

2012 IEEE/OES Baltic International Symposium (BAL TIC 2012)

**Klaipeda, Lithuania
8 – 10 May 2012**



**IEEE Catalog Number: CFP12AME-PRT
ISBN: 978-1-4673-1413-8**

TABLE OF CONTENTS

The World Ocean Level Change During the Holocene	1
<i>N. Esin</i>	
River Landslides In Nizhny Novgorod Region And A Possibility Of Local Tsunami Generation	7
<i>I. Nikolkina, I. Didenkulova</i>	
Decadal And Long-Term Variations In The Wave Climate At The Latvian Coast Of The Baltic Proper	14
<i>K. Pindsoo, T. Soomere, M. Zujev</i>	
The Chemical Elements And Sedimentation Types Of Deposits In The Dug Holes Dubiciai 1, 2 And Musos Tyrelis As Indicators Of Late Pleistocene And Holocene Climate Changes	22
<i>O. Pustelnikovas, M. Melesyte, E. Rudnickaite, D. Kaminskas</i>	
Features Of Climate Changes Based On The Chemical Elements And Palinological Remnants Distribution In The Sediments And Late Pleistocene And Holocene Deposits Of The SE Baltic Area	27
<i>O. Pustelnikovas</i>	
Global Climate Change: Did We Pass A Tipping Point?	34
<i>A. Stips, M. Lilover</i>	
The Regime Shift In The Baltic Sea Area – Caused By The Change Of The NAO Sign?	40
<i>A. Stips, M. Lilover</i>	
Bottom Relief and Water Discharge Changes in Nemunas Delta due to Climate Change during the Last Century	47
<i>E. Glazaciovaite, I. Dailidiene, I. Osadcij</i>	
Aesthetic Value Characterization Of Landscapes In Coastal Zones	53
<i>D. Depellegrin, N. Blazauskas, L. Vigl</i>	
Device For Taking Samples From The Bottom Boundary Layer Of A Water Body	59
<i>A. Erm, M. Voll, R. Suits, M. Kaeeli</i>	
Comprehensive Recognition Of The Long- And Short-Term Factors For The Socio-Economic Efficiency Estimation Of Dredging Projects	66
<i>G. Gogoberidze, M. Mamaeva, J. Lednova</i>	
Ecological Assessment Of Dredging In The Eastern Gulf Of Finland	70
<i>A. Chusov, J. Lednova, M. Shilin</i>	
Concept Of State Cadastre Of The Marine Coastal Zone Of The Russian Federation	74
<i>D. Ryabchuk, V. Zhamoida, M. Spiridonov, B. Arseniev, G. Gogoberidze</i>	
Environmental Policy And Legislation On Dredged Material In The Baltic Sea Region - Analysis	81
<i>G. Sapota, G. Dembska, M. Bogdaniuk, G. Holm</i>	
A Future Technology Of Environmental Management Of Semi-Enclosed Seas	96
<i>T. Soomere</i>	
Factors, Influencing On Macroalgal Communities In The Neva Estuary (Eastern Baltic Sea)	103
<i>G. Yu</i>	
The Recovery Of Twaite Shad (Alosa Fallax) Population In Lithuania	107
<i>R. Repecka</i>	
Using MERIS/Envisat Data To Assess The Secchi Depth – A Case Study From Lithuanian Baltic Sea Waters	113
<i>D. Vaiciute</i>	
Wind Energy Issues in Estonia and Latvia – the Current Status and Perspectives	118
<i>I. Jansone, A. Kull, A. Ikauniece</i>	
Changes In Coastal Ecosystem Of The Eastern Baltic Sea Under Eutrophication And Climate Variability	126
<i>N. Berezina, Y. Gubelit</i>	
On The Compressibility Of Surface Currents In The Gulf Of Finland, The Baltic Sea	130
<i>A. Giudici, J. Kalda, T. Soomere</i>	
Monitoring of Ice Dynamics Using Bottom-Mounted ADCP in the Central Gulf of Finland in 2010	138
<i>T. Kouts, J. Pavelson, M. Lilover</i>	
Transfer Of Heights To Islands In West-Estonian Archipelago Using Hydrodynamic Levelling	145
<i>A. Liibus, T. Kouts, A. Ellmann</i>	
Tidal Currents As Estimated From ADCP Measurements In “Practically Non-Tidal” Baltic Sea	153
<i>M. Lilover</i>	
Trends Of Simulated Oxygen Dynamics And Hypoxia In The Baltic Sea	157
<i>S. Miladinova, A. Stips</i>	

Gyration Effect Estimated from Global Surface Drifter Data in the Pacific Ocean	163
<i>A. Toompuu, J. Heinloo</i>	
Analysis Of The Structure Of Currents In The Gulf Of Finland Using The Okubo-Weiss Parameter	167
<i>B. Viikmaa, T. Torsvik, T. Soomere</i>	
Simulating Wave-Surge Interaction In A Non-Tidal Bay During Cyclone Gudrun In January 2005	174
<i>V. Alari, T. Kouts</i>	
Modeling Of Eutrophication Processes In The Gulf Of Finland During 1991-2010	186
<i>G. Lessin, A. Stips</i>	
Valuation of Ice Compression Hazard by Means of Fuzzy Logic Model	193
<i>M. Lilover, T. Kouts</i>	
Consistency Of Residence Time Calculations Based On Lagrangian Trajectory Analysis In Ocean Modeling	199
<i>T. Torsvik</i>	
Relationship Between Coastline Changes And Dynamics Of Coastal Ecosystems Of Tahkuna Peninsula, Estonia	205
<i>A. Anderson, U. Ratas, R. Ravis, V. Palginomm</i>	
Monitoring Sediment Transport In The Coastal Zone Of Tallinn Bay	211
<i>F. Buschmann, A. Erm, V. Alari, M. Listak, J. Rebane, G. Toming</i>	
The Influence of Meteorological Data on Calculation of Longshore Sediment Transport	224
<i>E. Fedorova, K. Marusin</i>	
Circulation Of The Surface And Deep Water Masses In The Iceland Basin At The End Of The Late Pleistocene	229
<i>N. Lukashina, L. Bashirova</i>	
Changes On Coasts Of Western Estonia And Russian Gulf Of Finland, Caused By Extreme Storm Berit In November 2011	232
<i>H. Tonisson, U. Suursaar, S. Suuroja, D. Ryabchuk, K. Orviku, A. Kont, Y. Sergeev, R. Ravis</i>	
Analysis Of Shore Changes Between August 2008 And August 2009 And Their Relationship To Hydrodynamic Conditions On Kelba Spit, Saaremaa Island, Estonia	239
<i>H. Tonisson, U. Suursaar, K. Orviku, A. Kont, R. Ravis</i>	
Hindcast Of Sediment Flow Along The Curonian Spit Under Different Wave Climates	244
<i>M. Viska, T. Soomere</i>	
Virtual Atmospheric Transfere Northern Atlantic and Baltic Sea Above on Base of Teisserenc de Bort Terms	251
<i>R. Abramov, O. Goushchin, Z. Stont</i>	
Marine Deposits in Vistula and Curonian Spits (Baltic Sea)	255
<i>E. Badyukova, L. Zhindarev, S. Lukyanova, G. Solovieva</i>	
Long Term Shoreline Changes Of The Lithuanian Baltic Sea Continental Coast	259
<i>I. Bagdanaviciute, L. Kelpsaite, D. Daunys</i>	
Marine Litter In The Different Functional Zones Of The Lithuanian Coast Line	265
<i>A. Balciunas</i>	
Coastal Zone Contamination Mitigation Means	271
<i>O. Belous, A. Balciunas</i>	
Development of Regional Bio-Optical Algorithms of Satellite Data for the South-Eastern Baltic	277
<i>T. Bukanova, S. Vazyulya, O. Kopelevich, V. Burenkov, S. Sheberstov, S. Aleksandrov</i>	
Klaipeda Seaport Key Sustainability Points	282
<i>V. Burskyte, O. Belous</i>	
Preliminary Results Of The Analysis Of Dumping Sites In SE Baltic Region On Example Of Gdynia Dumping Site	290
<i>G. Dembska, G. Sapota, M. Bogdaniuk, N. Blazauskas, S. Suzdalev, L. Zegarowski, B. Hac, B. Aftanas</i>	
Long-Time Variability Of Hydro-Meteorological Fields In The Eastern Part Of Gdansk Basin	297
<i>V. Dubravin, Z. Stont, E. Dorokhova</i>	
Change In Growth Rate Of Baltic Herring (Clupea Harengus Membras L.) In Lithuanian Exclusive Economic Zone (LEEZ) Of The Baltic Sea	304
<i>J. Fedotova</i>	
Upwelling By The Lithuanian Coast: Numerical Prediction Using GIS Methods	307
<i>V. Jurkin, L. Kelpsaite</i>	
The Effect of Persistent Pollutants on Aquatic Ecosystem: A Complex Study	312
<i>N. Kazlauskienė, G. Svecevicus, D. Marciulionienė, D. Montvydiene, V. Kesminas, R. Staponkus, E. Taujanskis, A. Sluckaite</i>	
Calculation of Equilibrium Beach Profile	318
<i>A. Khomchanovsky, E. Fedorova, K. Marusin, A. Khabidov</i>	

The Method Of Coastal Recreational Potential Estimation (For The Eastern Part Of The Gulf Of Finland)	323
<i>M. Lazareva</i>	
Optimizing Breakwater Configuration For Vessel Wakes And Wind Waves	328
<i>R. Mannikus, T. Soomere, T. Torsvik</i>	
Distribution Patterns Of Tributyltin Contaminated Bottom Sediments In Klaipeda Port Area	336
<i>S. Suzdalev, S. Gulbinskas</i>	
On the Vertical Distribution of the Kinetic Energy in the Low-Frequency Range in the Gulf of Finland.....	343
<i>L. Talpsepp, M. Lilover</i>	
Unexpected Experiment Of Sediment Transport And Its Effect On The Benthic Habitat On The Baltic Sea Nearshore Area Of Lithuania	350
<i>E. Visakavicius, M. Bucas, L. Kelpsaitė, A. Figoras</i>	
Distribution Of Trace Elements And Radionuclides In The Curonian Lagoon And The Baltic Sea.....	356
<i>N. Remeikaite-Nikiene, G. Lujaniene, G. Garnaga, K. Jokas, A. Garbaras, R. Skipityte, R. Bariseviciute, B. Silobritiene, A. Stankevicius</i>	
Introduction of the Compact HF Radar WERA-S	368
<i>T. Helzel, B. Hansen, M. Kniephoff, L. Petersen, M. Valentin</i>	
Tracking And Monitoring Oil Slicks Using Remote Sensing	371
<i>V. Klemas</i>	
X-Band Azimuth Cut-Off For Wind Speed Retrieval By Means Of COSMO-SkyMed SAR Data	378
<i>M. Migliaccio, A. Montuori, F. Nunziata</i>	
A Polarimetric Model To Observe Targets At Sea By Pingpong Mode Cosmo-SkyMed SAR Data	383
<i>F. Nunziata, M. Migliaccio</i>	
Ground-Penetrating Radar Study Of Coastal Landscape On Hiiumaa Island, Estonia	387
<i>K. Vilumaa, A. Kont, U. Ratas, H. Tonisson</i>	
Wave Run-Up On A Vertical Wall In A Bay Of A Parabolic Cross-Section	393
<i>I. Didenkulova, S. Chatraee, E. Pelinovsky</i>	
Statistics Of Shallow Water Rogue Waves In Baltic Sea Conditions: The Case Of Tallinn Bay	399
<i>I. Didenkulova, A. Rodin</i>	
Author Index	