded), BISTRO, EU FP7: IMPROVE), Swedish Agency
 for Marine and Water Management (Nutrient loads from aquaculture).
- Representing FoUo division at SMHI meetings to enhance collaboration/communication between different divisions (Branch meetings oceanography, SCOBI users, and marine strategy meetings within and between departments FoU (research and development), A (professional services) and S (core services).)
- Internal and external presentations, e.g. presenting work at FoUo for other divisions at SMHI, for
 University students, SMHI external collaboration partners and Swedish County Administration
 Boards (including County Governor), SMHI Advisory Council, Swedish and international
 authorities and government representatives, the Swedish Minister for the Environment, the
 Swedish Minister for Climate and Environment, Swedish Agency for Marine and Water
 Management, the Swedish King H.M Carl XVI Gustaf.
- Fluently written and spoken Swedish and English
- Well acquainted with Windows system, Microsoft Office tools (Word, PowerPoint, Excel, Outlook, and Publisher) and some with UNIX.
- Well acquainted with Adobe Design Standard CS6, 2-day course on InDesign.
- Well acquainted with Matlab, LaTeX and Emacs software and FORTRAN computer language.
- Work with FoUo research unit's economy, budget and personnel time planning, well acquainted with business support tools like Agresso, Palasso and BOSS.

Courses

Courses during my postgraduate studies include:

2001: Conceptual models in climate dynamics (E. Tziperman, Weizmann Institute of Science, Israel, R. Pierrehumbert, University of Chicago, P. Cessi, Scripps Institution of Oceanography, 10 p) About the program (essentially from WHOI webpage):

The GFD Program began in 1959 at the Woods Hole Oceanographic Institution. It has been held each summer since and promotes an exchange of ideas among the many distinct fields that share a common interest in the nonlinear dynamics of rotating, stratified fluids. Each year's session is devoted to a central topic, beginning with a two-week course by the "principal lecturer," whose task is to present a self-contained introduction, including research problems of current interest, in a precise but compact fashion. Up to ten competitive fellowships are awarded each year. The fellows take notes which, after editing by the lecturer, become a central part of the annual volume. The course notes from past GFD sessions comprise a unique and valuable resource to the research community. Many are essentially mini-textbooks by research scientists who would never take the time off to write a regular text. In addition each fellow works on a research project, supervised by a senior researcher, and described in a report, also included in the annual volume.

2000: Marine Systems Analysis: Process-based modelling of the ocean (A. Stigebrandt, Göteborg University, 5 p).

2000: Boundary layers and stability (G. Walin, Göteborg University 3 p)

2000: Quasigeostrophic flows (G. Walin, Göteborg University, 3 p)

1999: Marine Systems Analysis: Production and turnover of organic matter in the sea- physical and biogeochemical control mechanisms (A. Stigebrandt, Göteborg University, 5 p)

1999: Ocean - atmosphere interaction at planetary scales and climate variability (E. Källén, Stockholm University, J. Marshall, MIT, I. Held, GFDL, NOAA/Princeton University, D. Battisti, University of Washington, 4 p)

1999: El Nioño (A. Stigebrandt, 5 p)

1999: Sea Ice Dynamics (M. Leppäaranta, Helsinki University 1 p)