

Curriculum vitae of Adjunct Professor Kai Myrberg

Personal information

Name: Myrberg, Kai Antero
Date and place of birth: 12.08.1962, Helsinki, FINLAND
Citizenship: Finnish
Age: 49 years
Sex: Male
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Academic activities

Academic degrees

MsC. Meteorology, Univ. of Helsinki, 1988
Phil.lic., Physical Oceanography, Univ. of Helsinki, 1992
Ph.D. thesis "Analysing and modelling the physical processes of the Gulf of Finland in the Baltic Sea", Physical Oceanography, Univ. of Helsinki (supervisor D.Sc. Rein Tamsalu), 1998
Adjunct Professor in Geophysics, Univ. of Helsinki, 2002

Academic activities

Academic Opponent of Mr. Juss Pavelson in the PhD Dissertation (Thesis: " Mesoscale Physical Processes and the Related Impact on the Summer Nutrient Fields and Phytoplankton Blooms in the Western Gulf of Finland") at the Marine Systems Institute, Tallinn Technical University, Tallinn, Estonia, 2005

Academic Opponent of Mr. Germo Väli in the PhD Dissertation (Thesis: "Numerical experiments on matter transport in the Baltic Sea)" at the Marine Systems Institute, Tallinn Technical University, Tallinn, Estonia, 2010

Reviewer of docentship (Adjunct professor) application of Dr. Heidi Pettersson, University of Helsinki, 2009

Academic Opponent (Phil. Lic. Thesis) of Ms. Jenny Nilsson, Department of Meteorology, Stockholm University, Sweden, 2006

Member of PhD Committee, University of Helsinki, Faculty of Science, Mr. Keguan Wang, 2007
Member of PhD Committee, University of Helsinki, Faculty of Science, Ms. Aija-Riitta Elo, 2007
Member of PhD Committee, Tallinn Technical University, Institute of Cybernetics, Estonia, Ms. Ira Didenkulova, 2008
Member of PhD Committee, Klaipeda University, Coastal Research and Planning Institute, Mr. Ali Erturk, 2008
Member of PhD Committee, Klaipeda University, Coastal Research and Planning Institute, Mr. Georg Umgiesser, 2009
Reviewer of four Ph.D. thesis (University of Helsinki and University of Alexandria, Egypt).

Referee work

Referee in international journals: Journal of Geophysical Research, Continental Shelf Research, Journal of Sea Research, Environmental Fluid Mechanics, Journal of Marine Systems, Ambio, Boreal Environment Research, Oceanologia, Geophysica etc.

Memberships in international bodies

International Council of the Exploration of the Sea, Finnish Delegate 2011-
International Council of the Exploration of the Sea, member of the Baltic Committee, 1998-2008
Steering Committee member, Baltic Sea Science Congress 2007, 2009, 2011
Steering group member of HIROMB 2009, 2011-

Editorial positions etc. in Journals

Editor (Physical Oceanography), Boreal Environment Research, 2009-
Member of Board, Geophysica, Finland, 2008-
Member of Advisory Board, Estonian Journal of Earth Sciences, 2007-

Invited lectures

International summer school "Waves and Coastal Processes", August 2007, Tallinn. Lectures of Baltic Sea physics

Baltic Sea 2020 Seminar, Helsinki, November 2007, lecture entitled "The Baltic Sea fish stocks and fisheries in their ecosystem context".

VI Baltic Ice Workshop in Lammi, Finland, August 2008, lecture entitled "Hydrography and circulation of the Baltic Sea"

Baltic Way BONUS+ project Summer School, September 2011, "Principles of Baltic Sea Oceanography and Environment"
Several invited lectures in Helsinki University, Technical University of Helsinki and Naval Academy

Academic guidance of students

Ms. Laura Leponiemi BSc (2011)
Ms. Riikka Hietala, PhD (2006-)
Ms. Maria Kämäri, PhD (2006-)
Ms. Päivi Korpinen, PhD (2009-)

Military service 1991-92

Finnish Naval Academy/Headquarters of Finnish Navy as a scientist in Helsinki, Finland, 9.5 months.

Knowledge of languages

Language	Read	Write	Speak
Finnish	excellent	excellent	excellent
Swedish	excellent	good	very good
Estonian	good	good	excellent
English	very good	very good	very good
German	good	good	good
French	slight	poor	slight
Russian	slight	poor	slight

Employment record

Present position; Project Manager, SYKE/Marine Research Centre, Since September 2011

Post: Research Scientist (1988-2007). Physical oceanographer, 2007-2008, Senior Research Scientist

Employer: Finnish Institute of Marine Research, Dept of Physical Oceanography, P.Box. 33., FIN-00931, Helsinki, Finland, Field of research: Hydrodynamic-ecological modelling of the Baltic Sea

Fellowship of the Nordic Council of Ministers

Dates and subject: 1.6.1993-30.4.1994, hydrodynamic modelling of the Baltic Sea, Dept of Oceanography, University of Göteborg, P.Box 4038, Sweden supervisor Prof. Peter Lundberg

Academic teaching

1997-2002 lecturer in the University of Helsinki, Department of Geophysics, Course on Descriptive Physical Oceanography 1997, 1998, 1999, 2000

Since 2002 Adjunct Professor in Geophysics at the University of Helsinki, lecture courses in Baltic Sea oceanography, 2002, 2004, 2006, 2008, 2010, Course in Principles of Physical Oceanography 2007, 2009, 2011

Lectures in various institutes in Finland (Technical University of Helsinki, Finnish Naval Academy, various institutes in the University of Helsinki, University of Tampere, University of Pori)

Lecture course (1 week) on Baltic Sea physics in Coastal Research and Planning Institute, University of Klaipeda, Lithuania belonging to the COLAR (Coastal and Lagoon resource centre) project, EU Centre of Excellence, October 2005

Course to high school teachers about Baltic Sea oceanography in autumn 2006 (together with Profs. Matti Leppäranta and Harri Kuosa, funded by Magnus Ehrnrooth Foundation)

Baltic Sea Oceanography Course in Tvärminne, University of Helsinki, 2009 (together with Matti Leppäranta, Andreas Lehmann, Tarmo Soomere)

Baltic Sea Oceanography Course, Department of Geophysics, University of Klaipeda, 2010 (together with Matti Leppäranta)

Organising Summer Schools and workshops

Chair of the Summer School on “Air-Sea interaction” as a part of the Marie Curie Chair project MEXC CT2003-509742 “Planetary Boundary Layer – Theory, Modelling and Role in Earth System” (PBL-TMRES) by prof. Sergej Zilitinkevich, 2006

Chair of national workshop on the adaptation to Climate Change in the Baltic Sea area, Helsinki, 2008 (funded by the Maj and Tor Nessling Foundation)

Organisator of International Summer School on Baltic Sea Physics (together with Prof. Matti Leppäranta and Academician Tarmo Soomere) to be held on 11-16 May, 2009, Tvärminne Zoological Station, University of Helsinki (funded by Finnish Academy of Sciences)

Baltic Sea Oceanography Course, Department of Geophysics, University of Klaipeda, 2010 (together with Inga Dailidiene, Loreta Kelpsaite and Matti Leppäranta)

Personal Grants

Suomen Tiedeseura, Sohlbergin Delegaatio, 2005, 3000 e

Magnus Ehrnrooth Foundation (together with Matti Leppäranta and Harri Kuosa), 2006, 5500 e

Finnish Cultural Foundation, 2007, 10 000 e (writing a textbook on The Physical Oceanography of the Baltic Sea)

Finnish Cultural Foundation 2010, 12000 e (writing a textbook on The Physical Oceanography of the World Ocean, in Finnish)

Finnish Academy (together with Matti Leppäranta and Tarmo Soomere), 2009, 8500 e

The Finnish Association of non-fiction writers, 2009, 2500 e

Post-doctoral scientists

Employer: Dept of Meteorology, Stockholm University, SE-10691, Stockholm:
1.6.2000-31.5.2002, Supervisor, Prof. Peter Lundberg, subject: hydrodynamic modelling of the Baltic Sea

Other International activities

- 2003- Visting scientist at the International Meteorological Institute, University of Stockholm
- 2010- Co-ordinator of Finnish-Estonian-Russian three-lateral co-operation to protect the marine environment of the Gulf of Finland
- 2011- Project Manager of the Gulf of Finland Year 2014

Research projects

- 1994- 1997 Sub-contractor in EU-project: CORE: "Mechanisms influencing long term trends in reproductive success and recruitment of Baltic cod: Implications for fisheries management" 1994-1997 (Project coordinator Prof. Dr.D. Schnack, Institute for Marine Research, Kiel, Germany).
- 1999-2002 Sub-contractor in EU-project STORE:" Environmenta and fisheries influence on fish stock recruitment in the Baltic Sea "(Project coordinator D. Schnack, Institute for Marine Research, Kiel, Germany).
- 1998-1999 Team leader in INTAS-96-1745 EU-project "Assessment of Ecological Risk from the Heavy-Metal and Organic Contamination for Vital Activity of Hydrobionts and Self-Purification Processes in estuarine zones of big rivers, by the example of the River Danube Delta".
- 2002-2003 INTERREG IIIA EU-project on development of oils spill and drift models in the Gulf of Finland (co-ordinated by the Finnish Environment Institute) a contractor.
- 2003 Organisator the workshop "The Combined use of Models and Monitoring", Gothenburg, June 2003, funded by the Air and Sea Group of the Nordic Council of Minsiters.
- 2003-2004 MERSEA Strand-1 EU-project (MERSEA=Marine Environment and Security for the European Area), main representative of a FIMR, which is a contractor.
- 2005- 2007 Co-ordinator of the project "Ensemble model simulations as a tool to study the Baltic Sea and the Gulf of Finland eutrophication" funded by the Nordic Council of Minisiters and by the Ministry of Environment of Finland.
- 2006-2007 Cordinator of the project " Internal structure on near-bottom dense water flows in the Ocean" funded by the Academy of Finland.
- 2006-2009 Funding from the Finnish Academy of Sciences for the project "The upwelling and downwelling dynamics in the Baltic Sea with ecological consequences" together with DAAD (between Kai Myrberg and Andreas Lehmann, Kiel, Germany).
- 2009-2010 ECOOP, European COastal sea Operational observing and Forecasting Project, Prinicpal investigator in SYKE, funded by EU.
- 2009-2011 Prinicpal investigator in Finland in the Baltic BONUS-project "BalticWay".
- 2009-2011 Team leader in A Baltic and NORth sea Model eutrophication Assessment in a future cLimate (ABNORMAL), funded by Nordic Council of Minsiters.

Awards

Medal for Military Merits in Finland, 4 June, 1992.