

6th Baltic Earth Conference

Heringsdorf, Usedom, Germany

13 - 17 April 2026



Preliminary Programme

as of 27 January 2026

Sunday, 12 April 2026

15:00 – 18:30 **Registration**

Monday, 13 April 2026

08:00 – 09:30 **Registration**

Opening Ceremony

09:30 **Welcome address on behalf of Baltic Earth**

H.E. Markus Meier

Leibniz Institute for Baltic Sea Research Warnemünde (IOW), Germany
Chair of the Baltic Earth Science Steering Group

Karol Kuliński

Institute of Oceanology of the Polish Academy of Sciences (IOPAN), Sopot, Poland
Vice-Chair of the Baltic Earth Science Steering Group

09:45 **Welcome addresses**

Further details will follow soon.

Opening Session

10:20 **New Challenges for Ocean Governance: Climate Change, Biodiversity, Deep-Sea Mining and shadow fleets (keynote)**
Sabine Schlacke
Professor of Public Law, in particular Administrative and Environmental Law,
Greifswald University, Germany

10:50 *Short Break*

11:00 **Partners in CLIME: cooperation between HELCOM and Baltic Earth as a key element in science-based regional climate policy (keynote)**
Rüdiger Stremmel
Executive Secretary, Baltic Marine Environment Protection Commission
HELCOM, Helsinki, Finland

11:30 **Where Land and Ocean Meet: Remote Sensing of Baltic Coastal Zones (keynote)**
Natascha Oppelt
Professor for Physical Geography, Kiel University, Germany

12:00 *Lunch*

13:15 **Modeling the Dispersal of Particles in the Marine Environment: Applications and Challenges (keynote)**
Siren Rühs
Junior Professor, GEOMAR Helmholtz Centre for Ocean Research Kiel,
Germany

13:45 **Baltic Sea salinity: a complex interplay between small scale physics, basin geometry and large scale forcing (keynote)**
Magnus Hieronymus
Ocean Climate Research Leader, Swedish Meteorological and Hydrological Institute (SMHI), Norrköping, Sweden

Session A: Climate variability and teleconnections

14:15 **Externally forced low-frequency variations in European climate (highlighted)**
Barghorn L, Börgel F, Meier HEM

14:30 *Break*

15:00 **Teleconnections to the Baltic Sea Region: Controls, Predictability and Consequences**
Börgel F, Ruvalcaba Baroni I

15:15 **Regional and Multi-Level Atmospheric Circulation Controls on Baltic Sea Inflows Variability**
Post P, Lehmann A

15:30 **Three centuries of weather observations on board of Danish ships: First results from ROPEWALK (Rescuing Old data with People's Efforts: Weather and climate Archives from Logbook records)**
Stendel M, Kronegh AJ, Skov EH, Møller TEA

Session B: Natural hazards and their impacts

15:45 **Automated classification of atmospheric circulation types for compound flood risk assessment: CMIP6 model analysis utilising a deep learning ensemble (highlighted)**
Heinrich P, Hagemann S, Weisse R

16:00 **Analysis of floods, wildfires and windstorms in Europe and their impacts in the years 1950–2020 using the HANZE database (highlighted)**
Sicińska A

16:15 **Derivation of the seasonal damage risk of Baltic Sea storm surges and concepts for minimization**
Seiß G

16:30 *Break*

17:00 **Assessing hazard and impact of extreme flooding in Pärnu, Eastern Baltic Sea**
Männikus R, Soomere T, Suursaar Ü

17:15 **Modelling-based reconstruction of the high water levels and waves that occurred during Storm Babet in October 2023 along the Schleswig-Holstein Baltic Sea coast**
Dreier N, Sone H, Fröhle P, Nehlsen E

17:30 **Evaluation of the temporal and spatial changes in the extreme sea levels in the Baltic Sea**
Viigand K, Soomere T

17:45 **An intensive upwelling event of hypoxic water at the southern Baltic Sea coast in September 2025 – a rare phenomenon or quite common?**
Naumann M, Sass M, Krebs B, Neubert S, Mars R, Thiele O, Bukowski C, Krumme U, Ahmerkamp S, Voss M, Holtermann P

18:00 **Responding to Coastal Erosion with Managed Retreat in the Baltic Sea**
Parnell K

18:15 **15min Open Topic Discussion**

19:00 **Ice Breaker**

Tuesday, 14 April 2026

Session B: Natural hazards and their impacts - *continued*

09:00 **Thermal Extremes as Emerging Hazards for Coastal Habitats in the Baltic Sea**
Juva K, Forsblom L, Virtanen E

09:15 **Microbial Communities as Universal Sensors of Anthropogenic Pollution in the Baltic Sea**
Sperlea T, Tagg A, Labrenz M

Session C: Baltic optics: Advancing ocean colour science and applications in the Baltic Sea

09:30 **Bringing Baltic Seagrass to Life: Interactive Visualisation from Multi-Scale UAV Data (highlighted)**
Eisermann JO, Wolf J, Oppelt N, Schütt E, Lion V, Gross F

09:45 **Remote Estimation of Vertical Chlorophyll-a Profiles in the Baltic Sea for Satellite Applications**
Lis D, Stoń-Egiert J, Darecki M

10:00 **Bridging the Resolution Gap: Using Drones to Scale In-Situ Observations of Aquatic Vegetation to Sentinel-2**
Schütt E, Gröschler K-C, Włodarska-Kowalcuk M, Kowalcuk P, Darecki M, Weydmann-Zwolicka A, Oppelt N

10:15 **Break**

10:45 **Advances in Satellite-Based Retrieval and Assimilation of Chlorophyll-a Concentration and Cyanobacteria Abundance in the Baltic Sea within the SatBałtyk System**
Darecki M, Lis D, Stoń-Egiert J, Janecki M, Nowicki A

11:00 **Variability of optical properties and composition of size-fractionated suspended particulate matter samples from the surface waters of the southern Baltic Sea – another element of the region's optical complexity**
Woźniak SB, Meler J, Stoń-Egiert J

11:15 **Challenges in Nearshore Ocean Color Remote Sensing: A Review of the Adjacency Effect**
Lion V, Robran B, Kroth F, Oppelt N

11:30 **The Copernicus Marine Service Regional Ocean Colour products for the Baltic Sea**

Brando V, Gonzalez Vilas L, Di Cicco A, Colella S, Lapucci C, Pitarch Portero J, Mander C, D'Alimonte D

11:45 **Towards sustainable water quality products for the western Baltic Sea**
Cahill B, Gräwe U, Mars R, Dash M, van der Lee E, Brüning T

12:00 *Lunch*

13:30 **Optical Signatures of Oil Droplets and Oil-Coated Microplastics in Seawater: Laboratory Experiments and Radiative Transfer Modeling**
Haule K, Baszanowska E, Toczek H, Bizewski A, Freda W

Session D: Bridging scales: From small-scale turbulence to basin-wide circulation

13:45 **Circulation of the Central Baltic from current meter observations and numerical simulations (highlighted)**
Siht E, Liblik T, Väli G, Lilover M-J, Suhhova I

14:00 **Submesoscale Dynamics in the Baltic Sea**
Lips U, Salm K, Väli G, Liblik T, Arneborg L, Biddle LC, Bulczak AI, Chrysagi E, Falarz M, Holtermann P, Jakacki J, Meier HEM, Mohrmann M, Myrberg K, Pemberton P, Umlauf L

14:15 **Flexible design of a multiparametric monitoring system for the observation of shallow-water processes in the Baltic Sea**
Neubert S, Krebs B, Sass M, Naumann M, Holtermann P, Voss M

14:30 *Break*

15:00 **Sources and physical drivers of coastal oxygen dynamics in stratified shallow waters: A case study of Nienhagen**
Thiele O, Ahmerkamp S, Selle T, Giese L, Gentsch K, Sass M, Krebs B, Neubert S, Voss M, Holtermann P

15:15 **From Hours to Seasons: Temperature and Oxygen Dynamics in Shallow Baltic Waters – Lessons from the Boltenhagen Observatory**
Holtermann P, Bukowski C, Naumann M, Thiele O, Ahmerkamp S, Mohrholz V, Krumme U

15:30 **Vertical reorganization of spring phytoplankton at fronts: insights from a high-resolution glider mission**
Salm K, Lips U, Liblik T, Rünk N, Lips I

15:45 **Role of small-scale processes in saltwater transport in the Baltic Sea: results from a high-resolution modelling study**
Väli G, Meier HEM, Liblik T, Radtke H, Lips U

16:00	High-Resolution Mapping of Baltic Sea Coastal Dynamics Using a Micro-AUV <i>Liblik T, Buschmann F</i>
16:15	15min Open Topic Discussion
17:00	Excursion (Guided tour in Heringsdorf)

Wednesday, 15 April 2026

Session E: Future projections of the Baltic Sea region

09:00	Natural variability restricts the detection of changes in marine heatwave area extent in future projections of the Baltic Sea (highlighted) <i>Safonova K, Meier HEM, Gröger M</i>
09:15	Projected 21st-century changes in significant wave height in the Baltic Sea: An Ensemble Approach <i>Groll N</i>
09:30	Perks and perils of objectively calibrating regional Earth system models <i>Voelker GS, Börgel F, Gröger M, Karsten S, Naumov L, Meier HEM</i>
09:45	Connecting national and regional Earth System Modeling efforts through natESM <i>Ehlert I, Schmidt A, Marotzke J</i>

Session F: Adaptive governance under multiple drivers of change in the Baltic Sea

10:00	Break
10:30	Wild cards in the Baltic Sea – are we ready for the unexpected? (highlighted) <i>Jenkins J, Hyytäinen K, Niiranen S, Sandström V</i>
10:45	Seeing the Obvious, Missing the Complex: Public Threat Perceptions and Adaptive Governance in the Baltic Sea <i>Kleemann S, Demmler R</i>
11:00	Understanding how to protect the Baltic Sea: An assessment of conceptions among business organizations <i>Imbrogiano J-P</i>
11:15	Impacts of eutrophication in the Western Baltic Sea – Where are we and where do we need to go? <i>Hepach H, Kuhn A, Bange H, Engel A</i>

11:30	Adaptive GIS Tool for Authorities to Predict Emission Loads of Emerging Contaminants from Point Sources into Baltic Sea Catchments <i>Seidenfaden A, Guidi C, Marzahn P, Tränckner J</i>
Session G: Biogeochemistry of the Baltic Sea – Linking observations and modelling	
11:45	Multidecadal variability of hypoxia in the Baltic Sea and Major Baltic Inflows: Is there a connection? Deep mixing observed by Argo floats in the Gdansk Basin during the winter of 2023 (highlighted) <i>Naumov L, Meier HEM</i>
12:00	<i>Lunch</i>
13:30	Poster speed talks
14:00	Poster session
15:30	<i>Break</i>
16:00	Potential impacts of future offshore renewables on Baltic Sea hydrodynamics and hypoxia (highlighted) <i>Kossack J, Christiansen N, Daewel U, Handmann P, Schrum C</i>
16:15	Using observations and DIVAnd interpolation tool to calculate anoxic and hypoxic area with error fields in the Baltic Sea <i>Viktorsson L, Hansson M, Ruvalcaba I</i>
16:30	Phytoplankton spring bloom intensity as an indicator for Eutrophication in the open North-East Atlantic Ocean and Baltic Sea <i>Ruvalcaba Baroni I, Hoikkala L, Attila J, Heyden B, Fleming V</i>
16:45	A New Lens on Eutrophication: Trophic Transfer Index, Lags, and Hysteresis in the Baltic Sea (1950–2020) <i>Stips AK, Polimene L, Parn O, Macias-Moy D</i>
17:00	<i>Break</i>
17:30	Dynamics of biological rates in shallow water over the course of the year and consequences for our understanding of the coastal filter <i>Voss M, Gentsch K, Holtermann P, Kache S, Klett A, Selle T, Ahmerkamp S</i>
17:45	Changes in nutrient chemistry by episodic oxygen supply in the halocline <i>Kuss J, Prien RD, Floth-Peterson M, Waniek JJ</i>

18:00	Nutrient levels in the southern Baltic in 1969 – 2024 –impacts of ecological politics and climate change <i>Zalewska T, Kraśniewski W, Wawryniuk K, Wilman B, Wochna A, Wojdasiewicz A</i>
18:15	15min Open Topic Discussion
19:00	Early Career Scientist's Event (by invitation only)

Thursday, 16 April 2026

Session G: Biogeochemistry of the Baltic Sea – Linking observations and modelling - *continued*

09:00	Tracing basal food sources and trophic dynamics of herring larvae in the Vistula Lagoon using compound-specific stable isotope analysis of amino acids <i>Silberberger M, Dembek M</i>
09:15	Pockmark research and assessment of submarine groundwater discharge in outer Puck Bay (southern Baltic Sea) <i>Misiewicz MM</i>
09:30	Salinity anomalies from density measurements in the western Baltic Sea <i>Reißmann JH, Joswig S</i>
09:45	Are the increasing summer total alkalinity concentrations in the Vistula River a side effect of HELCOM's actions of reducing nutrient loads from land? <i>Kulinski K, Koziorowska K, Aguado Gonzalo F, Bromboszcz-Szczypior L, Woszczyk M, Zalewska T</i>

Session H: Sea level and coastal change

10:00	Break
10:30	Mapping Elevation and Elevation Changes in the North and Baltic Sea (highlighted) <i>Schröder L, Liebsch G, Bauer T, Hofmann T, Schwabe J</i>
10:45	Data-Driven Investigation of the Free Surface Elevation Probabilistic Characteristics (highlighted) <i>Grzonka L, Herman A, Parnell K</i>
11:00	Resonant sub-hourly sea level and current events in river mouths: an example from Varna Channel <i>Elken J, Piho L, Kruusmaa M</i>

11:15 **SWOT reveals gradient reversals in Baltic rivers**
Jansson D, Jaramillo F, Chafik L

11:30 **Interactions Between Vessel Traffic, Wave Forcing and Sedimentation in a Shallow Coastal Channel**
Utso M, Männikus R, Parnell KE

11:45 **Spatial pattern of coastal changes of the southern Baltic from airborne laser bathymetry (ALB)**
Borowka RK, Dudzinska-Nowak J, Michczynski A, Mahlstedt S, Bittmann F

12:00 *Lunch*

13:30 **Poster speed talks**

14:00 **Poster session**

15:30 *Break*

16:00 **Predicting the Black Sea state at weather and climate scales (keynote)**
Marilauré Grégoire
Professor, Liège University, Belgium

Session I: Philosophical aspects of Baltic Sea Earth system research

16:30 **Closing the Water Gaps: Understanding Freshwater Discharges and their Nutrient and Pollutant Loads from Land to Sea**
Destouni G, Zarei M, Mo R

16:45 **Ideas that shaped the understanding of the Earth System in the Baltic Basin**
Omstedt A

17:00 *Short Break*

Session J: Marginal Seas – Humans and Environment

17:15 **From sediment chemistry to biomarkers: early evidence of pollution impact on macrofauna in the Gulf of Gdańsk (Baltic Sea) (highlighted)**
Ziółkowska M, Pouch A, Siedlewicz G, Narwojsz D, Walkusz-Miotk J, Malenga A, Sharma L, Zaborska A, Koziorowska K, Staniszewska M, Nehring I, Rzędarska E, Sole M, Gregorczyk K, Kotwicki L, Tonteri O, Lehtonen K, Pazdro K

17:30 **Comparing Marginal Seas: Workflow for Benthic Biodiversity and Functional Assessment**
Gogina M, Harff J, Radziejewska T

17:45	Sustainable marginal seas' environment – a global challenge <i>Harff J, Greene HG</i>
18:00	15min Open Topic Discussion
19:00	Conference Dinner

Friday, 17 April 2026

Session J: Marginal Seas – Humans and Environment - *continued*

09:00	Microplastic pollution in marginal seas <i>Ivar do Sul J, Reineccius J, Waniek J</i>
09:15	From limnology to oceanography, where Engineered Oxygen Supply (EOS) and Ocean Deoxygenation meet <i>Handmann P, Hertle J, Jutras M, Bryant L, Wallace D, Walve J, Stigebrandt A, Austin D</i>
09:30	A global assessment of thermal stressors in marginal seas <i>Gröger M, Börgel F, Dutheil C, Karsten S, Meier HEM, Safonova K, Völker GS</i>
09:45	Comparison study on fossil diatom record from marginal seas and their response to 4.2 ka event: Northern South China Sea and Southern Baltic Sea <i>Zhang J, Li P, Li C, Xue Q</i>
10:00	15min Open Topic Discussion
10:15	Short Break
10:30	Discussions and Closing Session
11:30	End of Conference

Posters

Poster authors are requested to prepare a 1-min – 1-slide introduction to their poster. These speed talks will be held on Wednesday and Thursday afternoons.

There are two dedicated poster sessions after the two speed talk slots, respectively.

All posters are on display during the whole conference.

Poster sequence is first author alphabetically within topics.

Wednesday Poster Session (A-F)

Session A: Climate variability and teleconnections

- A-1 Applying machine learning for downscaling wind in Danish waters
Kristensen SE, Dore A, Dronen N, Svensson M
- A-2 Shifts in precipitation phases in Lithuania
Leonavičiūtė G
- A-3 Comparing simple wave models with measurements and sophisticated models in the Gulf of Riga
Männikus R, Soomere T, Suursaar Ü
- A-4 Variability of River Runoff to the Northwestern Black Sea under Climate Change
Ovcharuk V, Tuchkovenko Y, Martyniuk M
- A-5 Wind and storminess in the Baltic Sea region and their temporal variability in relation to jet stream parameters and large-scale atmospheric circulation patterns
Rennel M, Keernik H, Post P
- A-6 Marine cold spells in the Baltic Sea
Singh S, Maljutenko I, Uiboupin R
- A-7 Sea ice in the Baltic Sea during 1993/94–2020/21 ice seasons from satellite observations and model reanalysis
Singh S, Maljutenko I, Uiboupin R
- A-8 Thermal anomalies in the South-Eastern Baltic and their links to atmospheric circulation patterns
Vyšniauskienė V, Stankūnavičius G

Session B: Natural hazards and their impacts

- B-1 Competing Hypotheses for Submarine Landform Genesis in the Baltic Sea: Landslide or Groundwater Seepage?
Andrén E, Andrén T, O'Regan M, Stranne C, Böttner C, Heimdal J, Persson C, Rosentau A, Rönnby J, Törnqvist O, Jakobsson M

B-2 Application of Excitation–Emission Spectroscopy for Microplastic Detection in Seawater
Baszanowska E, Toczek H, Freda W, Haule K, Śliwińska S, Falkowski K

B-3 Evaluating the applicability of EOF analysis to characterise extreme storms in the Southern Baltic Sea: insights from REMO and Copernicus atmospheric pressure fields
Cupiał A, Cieślikiewicz W

B-4 Future changes in compound precipitation and wind extremes in the Baltic States under CMIP6 projections
Klimavičius L, Rimkus E

B-5 Socio-economic vulnerability to compound river–coastal flooding in Klaipėda under climate change
Vasiliauskiene E, Dailidienė I, Andriulė A

B-6 Extreme value analysis on wave-driven near-bed water speeds in the eastern Gulf of Riga
Viigand K, Soomere T

B-7 Simulating Complex Hydrodynamics in a Small Marina Using Smoothed Particle Hydrodynamics
Žalys M, Nesteckyte L, Kelpšaitė-Rimkienė L

Session C: Baltic optics: Advancing ocean colour science and applications in the Baltic Sea

no posters in Session C

Session D: Bridging scales: From small-scale turbulence to basin-wide circulation

D-1 A lean 3D Lagrangian suspended sediment-plume simulator for offshore wind farm construction
Giudici A, Männikus R, Soomere T

D-2 A Three-Decade Spatiotemporal Evaluation of Baltic Sea Salinity Content
Gudimetla VV, Hayatijozani A, Raudsepp U

D-3 Analysing Baltic Sea Extreme Events in five years of Glider Observations
Mohrmann M, Biddle LC

Session E: Future projections of the Baltic Sea region

E-1 Adaptation to climate change: Regional scenarios for the Baltic Sea
Ehlers BM, Su J, Janssen F, Skovgaard Madsen K

E-2 Toward a High-Resolution Coupled Earth System Model for the Baltic Sea: Advancing Regional Climate Projections with the IOW ESM
Karsten S, Völker GS, Börgel F, Gröger M, Meier HEM

E-3 A Database of dynamically downscaled CMIP6 climate projections for the Baltic Sea Region
Männik A, Käärik K, Liu J, Maljutenko I, Elken J, Raudsepp U, Rikka S, Alari V, Aavaste A, Lagemaa P, Uiboupin R

E-4 Hydrodynamic Modeling Outputs for Floodplain Management in the Nemunas River Delta
Sime CH, Čerkasova N, Méžiné J, Ertürk A

Session F: Adaptive governance under multiple drivers of change in the Baltic Sea

F-1 Modelling Local Climate Sensitivity to Deforestation in the Hemiboreal Zone: an Estonian Case Study
Käärik K, Männik A

F-2 Bridging Spatial Risk and Marine Governance: Joint Impacts of Offshore Wind Farm Development and Shipping Activities in Finland's EEZ
Nugroho A

Thursday Poster Session (G-J)

Session G: Biogeochemistry of the Baltic Sea – Linking observations and modelling

G-1 Adhesive- adsorptive signatures of biofouled seawater solid substrata versus biotic and abiotic trophic status indexes
Boniewicz-Szmyt K, Pogorzelski S, Rochowski P, Dorywalski K, Freda W

G-2 Using a river plume to define a water quality assessment unit
Friedland R, Neumann T, Piehl S, Radtke H, Schernewski G

G-3 Phytoplankton Community Composition and Its Influence on Primary Production in the southwestern Baltic Sea
Kurtay G, Hepach H, Engel A

G-4 Winter sets the table: Early-season phosphorus favours summer proliferation of *A. flos-aquae*
Liepiņa I, Maderniece A, Aigars J

G-5 Mercury levels in the tissues of two cyprinid fish species Bream (*Abramis brama*) and Roach (*Rutilus rutilus*) from the southern Baltic Sea lagoons
Malec R, Bełdowska M, Wojdasiewicz A, Sapota M, Dziubińska A, Woźniczka A, Korniów R

G-6 Eutrophication in the northern Baltic Sea—long-term changes in summer blooms of cyanobacteria and green algae
Rousi H, Fält-Nardmann J, Marjamäki B, Niemelä P, Hänninen J

G-7 Dynamic of benthic metabolism, metals, and DIC in temperate seagrass meadow
Sheikh Hussain NH, Zhang M, Van Dam B, Kaiser D

G-8 Trophic Transfer Index (TTI): Methodology, Challenges, and Application to Marine Eutrophication Assessment
Stips AK, Parn O, Polimene L, Macias-Moy D, Miladinova S

G-9 A snapshot of C fluxes across ecosystem interfaces in a Baltic seagrass meadow – The SGFlux project
Van Dam B, Zhang M, Nusrathul Husna SH, Kaiser D, Miller C, Visser S, Kock T

G-10 Greenhouse Gas Fluxes and Carbonate Dynamics During the Growing Season of Seagrass Meadow in the Baltic Sea
Zhang M, Nusrathul S, Kock T, Van Dam B

Session H: Sea level and coastal change

H-1 Shoreline Changes of the Southern Baltic Coasts During the Late Holocene in Light of Dating Submerged Forests
Borowka RK, Dudzinska-Nowak J, Michczynski A, Mahlstedt S, Bittmann F

H-2 In-situ Meteorological and Sea Level Dataset from Coastal Stations along the Estonian Coastline during 2000-2025
Liu VJ

H-3 Influence of surface waves on the transport of natural and anthropogenic sediments in the western Baltic Sea
Reinert M, Seiß G, Kösters F

H-4 Evaluation and Optimization of Aeolian Sand Trap Designs
Tadžijevas A, Kondrat V, Šakurova I, Šapalas D, Dumbrauskas B, Kelpaite-Rimkiene L

Session I: Philosophical aspects of Baltic Sea Earth system research

I-1 Involving public authorities and citizen scientists in micro- and mesoplastic pollution monitoring
Burdukovska V, Dimante-Deimantovica I, Barone M, Setälä O, Mustonen A-R, Buhhalko N

Session J: Marginal Seas – Humans and Environment

J-1 Metallic debris and wet wipes are underresearched pollutants on marine coasts worldwide
Ehlers SM, Ellrich JA, Furukuma S

J-2 Decoupled Benthic Fauna Responses to Habitat Variability and Trawling in the Baltic Sea
Gogina M, Ostmann A, Schulze I, Rooze J, Schönke M

J-3 A Study on the Characteristics of Sea-Level Changes in the Pearl River Estuary Region
Hou J, Zhang J, Xu Y

J-4 Coastal Sensing - From Pixels to Processes to Policy
Oppelt N, Krastel-Rudegast S, Kröger P, Riekhof M-C

J-5 Impact of Hydrological Factors on the Ecological State of Marine Areas of the Northwestern Black Sea in the Context of Military Actions
Ovcharuk V, Tuchkovenko Y, Torgonskyi A

J-6 A Multi-Biomarker Early-Warning System for Sediment Pollution in the Gulf of Riga: Responses of *Monoporeia affinis* and *Macoma balthica*
Strode E, Barda I, Poikāne R, Batare L, Liepiņa-Leimane I, Putna-Nīmane I, Andersone I

J-7 From Fluvial to Tide-Dominated Systems: Climate and Sea-Level Forcing of Late Pleistocene Source-to-Sink Transitions in the Western Hainan Marginal Sea, South China Sea
Wang Y