



Programme of the 10th Baltic Sea Science Congress

15 June			
15.30 - 20.00	10th BSSC registration, Hotel Radisson Blue Latvija, Elizabetes str. 55		
BONUS Young Scientist Club Event, Faculty of Biology, University of Latvia, Kronvalda blvd.4			
16.30 - 18.30	Lecture and workshop, Auditorium No. 1		
18.30 - ...	Get-together party, Auditorium No. 5		
16 June			
08.00-09.00	10th BSSC registration, Hotel Radisson Blue Latvija, Elizabetes str. 55		
09.00-10.30	<p>Opening of the 10th BSSC, Hall Omega 1</p> <p>09.00 - 09.05 Introduction by Ms. Anda Ikauniece, Director of Latvian Institute of Aquatic Ecology</p> <p>09.05 - 09.10 Address by Mr. Kaspars Bērziņš, advisor for Minister of Education and Science</p> <p>09.10 - 09.15 Address by Mr. John Bell, Director Bioeconomy, Directorate-General Research and Innovation, European Commission</p> <p>09.15 - 09.20 Address by Ms. Kaisa Kononen, Executive Director of BONUS</p> <p>09.20 - 09.30 Short interplay without words</p> <p>From 09.30 - Keynote lecture by Hans von Storch "DETECTION AND ATTRIBUTION OF CLIMATE CHANGE IN THE BALTIC SEA REGION"</p>		
10.30-11.00	Coffee break		
Thematic sessions			
Hall	Omega 1	Alfa	Beta 2

	<i>Coastal seas - towards better understanding</i>	<i>Spatial marine ecology in support of ecosystem-based management</i>	<i>Keeping climate change in focus: ecosystem impacts, mitigation and adaptation measures</i>
Session chairs	<i>Juri Elken, Kai Myrberg, Irina Chubarenko, Inga Dailidiene (tbc)</i>	<i>Markku Viitasalo, Henn Ojaveer, Erik Bonsdorff, Darius Daunys</i>	<i>Markus Meier, Juris Aigars, Marcus Reckermann (tbc)</i>
11.00 -11.20	BÄRBEL MÜLLER-KARULIS, OLEG SAVCHUK AND BO GUSTAFSSON. Interactions between subbasins mitigate the effects of hypoxia on Central Baltic Sea nutrient dynamics	RIIKKA VENESJÄRVI et al. Species distribution modelling as basis for the ecosystem-based management: a case study for the eastern Baltic Sea	JAAK JAAGUS et al. Regime shifts in the natural environment in the Northern Baltic Sea region in late 1980s
11.20-11.40	RALF WEISSE AND HENDRIK WEIDEMANN. Storm surge climate in the Western Baltic Sea 1948-2012	ANU KASKELA et al. Knowledge on marine geo-biointeractions for the spatial planning and conservation of the Gulf of Finland	JÜRI ELKEN, ANDREAS LEHMANN AND KAI MYRBERG. Recent changes in Baltic Sea oceanographic conditions, with some effects to the ecosystem status
11.40-12.00	SEBASTIAN GRASHORN et al. Unstructured grid model simulations in the North and Baltic seas during a storm surge event	THOMAS KIRK SØRENSEN et al. Multidisciplinary mapping of fish habitats in the Sound, Denmark for maritime spatial planning	MARKUS MEIER. Challenges in climate system modelling for the Baltic Sea, North Sea, Mediterranean Sea and Arctic Ocean regions
12.00-12.20	HENRI RÄSTAS, VICTOR ALARI AND URMAS RAUDSEPP. Projected changes of the significant wave height in the Baltic Sea by the end of 21th century	NOORA MUSTAMÄKI et al. Seasonal small-scale variation in distribution among depth zones in a coastal Baltic Sea fish assemblage	THORSTEN BLENCKNER et al. Assessing the ocean health of the Baltic Sea
12.20-12.40	JAN-VICTOR BJÖRKQVIST et al. A multi-year wave measurement campaign in the Helsinki coastal archipelago	TIMO ARULA, HENN OJAVEER AND TIIT RAID. Mortality and growth at larval stage: advancing the understanding of stock dynamics processes in the Gulf of Riga spring spawning herring (<i>Clupea harengus membras</i>)	ADOLF KONRAD STIPS, DIEGO MACIAS AND ELISA GARCIA-GORRIZ. Correlation and Causation: Changing Baltic Sea Climate
12.40-13.00	MARIS EELSALU et al. Ensemble approach for the projections of extreme water levels reveals bias in water level observations	ANNA TÖRNROOS AND ERIK BONSDORFF. Interpreting ecological functioning in coastal waters: spatial and temporal trait patterns across the Baltic Sea	ANDREY PEDCHENKO. Whether only climate changes influence stocks, distribution of pelagic fishes and fishing in the Baltic Sea?
13.00-14.00	Lunch		
14.00-14.20	TOMAS TORSVIK, IRA DIDENKULOVA AND V.V.S.S.R. HEMANTH. Measurements of wave transformation in the coastal zone	JÜRATĖ LESUTIENĖ et al. Use of stable isotopes to track the fate of cyanobacteria production in estuarine food webs	JANI SÄRKKÄ et al. Simulated sea levels of the Baltic Sea from different climate scenarios

14.20-14.40	EDITH SOOSAAR et al. On the dynamics of the river bulge using satellite imagery and numerical model, case study of Daugava river bulge.	SERGEI GOLUBKOV, MIKHAIL GOLUBKOV AND NADEZHDA BEREZINA. Pelagic-benthic coupling in the Neva estuary (Eastern Gulf of Finland).	NIKOLAUS GROLL AND MICHAEL MEESE. Present and future wave climate for the Baltic Sea.
14.40-15.00	URMAS LIPS et al. Mesoscale variability and river plume dynamics in the Gulf of Riga (a model study)	NADEZHDA BEREZINA. Food web structure in the coastal areas of the Neva estuary under eutrophication	UWE BUCZKO et al. Carbon storage in coastal reed beds of the southern Baltic Sea – a possible contribution to greenhouse gas mitigation?
15.00-15.20	HEINER DIETZE AND ULRIKE LOEPTIEN. Simulating eddy - wind interaction with MOMBA	LIIS ROSTIN AND GEORG MARTIN. Colonization pattern of new hard substrate – study on the possible effects of construction of wind farm in the northern Gulf of Riga	ULPU LEIJALA et al. Combining short- and long-term sea level variations to evaluate future flooding risks on the Finnish coast
15.20-15.40	JOANNA STANEVA et al. Baltic Sea Ocean State Predictions by assimilating of temperature and salinity data	MARIE JÄRNSTRÖM et al. Ecosystem Functioning in Coastal Areas - the Role of the Macrofauna	KATRI PINDSOO AND TARMO SOOMERE. Contribution of wave set-up into the total water level in the Tallinn area
15.40-16.00	SEBASTIAN GRAYEK AND EMIL STANEV. Analysis Of An Offline Coupling Approach For The North-Baltic Sea	ELINA VIRTANEN et al. New spatial model on benthic oxygen conditions reveals problem areas prone to anoxia in the complex archipelagoes of the northern Baltic Sea	EDVARDAS VALAITIS et al. Impact of hurricane Felix on the Lithuanian SE Baltic sandy beach
16.00-16.20	Coffee break		
			Hall Beta 2 <i>A healthy marine ecosystem: how to measure it?</i> <i>Chairs: Christin Bennke (tbc), Solvita Strāķe</i>
16.20-16.40	OLEG SAVCHUK. SANFISH: fish in NEST vs. fish in nets	MARI JOENSUU et al. Sediment stability and resuspension induced nutrient fluxes over habitat gradients	RENE FRIEDLAND, GERALD SCHERNEWSKI AND THOMAS NEUMAN. The good ecological state in the south-western Baltic Sea – defined with an integrated modeling approach and reached with the BSAP
16.40-17.00	ILJA MALJUTENKO AND URMAS RAUDSEPP. Renewed circulation scheme of the Baltic Sea – based on the 40-year simulation with GETM.	INGRIDA BAGDANAVICIUTE, DARIUS DAUNYS AND TOMAS ZOLUBAS. Intensity and spatio-temporal dynamics of bottom trawling in the Lithuanian part of the south-eastern Baltic Sea.	SOLVITA STRAKE et al. A survey of non-indigenous aquatic species in the Baltic Sea ports – port of Liepaja and port of Riga
17.20-17.40	IRINA CHUBARENKO AND NATALIA STEPANOVA. Role of intermediate layers in the thermohaline circulation of the Baltic Sea.	SERGEY ALEKSANDROV. Eutrophication and pollution of the Curonian and Vistula lagoons	ANDERS CHRISTIAN ERICHSEN et al. Setting WFD N reductions based on mechanistic models

17.40-18.00	KATHARINA HÖFLICH et al. On the atmospheric and oceanic conditions associated with large volume changes (LVCs) and major inflows (MBIs) to the Baltic Sea	ERIK KOCK RASMUSSEN et al. Ecological model of the Riga Bay area: a contribution to the BONUS project BIO-C3	SOFIA A. WIKSTRÖM et al. Response of macroalgal vegetation to eutrophication and natural environmental gradients – implications for indicator development
18.30-20.30	"Icebreaking" party at Latvian Society House, Merkela str. 13		

17 June			
8.00-13.45	<i>10th BSSC and BONUS Forum Policy Day, Hall Omega 1, moderators Pauli Merriman and Markku Ollikainen</i>		
8.00-9.00	Registration and coffee		
9.00-9.05	Opening of the Policy Day		
9.05-9.45	"In a quest to embed marine goods and services to societal action in support of region's prosperity" , a keynote lecture by Rudolf de Groot		
9.45-10.00	MAIKE PIEPHO AND HENDRIK SCHUBERT. Baltic Coastal System Analysis and Status Evaluation (BACOSA)		
10.00-10.15	HOLGER JANSEN, STEPHEN JAY, THOMAS KLENKE AND MICHAEL GILEK. Integration Challenges in MSP and the concept of an ecosystem approach		
10.15-11.05	Facilitated panel discussion – policymakers, industry, scientists. Conclusions		
11.05-11.35	Coffee break		
11.35-12.15	"In a search of the best cross-border and -sector governance model" , a keynote lecture by Mike Elliott		
12.15 -12.30	ANTTI IHO, MARC RIBAUDO AND KARI HYYTIÄINEN. Water Protection in the Baltic Sea and the Chesapeake Bay: Institutions, Policies and Efficiency		
12.30-12.45	ZRINKA MENDAS. Toward a sustainable spatial island ecosystem of island archipelago in Zadar, Croatia		
12.45-13.35	Facilitated panel discussion – policymakers, industry, scientists. Conclusions		
13.35-13.40	The emerging Policy day declaration (to be delivered at the end of BSSC on 19 June), summing up the day		
13.40-14.40	Lunch		
Thematic sessions, Halls Omega 1, Alfa, Beta			
Halls	Omega 1	Alfa	Beta 2
	<i>Spatial marine ecology in support of ecosystem-based management</i>	<i>Coastal seas - towards better understanding</i>	<i>A healthy marine ecosystem: how to measure it?</i>
Session chairs	<i>Piotr Margonski, Iveta Jurgensone,</i>	<i>Gregor Rehder, Bärbel Müller-Karulis (tbc)</i>	<i>Arturas Razinkovas, Rene Friedland (tbc)</i>

14.40-15.00	MARKKU VIITASALO et al. The Finnish Inventory Programme for Underwater Marine Environment (VELMU) produces data for knowledge-based Maritime Spatial Planning	ANJA EGGERT AND BERND SCHNEIDER. A nitrogen source in spring in the surface mixed-layer of the Baltic Sea: Evidence from total nitrogen and total phosphorus data	JONNA TEIKARI et al. Impact of major environmental stressors on bacterial community in the Baltic Sea
15.00-15.20	KRISTIINA NURKSE et al. Invasive epibenthic predators' impact on benthic communities functioning	MARILIIS KÕUTS et al. Long-term model study of nutrient and detritus dynamics in the Baltic Sea	CHRISTIN BENNKE et al. From mechanistic to functional monitoring – guiding microbial indicators into practical operability
15.20-15.40	ELENA NAUMENKO. Long-term abundance dynamics of invader <i>Cercopagis pengoi</i> (Ostroumov, 1891) in the Vistula lagoon of the Baltic Sea and its impact on zooplankton	JANA WÖLFEL, MARKO LIPKA AND GREGOR REHDER. Seasonal benthic gas and nutrient dynamics at different sediment water interface, Western Baltic Sea (Germany)	JOACHIM KUSS. The reaction of the marine ecosystem on toxic mercury
15.40-16.00	INGA LIPS et al. Spring bloom in the Gulf of Finland – interannual variability caused by meteorological and hydrological conditions	MINDAUGAS ŽILIUS et al. Rates of denitrification in a freshwater shallow estuary: a real sink of nitrate generated in the watershed?	KATJA BROEG, MATTHIAS BRENNER AND REGINA BAUDE. Biological effects of chemical warfare agents analysed in the head-kidney of cod
16.00-16.20	GERALD SCHERNEWSKI, NARDINE STYBEL AND THOMAS NEUMANN. Zebra mussel farming in a Baltic lagoon - Application of an ICZM Systems Approach Framework	IRMA LUBIENE et al. Nutrient load, net balances and ecological stoichiometry in a hypereutrophic estuary	BRITTA EKLUND. The use of Ceramium tenuicorne growth inhibition test for testing effects of boat activities – leakage from antifouling paints, contaminated sediment and soil
16.20-16.40	ALEXEY MAXIMOV AND TATJANA EREMINA. Synchronous shifts in nutrients and macrozoobenthos in the eastern Gulf of Finland	SAMI JOKINEN et al. Seasonal sedimentation cycle and flow-influenced mud deposition inferred from a microfabric study of laminated sediments in the northern Baltic Sea coast	
16.40 - 17.00	Coffee break		
17.00-19.30	Poster session – Halls 1 & 2 Workshop on Baltic Sea stratigraphy (chair Joonas Virtasalo), Hall Beta 2 Committee meetings, halls Omega 1, Alfa		

18 June	
8.30-10.00	Keynote lectures, Hall Omega 1 Chair: Markku Viitasalo 8.30 – 9.15 Herman Hummel “PATTERNS OF BIODIVERSITY IN COASTAL BENTHIC ECOSYSTEMS: A COMPARISON FROM THE

	GENETIC TO THE SYSTEM LEVEL AT EUROPEAN SCALE”		
	9.15 – 10.00 Kai Myrberg “THE INTERNATIONAL GULF OF FINLAND YEAR 2014 - MAIN SCIENTIFIC FINDINGS”		
10.00-10.30	Coffee break		
Thematic sessions			
Hall	Alfa	Beta 2	Omega 1
	<i>Coastal seas - towards better understanding</i>	<i>Observation, monitoring and forecasting of the Baltic Sea's status: The new generation</i>	<i>Just ice and stones? - Updates of geological research in the Baltic Sea area</i>
Session chairs	<i>Tomas Torsvik , Michael Naumann (tbc), Kai Myrberg</i>	<i>Juris Aigars, Pekka Alenius (tbc), Urmars Lips, Anastasija Zaiko</i>	<i>Jan Harff, Laimdota Kalnina, Jānis Lapinskis (tbc)</i>
10.30-10.50	PEKKA ALENIUS et al. A zoom to the Gulf of Finland hydrography	RALF PRIEN, MAREIKE FLOTH-PETERSON AND DETLEF SCHULZ-BULL. Profiling mooring GODESS - the first 100 km of profiles from the Gotland Basin	JAN HARFF et al. Why is the Baltic Sea special in coastal morpho-dynamics ? A comparative study
10.50-11.10	NICOLE DELPECHE-ELLMANN AND TOMAS TORSVIK. Examination of the effects of wind induced forcings on surface drifters circulation patterns in the Gulf of Finland	ANDREAS LEHMANN, IRA DIDENKULOVA AND KATHARINA HÖFLICH. A simple approach to determine the Stokes drift for the entire Baltic Sea	ANU KASKELA et al. EMODNET-GEOLOGY – seabed substrates and sedimentation rates of the European seas
11.10-11.30	MADIS-JAAK LILOVER AND JÜRI ELKEN. Variability of low-frequency currents in the Gulf of Finland	PEKKA ALENIUS AND KIMMO TIKKA. Gliders in the Baltic Sea	ELINOR ANDRÉN. Long-term trends of hypoxia in the coastal zone, North-Western Baltic Proper
11.30 -11.50	URMAS LIPS et al. Wintertime reversals of estuarine circulation and related changes in oxygen and nutrient conditions in the Gulf of Finland	ANDREAS TRZUSKOWSKY AND DIRK ABEL. SeaGATE: Navigation Satellite System Environment for Testing and Validation	JOONAS VIRTASALO et al. Seafloor environment and zoobenthic communities in the easternmost gulf of Finland during the past six millennia, and the influence of the birth of the Neva River
11.50-12.10	TAAVI LIBLIK AND URMAS LIPS. Wind-driven variability of pycnoclines in the Gulf of Finland	VICTOR ALARI AND JOANNA STANEVA. Response of water circulation, temperature and salinity to wind wave effects in the Baltic and North sea's	DARIA RYABCHUK et al. New data about postglacial development of the Eastern Gulf of Finland
12.10-12.30	URMAS LIPS et al. Modeling submesoscale processes in the Gulf of Finland - case scenario upwelling events in the summer 2006	TOMASZ ZAPADKA, ADAM KRĘŻEL AND MARCIN PASZKUTA. Radiation budget of the sea surface from SatBaltic operational system data	ILYA BUYNEVICH et al. Geoarchaeological implications of biogenically induced high-amplitude GPR anomalies in Baltic and Bahamian coastal dunes

12.30-13.30	Lunch			
13.30-13.50	MARCUS RECKERMANN, HANS VON STORCH AND ANDERS OMSTEDT. Results of the Second Assessment of Climate Change for the Baltic Sea Region (BACC II)	ANASTASIJA ZAIKO et al. Molecular approaches for non-indigenous species surveillance – from introduction pathways to established populations	JĀNIS LAPINSKIS. Development of guidelines for coastal erosion mitigation in Latvia	Hall Beta 1 Technology Transfer workshop 13.30 – 16.30, programme available below separately
13.50-14.10	MICHAEL NAUMANN et al. Analysis of the exceptional ventilation event during wintertime and spring 2014 after a decade of anoxic deep-water conditions in the Baltic Sea.	HARRI TOLVANEN AND HANNA LUHTALA. Geographic data properties and applicability in maritime spatial planning	THOMAS ANDRÉN et al. Towards an integrated age-model for the International Ocean Discovery Program (IODP) Expedition 347 Site M0059, Little Belt	
14.10-14.30	TARMO SOOMERE AND MARIS EELSALU. Separation of the Baltic Sea water level into short-term and multi-weekly components	KIM DAHLGREN STRAAT et al. Modelling the generation and transport of particulate organic carbon in the Baltic Sea watersheds	ILYA BUYNEVICH et al. Comparative sedimentology and internal structure of early stage coastal mega-ridges at Cape Kolka, Latvia	
14.30-14.50	MĀRIS SKUDRA AND URMAS LIPS. Inter-annual changes in temperature, salinity and density distribution in the Gulf of Riga	GEORG UMGIESSER et al. CISOCUR – Numerical modelling of stable isotope distribution in the Curonian Lagoon	DENNIS BUNKE et al. Possible causes of sediment dynamics and mixing in western Baltic Sea basins	
14.50-15.10	KATRI PINDSOO AND TARMO SOOMERE. Trends in extreme water levels of the eastern Baltic Sea		AARNO T. KOTILAINEN et al. Holocene sedimentation in estuaries of the Baltic Sea – an Ångermanälven case study	
15.10-15.30	GREGOR REHDER et al. Controls on methane fluxes and turnover in the water column of the Baltic Sea – a review reflecting the potential impact of the 2014/2015 major inflow event		MARIYA N. GOLENKO et al. Effects of geostrophic currents and inertial waves on sediment erosion in the South-East Baltic	
15.30-15.50	Coffee break			
15.50-16.10	Poster session, Halls 1& 2 Round-table discussion “Development and implementation of novel indicators for Baltic Sea monitoring” (<i>chairs: Lasse Riemann, Matthias Labrenz</i>), Hall Alfa , <i>see programme below</i> Baltic Earth meeting, only with invitations, Hall Beta 2		ALAR ROSENTAU. Coastal change and stone age shore-bound settlements in Estonia	
16.10-16.30			ANDIS KALVĀNS AND TIIT HANG. Clues about water circulation in the Baltic Ice Lake (BIL) recorded in the varve clays in the Pärnu Bay area	
16.30-16.50			OLGA KOVALEVA, BORIS CHUBARENKO AND DARIA RYABCHUK. Analysis of sediment transport pattern along the coastal line of the Russian part of the Curonian Spit	

19.30-22.30	Congress dinner at Latvian Railway Museum, Uzvaras blvd. 2a
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Workshop “Technology Transfer in Marine Science. Science’s needs and market’s means – do they fit?” , hall Beta 1

organized by Leibniz Institute for Baltic Sea Research (IOW)

13.30	Ulrich Bathmann (IOW), Andris Andrusaitis (BONUS Secretariat): Opening and introduction
13.35 – 14.00	Ralf Prien (IOW) Technology transfer - moderating conflicting interests of developers, users and manufacturers
14.00 – 14.20	Urmias Lips (Tallinn University of Technology): Multi-sensor in-situ observations in the stratified Baltic Sea – needs for new technologies and regional co-operation.
14.20 – 14.40	Anders Tengberg (University of Gothenburg): Chemical sensor measurements in marine waters - existing and possible future technology
14.40 – 15.00	Discussion
15.00 – 15.20	Coffee, exhibition
15.20 – 15.40	Sophie Charvet (IOW), Uwe Fischer, HydroBios, Kiel: New development of AFIS
15.40 – 16.00	Stefan Raimund, SubCtech, Kiel: From the first idea to the ready to use instrument - Development of monitoring systems for the marine environment
16.00 – 16.20	tba: IP-rights and ways of exploitation for scientific results and developments
16.20 – 16.30	Discussion and final words
16.30	End of workshop

Round-table discussion “Development and implementation of novel indicators for Baltic Sea monitoring”, Hall Alfa

Chaired by Lasse Riemann, University of Copenhagen, Matthias Labrenz and Christin Bennke, Leibniz Institute for Baltic Sea Research Warnemünde.

Starting at 15.50, approx. 1,5 – 2 hrs.	
Lena Avellan, HELCOM (keynote talk)	HELCOM core indicators on Baltic Sea environmental status
Lasse Riemann, University of Copenhagen	Development of molecular microbial indicators: the BONUS project BLUEPRINT
Christin Bennke, IOW	Guiding a molecular indicator into practical operability
General discussion	

19 June	
09.30-11.00	Keynote lectures, Hall Omega 1 Chair: Andris Andrushaitis
	09.30 – 10.00 Volker Mohrholz “FRESH OXYGEN FOR THE BALTIC SEA – THE MAJOR BALTIC INFLOW 2014”

	10.00 – 10.30 Henn Ojaveer “AquaNIS IN ACTION: COMPREHENSIVE OVERVIEW ON THE NON-INDIGENOUS SPECIES INVASIONS AND THE VECTORS RESPONSIBLE IN THE BALTIC SEA” 10.30 - 11.00 Tarmo Soomere “SOCIETAL CHALLENGES IN MARINE SCIENCE”
11.00-11.30	Coffee break
11.30-12.30	Closing ceremony of the Congress - declaration, announcements, next location and focus



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