

ABOUT INTERNATIONAL CONFERENCE AND SUMMER SCHOOL-SEMINAR “DYNAMICS OF THE COASTAL ZONE OF NON-TIDAL SEAS”

International Conference and Summer school-seminar “Dynamics of the Coastal Zone of Non-tidal Seas” was held from 30 June to 04 July 2008 in Baltiysk, Kaliningrad region.

Conference was organized with the support of the Project CoRuNA (Coastal Russian Networking Activity) in the framework of the EU Project ENCORA, Russian Foundation for Basic Researches (RFBR), P.P. Shirshov Institute of Oceanology of Russian Academy of Sciences (IORAS), Atlantic Branch of P.P. Shirshov Institute of Oceanology of Russian Academy of Sciences (AB IORAS), the Working Group “Sea coasts” of the Council on Problems of World Ocean of the Russian Academy of Sciences, the Project “Sustainable Development Indicators for South-Eastern Baltic (SDI-4-SEB)” in the framework of Neighbourhood (Int.-Taxis) Program “Lithuania, Poland and Kaliningrad Oblast (Russian Federation)”, the Immanuel Kant’s State University of Russia (IKSUR).

Prof. Ruben Kosyan (Russia, SBSIO RAS) was the chairman of Scientific Committee and Dr. Boris Chubarenko (Russia, ABSIO RAS) was the head of Local Organizing Committee.

The principal aim of the International Conference and the Summer school-seminar “Dynamics of the Coastal Zone of Non-tidal Seas” was to give modern information about dynamics processes in the coastal zone and to afford ground for exchange of scientific results of investigations.

The coastal zone though occupying only a small part of seas and oceans plays an important role in human existence. Modern state of investigations of the coastal zone of non-tidal seas was presented on this International Conference and Summer school-seminar. The whole spectrum of questions (from surf zone hydrodynamics to interaction of coastal zone with open sea regions) was discussed during verbal and poster presentations.

More than hundred experts, specialists, young researchers, PhD-students interested in coastal dynamics participated in this event. External lecturers came from Russia (IORAS and Moscow State University Moscow; SBIORAS, Gelendzhik; ABIORAS, Kaliningrad; State University for Physics and Technology (MIPT), Dolgoprudnyi), Poland (Institute of Hydro-Engineering PAS, Gdansk), Germany (Oldenburg University, Oldenburg; Darmstadt University of Technology, Darmstadt), Italy (Institute of Marine Science, Venice), Switzerland (Laboratory of Hydraulics, Hydrology and Glaciology, Zurich). Coming of four lecturers was supported by CoRuNA.

Specialists and young researchers came from more than ten countries (Russia, Ukraine, Estonia, Poland, Greece, France, Spain, Netherlands, Turkey and others) to participate in the International Conference and Summer school-seminar “Dynamics of the Coastal Zone of Non-tidal Seas”, to hear a course of lectures and to present their posters during the conference.

Course of lectures included three topics: “Dynamics of the coastal zone”, “Dynamics of estuaries and lagoons” and “Dynamics of interaction between coastal zone and the open sea”.

Topic 1 «Dynamics of the coastal zone», Chairman – Prof. Ruben Kosyan, local coordinator – Dr. Alexander Babakov

Opening, presentation of Russian Fund of Basic Research (Prof. V. Zhmur) and ENCORA Project (Prof. Job Dronkers)

Dr. Tatyana Akivis¹ «Definitions and problems of the marine coastal zone»

Dr. Igor Leontyev¹ «Morphodynamics of the coastal zone»

Prof. Ruben Kosyan² «Sediment transport in the coastal zone»

Dr.hab. Rafal Ostrowski³ «Wave deformation and breaking in the coastal zone»

Prof. Hans Kunz⁴ «Spatial coastal protection as tool for sustainable development of the coastal zones»

Topic 2 «Dynamics of estuaries and lagoons» Chairman – Prof. Gennady Safyanov, local coordinator – Dr. Vladimir Chechko

Presentation of the FP7 program (Dr. Peter Davis) and the Interreg-Tacis Project SDI-4-SEB (Dr. B. Chubarenko)

Prof. Gennady Safyanov⁵ «Genesis and morphodynamics of estuaries»

Dr. Boris Chubarenko⁶ «Coastal lagoons: typology, hydrodynamics and transport»

Dr. Georg Umgiesser⁷ «Numerical modelling of coastal lagoons»

Dr. Malgorzata Robakewicz³ «Sediment transport in river mouths and estuaries»

Topic 3 «Dynamics of interaction between coastal zone and the open sea»

Dr. Maria Teokhareva «Information about current national and international projects»

Dr.Sci. Andrey Zatsepin¹ «Generation of vortexes and upwelling in the coastal zone»

Coffee Break

Dr. Sci. Petr Zavialov¹ «Dynamics of river plums in the coastal zone»

Dr. Irina Chubarenko⁶ «Water exchange between shallow and deep parts of the basin driven by convective mechanisms»

Prof. Kolumban Hutter⁸ (em.) «Boundary waves»

Prof. Vladimir Zhmur⁹ «Along a slope gravity currents as a mechanism of upper and deep water exchange»

1- P.P.Shirshov Institute of Oceanology of Russian Academy of Sciences (IORAS), Russia, Moscow

2- Southern Branch of P.P.Shirshov Institute of Oceanology of Russian Academy of Sciences (IORAS), Russia, Gelendzhik

3- Institute of Hydro-Engineering, Polish Academy of Sciences (IBWPAN), Poland, Gdansk

4- Oldenburg University, Germany, Oldenburg

5 – Moscow State University (MSU)

6 – Atlantic Branch of P.P.Shirshov Institute of Oceanology of Russian Academy of Sciences (IORAS), Russia, Kaliningrad

7 – Institute of Marine Science, National Research Council (ISMAR-CNR), Italy, Venice

8 – Laboratory of Hydraulics, Hydrology and Glaciology, ETH Zurich, Switzerland (formerly Professor of Mechanics at Darmstadt University of Technology, head of Environmental Flows Department, Darmstadt, Germany)

9 – Moscow Institute (State University) for Physics and Technology (MIPT), Russia, Dolgoprudnyi

In addition to the lectures a number of poster presentations (three minutes for each poster) were presented during three poster sessions - **Topic 1 «Dynamics of the coastal zone»**, **Topic 2 «Dynamics of estuaries and lagoons»** and **Topic 3 «Dynamics of interaction between coastal zone**

and the open sea». Scientific Committee selected two best posters for each topic. Authors of the best posters received incentive prizes from Scientific and Organizing Committees.

Very interesting presentations about Baltic coasts and lagoon dynamics were held by Dr. Boldyrev (ABSIO RAS) and Dr. Bobykina (ABSIO RAS) during excursions to the open Baltic coast, coasts of Kurshskaya Spit, Vistula Lagoon and eroded sea coast of Vistula Spit. Field trips were held in order to demonstrate accumulative and eroded coasts, unique moving wind-blown dunes and coast protected constructions of Kaliningrad region.

A limited set of fellowships was available for young scientists from Russia and other European countries. Sixteen young researchers and PhD-students from five countries participated in conference thanks to Young Professional Exchange Program (YPEP) of ENCORA (Project CoRuNA - Coastal Russian Networking Activity in the framework of the EU Project ENCORA). Six young persons received the support of their national organizations of the ENCORA project.

Conference Proceedings with extended abstracts with illustrative material in English and Russian were published before the conference and were distributed among participants.

Participants were accommodated at Field Scientific Station "Baltic Spit" of Atlantic Branch of P.P.Shirshov Institute of Oceanology, located in the village Kosa on the Vistula Spit, sandy barrier peninsula between the Baltic Sea and the Vistula Lagoon. Lagoon and sea shore were in walking distance of 5-7 minutes.

Cultural events included barbecue (first day) and closing buffet dinner (last day) in the Station "Baltic Spit" garden, musicales, football and volleyball matches for all participants of this conference.