12th German-Polish Seminar on Coastal Research including 6th International COPAF Workshop Greifswald, 11/12th October 2012

Thursday, October 11

9:00 Welcome and Introduction Prof. Dr. J. Sündermann, University of Hamburg, Germany Prof. Dr. M. Meschede, Greifswald University, Germany Prof. Dr. S. Massel, IO PAN Sopot, Poland

> *Dynamics of the Baltic Sea System* Chairman: Prof. Dr. H. von Storch

- 9:30 Adaptive vertical coordinates in ocean models: one way to effectively reproduce the Baltic Sea inflow dynamics Prof. Dr. H. Burchard, IO Warnemünde, Germany
- **10:00** Development of an ecosystem model of the Baltic Sea Dr. L. Dzierzbicka-Glowacka, IO PAN Sopot, Poland

10:30 coffee break

- **11:00** Configurational mechanics of stable stratification applied to the Baltic Sea Dr. E. Kleine, BSH Hamburg, Germany
- 11:30 How and where the winter NAO affects Baltic Sea hydro- and morphodynamics? Dr. G. Różyński, IBW PAN, Gdańsk, Poland
- **12:00 Coastdat: Baltic Sea wave conditions in a changing climate** Dr. N. Groll, Helmholtz-Zentrum Geesthacht, Germany
- 12:30 Lunch Chairman: Prof. Dr. S. Massel
- 14:00 Consequences of climate change for the morphological development and protection of sandy coasts Prof. Dr. P. Fröhle, TU Hamburg-Harburg, Germany
- 14:30 Long-term evolution of a multibar shore-profile: Shoreline position, volumetric resources and Dean's function
 G. Cerkowniak, IBW PAN, Gdańsk, Poland
- 15:00 Identification of an environmentally safe fairway in the South-Western Baltic Sea and Kattegat Xi Lu, Helmholtz-Zentrum Geesthacht, Germany

Meeting Place: Greifswald University, Institute for Geography and Geology, Friedrich-Ludwig-Jahn-Straße 17A

15:30 coffee break

Coastline changes of the Southern Baltic Sea Chairman: Prof. Dr. J. Harff

16:00 Morphodynamics research at the southern Baltic coast by the Remote Sensing and Marine Cartography Unit, University of Szczecin

Prof. Dr. K. Furmanczyk, University of Szczecin, Poland

- 16.20 tbd University of Greifswald
- **16:40** Introduction to CoPaf State of the art Prof. Dr. J. Harff, University of Szczecin, Poland
- 17:00 Present-day crustal deformation and sea-level changes in the Baltic Sea region
 A. Groh, Technical University Dresden, Germany
- 17:20 Protection of the Baltic Sea coast in the Province of Western Pomerania Dr. J. Dudzinska-Nowak, University of Szczecin, Poland
- 17:40 Modeling of long-term coastal morphodynamics of the Pomeranian Bight, southern Baltic Sea J. Deng, University of Szczecin, Poland

18:00 Summary and Discussion Prof. Dr. H. von Storch, Helmholtz-Zentrum Geesthacht, Germany Prof. Dr. J. Harff, University of Szczecin, Poland

~19:00 joint dinner/ get together with participants of the combined 6th International CoPaF Workshop at Geologenkeller/ University of Greifswald

Friday, October 12

- 8:45 Welcome and Introduction Prof. Dr. J. Harff, University of Szczecin, Poland
- 8:55 Aeolian sand transport rate on the beach and its influence on the development of fore-dunes along the Leba Barriers, southern Baltic coast, Poland. Dr. J. Rotnicka, University of Poznan, Poland
- 9:15 Present day and Holocene development of Polish coastal dunes Prof. Dr. K. Borowka, Dr. K. Osadczuk, University of Szczecin, Poland

Meeting Place: Greifswald University, Institute for Geography and Geology, Friedrich-Ludwig-Jahn-Straße 17A

- **9:35** Dune morphogenetic modeling using CA concepts Dr. W. Zhang, University of Greifswald
- 9:55 CLISCODE –Climate signals in coastal deposits Universität Hamburg (Ludwig)/ Helmholtz-Zentrum Geesthacht (Bierstedt), Germany
- **10:10 Discussion of the Research Plan** Prof. Dr. J. Harff, University of Szczecin, Poland
- 10:30 coffee break

Current and future programs and initiatives Chairman: Prof. Dr. J. Sündermann

- **10:50** Second BALTEX Assessment of Climate Change –State of the art Prof. Dr. Hans von Storch, Helmholtz Zentrum Geesthacht, Germany
- **11:10 BONUS: Present state** Prof. Dr. S. Massel, IO PAN Sopot, Poland

11:30 Discussion on joint future Baltic Research

(including short presentations of 3min from representatives of the participating main institutions) Prof. Dr. H. von Storch, Helmholtz Zentrum Geesthacht, Germany Prof. Dr. A. Witkowski, University of Szczecin, Poland

13:00 Lunch

Departure of Non-Local Guests

14:00 Joint CliSCODE-COPAF Fieldtrip to Świnoujście and Łeba Dunes Betzler / Lindhorst / Ludwig (Uni HH), Bierstedt (HZG), Harff/ Borowka/ Osadczuk /Osadczuk/ Strzelecka. (University of Szczecin)