

## **Preface**

### **Changing water, energy and biogeochemical cycles in the Baltic Sea basin**

The 6th Study Conference on BALTEX was devoted to changing water, energy and biogeochemical cycles in the Baltic Sea basin. The conference took place at Międzyzdroje, on the island of Wolin, Poland, on 14–18 June 2010. More on the conference, including the programme divided according to the scientific sessions, volume of the presentation abstracts, and list of participants can be found on the BALTEX website (<http://www.baltex-research.eu/wolin2010/index.html>).

It is the privilege of the host country to publish the conference proceedings. Even before the conference, it had been decided that the proceedings would be published as a special volume of *Oceanologia*, the journal of the Institute of Oceanology, Polish Academy of Sciences, Sopot (<http://www.iopan.gda.pl>). Altogether, 21 manuscripts were submitted. Following the usual, strict, peer review procedure, 15 were accepted for publication and are included in this volume. The manuscripts cover a broad range of topics, but the relationship to the conference subjects and the BALTEX thematic field – cycles of water and energy in the Baltic Sea catchment area is perfectly clear.

With the great variety of topics covered in the accepted papers, it should not be a problem to select a paper that would be specific enough to be placed at the beginning of the volume. On the other hand, nobody really knows where the water cycle begins: is it in a river or the sea, or yet somewhere else? Nevertheless, it seems that most of us appreciate the connection between rain and river, river and sea, and not vice versa. For this reason alone, the volume begins with papers on atmospheric modelling, which are followed by two papers dealing with precipitation changes over Lithuania and Latvia. Then comes a paper describing the moisture changes in the easternmost part of the Baltic catchment area. Water level changes in the southern Baltic lagoons are a logical follow-up: these were investigated, and the increasing trend was found to be statistically significant. Other aspects relating to the sea include wave climate and storm surges, topics important from the point of view of marine transport and coastal erosion; both are represented in the volume. Biogeochemistry is represented by the quantitative assessment of phosphorus accumulation, nitrogen deposition to the sea from the atmosphere and nitrogen upwelling. This is followed by a paper dealing with phytoplankton abundance. The past and future changes

of the sea's coastline described in the two closing papers will, perhaps, remind everybody that nothing, not even the sea, is forever.

I would like to say that working on the volume as guest editor has given me lots of satisfaction and unexpected pleasure. In this capacity, it is also a great pleasure for me to thank the many individual contributors for their involvement and assistance with the issuing of this volume. First and foremost, I would like to express my sincere gratitude to all the authors and anonymous reviewers. Their commitment to convey science to our readers and to the maintenance of scientific quality have been, of course, the essential driving force behind all the papers included in this volume. The technical editor of 'Oceanologia', Sabina Szczykowska MSc, deserves special thanks, as she had to deal with the authors, reviewers, coordinate the linguistic correction procedure, the printing office, not to mention the guest editor. Nobody could have done the job better. The people at the BALTEX secretariat, especially Dr Marcus Reckermann, collected the manuscripts from the authors and stored them safely until the editorial office took over, and so were an important link between the authors and the journal.

I strongly believe that both the content and format of this volume will satisfy our readers and will encourage them to look forward to the next 7th study conference on BALTEX, which will be held on the Swedish island of Öland in May/June, 2013.

Janusz Pempkowiak