

## Preface

The 5th Study Conference on BALTEX (the Baltic Sea Experiment) was held in Kuressaare on the Estonian island of Saaremaa in the Baltic Sea from 4 to 8 June 2007. With more than 140 registered participants from 16 countries and 120 papers presented the conference was a success. The entire spectrum of BALTEX phase II research including neighbouring areas and the involvement of stakeholders were covered. About 75% of all papers addressed the objectives which are new in the frame of phase II of BALTEX, an encouraging indicator for the present and future development of the programme. The conference reflected the wider scope of BALTEX phase II with much stronger contributions in climate and environmental topics than during previous conferences and there were many opportunities to discuss how further work in this direction could be stimulated.

BALTEX is a Regional Hydroclimate Project of the Global Energy and Water Cycle Experiment (GEWEX), that is a part of the World Climate Research Programme (WCRP). It is clear that BALTEX makes excellent contributions to its mother programmes, but it is also obvious that BALTEX is already moving beyond the scope of these programmes, particularly in areas where air and water quality issues are addressed. Outputs from climate models are being used for more detailed studies affecting a large cross section of sectors within society, leading to challenges in communication of scientific results. Climate change and related impacts are also prominent areas where the outreach of BALTEX has recently become increasingly effective through the close cooperation with the Helsinki Commission (HELCOM). The Conference participants enjoyed good contributions from several research programmes and networks such as LOICZ, EUR-OCEANS and ENSEMBLES and a strengthened interaction between BALTEX and these networks is one way forward towards the broader objectives of BALTEX phase II. The Conference also demonstrated case studies on how research knowledge is further developed and processed for decision making: the ASTRA project and several regional and local studies addressed within the COASTMAN project showed the transfer of research knowledge to practical application in areas related to climate change and coastal zone management in regions of the Baltic Sea basin.

This special issue contains 23 selected peer-reviewed papers. Together they give an impression of the inter-disciplinary character of the conference and of the BALTEX programme in general. We hope the readers of *Boreal Environment Research* will appreciate this opportunity to get insight into the research of an evolving environmental research programme for the Baltic Sea basin.

**Joakim Langner**

Chair BALTEX Science Steering Group,  
Swedish Meteorological and Hydrological Institute

**Hans-Jörg Isemer**

International BALTEX Secretariat,  
GKSS Research Centre Geesthacht