

Editorial

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This issue of *Maritime Engineering* presents a collection of papers presented at the eighth ICE Coastal Management conference, held in Amsterdam in September 2015. This and the ICE 'Breakwaters' conference are widely considered to be amongst the most informative coastal conferences for industry, bringing together practitioners and academia to share advanced research and knowledge and problem-solving capabilities. This is strongly reflected in the papers presented at those events, and accord with the aspirations of this journal.

With a large proportion of the world's population concentrated around coastlines, many communities and critical infrastructure face the prospect of significant risk from future climate change through rising sea levels and changes in storm severity accelerating erosion rates and the risk of flooding. Climate change does, though, also present us with the opportunity to rethink how we analyse and address coastal management. The solutions are not always just about engineering; helping communities to adapt and change is itself a significant topic area, while solutions that are bringing nature and engineering together are also increasingly being adopted.

The theme of ICE Coastal Management 2015 was 'Changing Coast, Changing Climate, Changing Minds'; attendees came together to discuss these issues and share knowledge on some of the problems and potential solutions. Sixty papers and 20 posters from across the world were presented at the conference, with delegates from over 20 countries present. Topics covered included: planning, policy, engagement, forecasting, modelling, design, construction, monitoring and management; covering coastal evolution, flood and erosion risk, climate change, environmental enhancement. Of particular note is working with different communities around the world that have very different needs, and can adopt different solutions from the highly complex through to very effective low-tech.

A selection of the papers is contained herein. This collection comprises a cross-section that has been chosen to illustrate the wide variety of the papers that were presented and discussed. These demonstrate the innovative and progressive thinking that exists and is applied by practitioners to tackle some of the issues we face, and should appeal to our established journal readership.

In this issue you will read about the use of innovative ecologically active concrete technologies for creating enhanced ecosystem services while improving the structural integrity and durability of coastal structures (Perkol-Finkel and Sella, 2015),

as well as how maritime engineering projects can be more carbon dioxide-efficient (Fiselier *et al.*, 2015). The approach being adopted by the US Army Corps of Engineers to adapt to changing sea levels is presented (Moritz *et al.*, 2015), outlining steps to follow for adaptation with respect to total water levels, while a comprehensive description of coastal and marine monitoring approaches is also provided (Colenutt *et al.*, 2015). The topic of planning for coastal change, in particular where there is unlikely to be future investment in protecting communities, is discussed (Hardiman, 2015). You will also find in here the results from a pilot project looking at the impacts of beach drainage on beach stability (Reedijk *et al.*, 2015), and read about how issues were overcome in designing and constructing a coastal protection scheme in a highly challenging environment (Bolle *et al.*, 2015).

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