

**COASTAL  
ENGINEERING  
2016**

Proceedings of the 35<sup>th</sup> International Conference

# COASTAL ENGINEERING 2016

17 November – 20 November, 2016  
Antalya, Turkey

Edited by

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**Abstract:** This *Proceedings* contains 170 papers from the 35<sup>th</sup> International Conference on Coastal Engineering, which was held in Antalya, Turkey from November 17 to November 20, 2016. The *Proceedings* is divided into six parts: Waves; Swash, Nearshore Currents, and Long Waves; Sediment Transport and Morphology; Coastal Structures; Coastal Management, Environment, and Risk, and Posters. The individual papers cover a broad range of topics including theory, numerical and physical modeling, field measurements, case studies, design, and management. These papers provide engineers, scientists, and planners state-of-the-art information on coastal engineering and coastal processes.

## Foreword

The 35<sup>th</sup> International Conference on Coastal Engineering (ICCE 2016) was held in Antalya, Turkey from November 17 to November 20, 2016. The Local Organizing Committee (LOC), led by Ayşen Ergin, is acknowledged for their dedicated preparation over many years that led to a successful conference with broad participation. In particular, the LOC must be thanked for their perseverance through a series of disruptive political events in the days and months preceding the Conference. Nearly two hundred and fifty attendees from 26 countries gathered in the coastal city of Antalya to discuss research and applications in coastal engineering. The papers contained in this *Proceedings* cover a wide range of topics including waves; swash, nearshore currents, and long waves; coastal management, risk, and environmental restoration; sediment transport and morphology; and coastal structures. The authors have provided state-of-the-art contributions, and this volume could not be produced without their commitment to solving coastal engineering challenges. The members of the ASCE/COPRI Coastal Engineering Research Council (CERC) and the ICCE 2016 Technical Review Committee reviewed 864 abstracts and accepted the 576 papers to be presented at the conference. The dedication of the Council members has led to the continued high quality and popularity of the International Conference on Coastal Engineering.

Preparation of these proceedings would not be possible without the assistance of many colleagues. Thank you to Dr. Jane Smith, CERC Chairman, Dr. Ron Noble, CERC Vice Chairman, and the entire CERC for their guidance and encouragement. Additional thanks go to Ayşen Ergin, Ahmet C. Yalçiner, Yalçın Yüksel, Esin Çevik, and Işıkhan Güler for answering many requests for information and maintaining their resolve to hold a successful conference in Turkey.

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**Turkish Chamber of Civil Engineers**

**Antalya Metropolitan Municipality**

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