The 7th International Conference on The Application of Physical Modelling in Coastal and Port Engineering and Science, Coastlab18, was organized in Santander, Spain, from 22 to 26 May 2018, by the Instituto de Hidráulica Ambiental de la Universidad de Cantabria, IHCantabria. The conference was organized under the auspices of the International Association of Hydro-Environment Engineering and Research (IAHR).

Coastlab18 continued a successful tradition, after Porto (2006), Bari (2008), Barcelona (2010), Ghent (2012), Varna (2014) and Ottawa (2016), to provide a forum to discuss the latest developments in physical modelling in the field of coastal and port engineering. In 2018, the Coastlab conference was held by IHCantabria in Santander (Spain), which has a long tradition in experimental hydraulics associated with the field of coastal engineering.

The main objectives of the Coastlab18 conference were:

- To provide a stimulating and enriching forum to discuss the latest developments in physical modelling applied to coastal and port engineering and in new trends coastal science.
- To increase the link between industry and the academia in the field of experimental modelling.
- To engage industry professionals from Coastal and Port Engineering and Marine Energy sector to be part of the Coastlab community.
- To attract new people from Latin America for the Coastlab network, especially young researchers and institutions from emerging coastal and port laboratories.

Coastlab18 welcomed 175 attendees from 18 different countries. The conference was preceded by a short course covering the most relevant aspects in wave generation, new techniques in laboratory measurements and best practices in innovative laboratory tests. Attendees had also the opportunity to participate in a field trip to visit Santander Harbor and Somo beach.

The Technical program included three renowned keynote lectures and 120 presentations focused on theoretical and practical aspects related to physical modelling in the field of coastal and ocean engineering. Coastal and ocean structures, breakwaters, revetments, laboratory technologies, measurement systems, coastal field measurement and monitoring, combined physical and numerical modelling, physical modelling case studies, tsunamis and coastal hydrodynamics were the main topics covered in the conference. The presentations and discussions, together with the social events held during the conference, helped to create a fruitful and friendly atmosphere, promoting close working relationships between coastal researchers and engineers from different countries and with different expertise. Thus, Coastlab18 continued its tradition of acting as a recognized platform for the direct exchange of knowledge and experience between early-stage researchers and senior scientists in the field of coastal and port engineering.

This book gathers 16 selected papers [1–16] from the conference, attempting to cover, as completely as possible, all the topics presented during Coastlab18. The papers have been accepted after a peer-review process based on their full text.
Special thanks are due to the Editorial and Reviewer Board, which had most of the responsibility for reviewing the documents and providing constructive comments. The quality of the presented papers gives good reasons to believe that this meeting contributes to promote a greater collaboration between researchers and engineers in the field of coastal and port engineering.

The organizers of Coastlab18 express their sincere acknowledgments to the Sponsor, the International Association for Hydro-Environment Engineering and Research (IAHR). We would also like to acknowledge to all members of the Local Organizing Committee and the Scientific Committee, as well as to all technical and administrative staff members for supporting the organization of Coastlab18.

Author Contributions: Writing—original draft preparation: M.M.; Writing—review and editing: J.L.L. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Acknowledgments: This work has been funded under the Retos Investigación 2018 (grant RTI2018-097014-B-I00) program of the Spanish Ministry of Science, Innovation and Universities. M. Maza is indebted to the Spanish Ministry of Science, Innovation and Universities for the funding provided in the grant Juan de la Cierva Incorporación (BOE de 27/10/2017). The authors also express their acknowledgments to the Coastlab18 Sponsor, the International Association for Hydro-Environment Engineering and Research (IAHR).

Conflicts of Interest: The authors declare no conflict of interest.

References


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