



Fifth International Conference on Estuaries and Coasts  
November 2-4, 2015



Sultan Qaboos University  
College of Engineering

## Proceedings of the Fifth International Conference on **Estuaries and Coasts**



November 2-4, 2015, Muscat, Sultanate of Oman

Edited by A. Sana, L. Hewawasam and M.B. Waris



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# **Estuaries and Coasts**

**(ICEC 2015)**

A. Sana, L. Hewawasam and M.B. Waris (Editors)

Sultan Qaboos University  
Muscat 2015

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## Foreword

The 5<sup>th</sup> International Conference on Estuaries and Coasts (ICEC 2015) is being held at Sultan Qaboos University, Muscat, Oman from November 2 to 4, 2015 under the patronage of His Excellency, The Minister for Agriculture and Fisheries, Sultanate of Oman. His Excellency, The Vice Minister, Ministry of Water Resources, Peoples Republic of China will also grace this event. The Executive Director of International Association for Hydro-Environment Engineering and Research (IAHR) and The Deputy Director of the International Research and Training Center on Erosion and Sedimentation (IRTCES) will also join the conference. The themes of the conference include coastal erosion, seawater quality, tsunamis and storm surges, estuarine water quality and its effects on marine resources, integrated coastal zone management and seawater intrusion into coastal aquifers and freshwater systems.

Earlier conferences have been held in year 2003 at Hangzhou, China (1st), year 2006 at Guangzhou, China (2nd), year 2009 at Sendai, Japan (3rd) and year 2012 at Hanoi, Vietnam (4th). This conference has attracted a significant number of participants from various countries in the past. For the 5th conference Oman was selected which is logical because of a rich maritime history of the Sultanate and His Majesty Sultan Qaboos bin Saeed's strong commitment to the environmental protection and conservation.

The main sponsors of this conference are Sultan Qaboos University, The Research Council Oman, Ministry of Agriculture and Fisheries, Oman, Special Economic Zone Authority, Al-Duqm, Oman and Ministry of Tourism, Oman. Some of the most prestigious professional organizations like International Association for Hydro-Environment Engineering and Research (IAHR) and International Research and Training Center on Erosion and Sedimentation (IRTCES) are also supporting this event.

The keynote speakers invited to deliver lectures are well known international researchers in the fields of coastal, hydrodynamic and environmental engineering and science. In fact most of the authors presenting in this conference are well known for their research. A total of 51 research papers will be presented by researchers from 20 countries from all over the globe.

A number of selected papers will be considered for publication in The Journal of Applied Water Engineering and Research (JAWER) published by IAHR and The Journal of Engineering Research (TJER) published by Sultan Qaboos University.

A short course on one of the modern numerical models; MOHID is also arranged for the interested participants from Oman and other countries on November 5, 2015. Engr. Frank Braunschweig who is one of the developers of this advanced software is invited to conduct the short course. The course participants will learn the fundamentals of the software and will get a chance to carry out numerical simulation using MOHID.

The Local Organizing Committee would like to express gratitude to all the administrative units of Sultan Qaboos University especially His Excellency The Vice Chancellor's office, Public Relations Department, College of Engineering Dean's office and all the Civil and Architectural Engineering Department staff for their tremendous help in the conference arrangements.

Ahmad Sana  
Luminda Hewawasam  
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