



G D A Ń S K
**BALTIC
2016**

**THE 13th COLLOQUIUM
ON BALTIC SEA MARINE GEOLOGY**

September 12-16 | 2016
Gdańsk, Poland

CONFERENCE PROGRAMME



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MONDAY 12.09		
18:00	21:00	ICE-BREAKING PARTY + REGISTRATION
TUESDAY 13.09		
08:30	09:30	Registration
09:30	09:45	Welcome
SESSION 1 9:50-11:50 TECTONICAL FRAMEWORK AND preQUATERNARY GEOLOGY OF THE BALTIC SEA, CHAIRPERSON: Marek Graniczny		
09:50	10:10	Base Quaternary mapping and shallow faults within the southwestern Baltic Sea - M. Al Hseinat, C. Hübscher, H. Lykke-Andersen
10:10	10:30	Baltic sector of the Trans-European Suture Zone revisited – First results from the "BalTec" expedition (March 2016) - C. Hübscher, V. Damm, M. Engels, C. Juhlin, C. Krawczyk, I. Bruun Lydersen, M. Malinowski, V. Noack, M. Schnabel, E. Seidel and BalTec scientific party
10:30	10:50	From offshore hydrocarbon exploration towards a 3D structural model of the German Baltic Sea area - K. Obst, A. Deutschmann, E. Seidel & M. Meschede
10:50	11:10	Structural analyses and characterisation of the Adler-Kamien Fault System as part of the Tornquist Zone - E. Seidel, M. Meschede, K. Obst
11:10	11:30	Regional seismic interpretation of the structure and stratigraphy of the Swedish sector of the Baltic Basin - D. Sopher, C. Juhlin, N. Nordbäck
11:30	11:50	Submarine canyons and gravity flow on the western slope of the Okinawa trough - Q. Li, X. Ma, J.i Li, F. Cai, G. Yan, Q. Li
COFFEE BREAK 11:50 - 12:20		
SESSION 2. 12:20 - 13:40 BALTIC SEA PALEOENVIRONMENTS, CHAIRPERSON: Jan Harff		
12:20	12:40	The brakish phase of the Yoldia Sea - an important stage in the history of the Baltic Sea - T. Andrén and E. Andrén
12:40	13:00	Environmental changes during the Late Glacial and Holocene in the Gdańsk Basin (Southern Baltic) as inferred from multi-proxy research - D. Kaulbarsz, J. Harff, G. Miotk-Szpiganowicz, Sz. Uścińowicz, M. Witak
13:00	13:20	New data about postglacial development of the Gulf of Finland - D. Ryabchuk, A. T. Kotilainen, O. Hyttinen, A. Grigoriev, V. Zhamoida, N. Sapelko, J. J. Virtasalo
13:20	13:40	Organic Sediments from the Buried River Valley Record Low Sea Level in Pärnu Region before the Litorina Transgression - T. Post, A. Rosentau, T. Jonuks, K. Kihno, T. Hang, H.-L. Habicht, A. Kriiska, J. Risberg
LUNCH 13:40 - 14:50		

TUESDAY 13.09**SESSION 2. 14:50 - 16:10 BALTIC SEA PALEOENVIRONMENTS, CHAIRPERSON: Małgorzata Witak**

14:50	15:10	Southern Baltic deglaciation as indicated by OSL dating of glaciofluvial and ice-dammed lake deposits - Sz. Uścińowicz, G. Adamiec, A. Bluszcz, W. Jegliński, L. Jurys, G. Miotk-Szpiganowicz, U. Pączek, N. Piotrowska, G. Poręba, P. Przewdziecki
15:10	15:30	Stone Age seal hunters and Holocene shore displacement in Hiiumaa Island, NW Estonia - A. Rosentau, Merle Muru, H. Tõnisson, S. Bjursater, T. Post, H.-L. Habicht, A. Anderson, K. Vilumaa, A. Kriiska
15:30	15:50	Holocene vegetation changes and human impact archived in the Baltic bottom sediments at Little Belt (site MOO59) - W. Granoszewski
15:50	16:10	The base of brackish-water mud as a stratigraphic marker in the Baltic Sea basin - J. J. Virtasalo, M. Moros, M. Endler, S. A. Jokinen, J. Hämäläinen ¹ , A. T. Kotilainen

COFFEE BREAK 16:10 - 16:30**SESSION 3. 16:30 - 17:50 COASTAL PROCESSES, CHAIRPERSON: Vadim Sivkov**

16:30	16:50	Models of land uplift and glacial isostatic adjustment in northern Europe - H. Steffen, V. R. Barletta, H. P. Kierulf, K. Kollo, G. A. Milne, M. Nordman, P.-A. Olsson, M. J.R. Simpson, L. Tarasov, O. Vestøl, J. Ågren
16:50	17:10	Post-glacial seismic activity on the south-eastern coast of the Baltic Sea - A. Bitinas, A. Damušytė, G. Vaikutienė
17:10	17:30	Application of Satellite Interferometry for Identification of the Vertical Ground Movements in the Polish Baltic Coastal Area - M. Graniczny, M. Przyłucka, Z. Kowalski, Sz. Uścińowicz, W. Jegliński
17:30	17:50	Temporal and spatial distribution of the volumetric changes of the of the southern Baltic Sea coast in 2008-2012 based on DTM from airborne laser scanning - J. Dudzińska-Nowak

17:50 - 20:00 POSTER SESSION (with refreshments)

WEDNESDAY 14.09**SESSION 2.1. 09:00 - 11:00 CLISED, CHAIRPERSON: Thomas Andrén**

09:00	09:20	Climate change impact on ecosystem health – marine sediment indicators (CLISED) - G. Kowalewska, M. Szymczak-Żyła, A. Filipkowska, L. Lubecki, T. M. Ciesielski, B. M. Jenssen, M. Ardelan, H. Mazur-Marzec, M. Witak, G. D.Breedveld, A. Oen, M. Bolińska
09:20	09:40	Diatoms in recent and deep sediments of the Gulf of Gdańsk (southern Baltic) - M. Witak
09:40	10:00	Carotenoids in the Gulf of Gdańsk sediments as eutrophication and climate proxies - M. Lawręc, M. Szymczak-Żyła, G. Kowalewska
10:00	10:20	History of cyanobacterial blooms in the Baltic Sea Application of chemical and genetic markers in the analysis of sediments - H. Mazur-Marzec, M. Cegłowska, A. Toruńska-Sitarz
10:20	10:40	Inorganic proxies of climate change in sediments from the Gulf of Gdańsk (Poland) and Oslofjord (Norway) - T. Ciesielski, A. Kuliński, B. M. Jenssen, M. Van Ardelan
10:40	11:00	Assessment of the biogeochemical sedimentary record of an Arctic fjord system (Balsfjord, Tromsø, Norway) - G.D. Breedveld, A.M.P. Oen, M. Szymczak-Zyła, A. Filipkowska, T. Ciesielski, M. Forwick

COFFEE BREAK 11:00 - 11:20**SESSION 2. 11:20 - 12:20 BALTIC SEA PALEOENVIRONMENTALS, CHAIRPERSON: Henry Vallius**

11:20	11:40	Sources of sedimentary biomarkers and proxies with potential paleoenvironmental significance for the Baltic Sea - J. Kaiser, H. W. Arz, K. Häusler, N. Wasmund
11:40	12:00	A long term evolution of harmful substances input into the Gulf of Finland - A. T. Kotilainen, O. Hyttinen, D. Ryabchuk, T. J. Andersen, N. Deryugina, A. Grigoriev, T. Leipe, M. Moros, H. Vallius, J. J. Virtasalo, V. Zhamoida
12:00	12:20	A 1000-year record of the development of coastal hypoxia from the Archipelago Sea - S. A. Jokinen, J. J. Virtasalo, T. Saarinen, A. E.K. Ojala, T. Jilbert, P. Paturi, J. Hänninen, P. Ekholm

LUNCH 12:20 - 13:40**SESSION 3. 13:40 - 15:20 COASTAL PROCESSES, CHAIRPERSON: Albertas Bitinas**

13:40	14:00	Coastline change of the Baltic Sea and its driving forces - J. Harff, J. Deng, J. Dudzinska-Nowak, P. Froehle, A. Groh, B. Hünicke, T. Soomere, W. Zhang
14:00	14:20	Landslides typology and processes in the cliffs of northern Poland - G. Uścińowicz, L. Jurys, T. Szarafin
14:20	14:40	Monitoring of coastal erosion of the Orłowo Cliff (Gulf of Gdańsk, Southern Baltic Sea) - J. J. Frydel
14:40	15:00	Monitoring and analysis of cliff collapses to evaluate the geohazard potential of the steep Baltic Sea coast in NE Germany - K. Obst & K. Schütze

WEDNESDAY 14.09

15:00	15:20	Specific conditions of the accumulation of heavy minerals in the coastal sediments of the Gulf of Riga, south-western Estonia - J.-I. Järvelill
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COFFEE BREAK 15:20 - 15:40

SESSION 3. 15:40 - 17:20 COASTAL PROCESSES, CHAIRPERSON: Alar Rosentau

15:40	16:00	Extreme wave events (EWE) in the middle part of the Polish Baltic coast in the light of legends, historical records and geological data - A. Piotrowski, P. Sydor, J. Krzymińska, T. Żuk
16:00	16:20	Impact of catastrophic events on the coastal development of the Gulf of Gdańsk– case study of the Wisła Śmiała mouth - D. Koszka - Maroń
16:20	16:40	Impacts of wavestorms on the eastern shores of the Baltic Sea in different combination with sea level height: storms Ulli in January 2012 and St Jude in October 2013 - H. Tõnisson, Ü. Suursaar, A. Kont and K. Orviku
16:40	17:00	Short-term beach changes caused by different hydrodynamic conditions along Dziwnow Spit dune coast - N. Bugajny and K. Furmańczyk

CONFERENCE DINNER 19:30 - 23:30

THURSDAY 15.09

SESSION 4. 09:30 - 11:10 ENVIRONMENTAL ISSUES AND PRACTICAL APPLICATIONS, CHAIRPERSON: Helge Arz

09:30	09:50	Coupled manganese and trace metal cycling in the deeps of the Baltic Sea - O. Dellwig, K. Häusler, A. Wegwerth, B. Schnetger and H. W. Arz
09:50	10:10	Spatial and temporal pollution patterns in western Baltic Sea sediments - D. Bunke, T. Leipe, O. Dellwig, M. Abraham, M. Moros, H. W. Arz
10:10	10:30	Geological maps of the Gulf of Finland sea bottom as a basis for assessing the state of marine environment - S. Suuroja, A. Kask, V. Petesell, M. Karimov, A. Veski, M. Dimitrijeva, T. Alliksaar, H. Tõnisson, U. Lips, A. Lepland, H. Vallius
10:30	10:50	Consequences of under-water mining transforming natural sedimentation conditions in the eastern Gulf of Finland - V. A. Zhamoida, A. G. Grigoriev, D. V. Ryabchuk, A.YU. Sergeev, I. A. Neevin
10:50	11:10	Fiberbanks in the Northern Baltic Sea – extended knowledge of an anthropogenic sediment - J. Norrlin, S. Josefsson, O. Larsson, O. Hallberg, A. Dahlgren, B. Bergman, L. Zillén Snowball, A. Persson, L. Melin, A. Löfholm, K. Jönsson, A. Dahl, H. Almqvist, L. Gottby

COFFEE BREAK 11:10 - 11:30

SESSION 4. 11:30 - 13:20 ENVIRONMENTAL ISSUES AND PRACTICAL APPLICATIONS, CHAIRPERSON: Daria Ryabchuk

11:30	11:50	Sediment and carbon accumulation along the southern coast of Finland - H. Vallius
11:50	12:10	Characteristics of labile sedimentary organic matter en route from source to sink areas in the Southern Baltic - A. Winogradow, J. Pempkowiak
12:10	12:30	Transport and fate of terrigenous matter in prodelta of Vistula river (Gulf of Gdańsk, Baltic Sea) - M. Damrat, M. Zajączkowski
12:30	12:50	The occurrence of magnetic and geochemical anomalies in external delta sediments of the Vistula River Cross-Cut - L. Łęczyński, G. Kusza, A. Kubowicz-Grajewska, Ż. Kłostowska, T. Ossowski, P. Hulisz
12:50	13:05	Integrated use of multiple acoustic frequency bands for sub-bottom profiling - K. Olá (Sponsor Presentation)

LUNCH 13:05 - 14:30

SESSION 4. 14:30 - 16:10 ENVIRONMENTAL ISSUES AND PRACTICAL APPLICATIONS, CHAIRPERSON: Aarno Kotilainen

14:30	14:50	Sand waves on the southern Baltic bottom - M. Kubacka, S. Rudowski, R. Wróblewski, K. Szeffler, Ł. Gajewski
14:50	15:10	Seabed dynamics of the Southern Middle Bank (Southern Baltic) - U. Pączek, P. Przedziecki, J. Relisko-Rybak, Sz. Uścińowicz, G. Adamiec, A. Bluszcz, N. Piotrowska, G. Poręba
15:10	15:30	Methodology of submarine groundwater discharge research, Puck Bay, Poland - E. Bubliewska, L. Łęczyński, M. Marciniak, Ł. Chudziak, Ż. Kłostowska, J. Urbański
15:30	15:50	Landscapes mapping on the Gdansk-Gotland sill - D. Dorokhov, E. Dorokhova, V. Sivkov

THURSDAY 15.09

15:50	16:10	Is Global Warming a Reality or just a Political Hoax? - B. Winterhalter
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COFFEE BREAK 16:10 - 16:30

16:30	17:00	BALTIC SEA MARINE GEOLOGISTS MEETING
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CONFERENCE CLOSURE 17:00

FRIDAY 16.09

08:00	18:00	EXCURSION
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