## Foreword

The First Meeting of the Spanish Physical Oceanography (EOF1) community was held in Barcelona between 13 and 15 October 2010, with a high participation of oceanographers from all Spanish (and some Latin American) institutions that carry out relevant research in Physical Oceanography. The event was organized by the Institute of Marine Sciences (*Institut de Ciències del Mar*, ICM) of the Spanish National Research Council (*Consejo Superior de Investigacions Científicas*, CSIC), the Maritime Engineering Laboratory (*Laboratorio de Ingeniería Marítima*, LIM) of BarcelonaTech University (*Universitat Politècnica de Catalunya*, UPC), and the International Centre for Coastal Resources Research (*Centre Internacional d'Investigació dels Recursos Costaners*, CIIRC), joining efforts as the Catalan Observatory for the Oceans (*l'Observatori Català de l'Oceà*). The event was funded by the Spanish Government through the former Spanish Science and Innovation Department (*Ministerio de Ciencia e Innovación*), the Catalan Government (*Generalitat de Catalunya*) and CSIC, and had local support from La Caixa Foundation (*Obra Social Fundació La Caixa*) and the Maritime Museum of Barcelona (*Museu Marítim de Barcelona*).

EOF1 was an excellent opportunity for gathering the Spanish physical oceanographers, aimed at enhancing positive interactions and synergies. The outcome was excellent, the scientific committee was formed by scientists representing 17 Spanish institutions and there were 138 communications from all fields of Physical Oceanography, structured within six topics: Small-Scale and Coastal Processes, Mesoscale Processes, Large-Scale Processes, Marine Climate and Operational Oceanography, Oceans and Climate Change, and Technologies for the Marine Environment. The success of the Barcelona meeting, the quantity and quality of the presentations and the high interest shown by the participants, deserved a continuation. This fortunately will take place in Madrid, between 14 and 16 November 2012, as the venue for the Second Meeting of the Spanish Physical Oceanography (EOF2) community, under the local organisation of the Spanish National Ports and Harbours Authority (*Puertos del Estado*, PdE). We anticipate a similar or even higher gathering in the Madrid meeting, we are positive there will be fruitful presentations and discussions, and from these lines we wish to encourage all Spanish oceanographers to participate.

We are very happy that Scientia Marina has become the vehicle to disseminate the international relevance of Spanish research in Physical Oceanography. This special issue is, above all, a celebration of maturity for the Spanish Physical Oceanography community. It gathers 19 papers that represent most, but certainly not all, of the research institutions and topics on Physical Oceanography in Spain. The introductory paper summarizes the historical development of the Spanish Physical Oceanography, in a sense it places all the remaining papers into a broad perspective, and wonders how we must proceed in the near future as we are in the middle of a profound economical crisis. It concludes that the continuous advance of Spanish Physical Oceanography depends on our capacity and commitment to promote human capital, partnership and society-oriented research. The remaining 18 papers are organised in six topics, following the same structure as the EOF1 meeting. We hope that they will serve to illustrate the Spanish contribution to these fields and will encourage further utilization of *Scientia Marina* as a channel for spreading the Spanish research on the physical environment of the oceans. We would like to sincerely thank all the contributing authors for their moral and financial support, they are the real actors that have made this special issue possible. We are also very grateful to the many fine reviewers that have helped improve the quality of the final articles. Finally, we are indebted to the following institutions that have contributed to the funding of this special issue: ICM, CIIRC, UPC, PdE and the Spanish Institute of Oceanography (*Instituto Español de Oceanografía*).

THE INVITED EDITORS