# COASTAL ENGINEERING 1998

Volume 1

#### **CONFERENCE PROCEEDINGS**

June 22-26, 1998 Falconer Hotel Copenhagen, Denmark

> EDITED BY Billy L. Edge



Abstract: This proceedings, Coastal Engineering 1998, contains over 270 papers presented at the 26th International Conference on Coastal Engineering which was held in Copenhagen, Denmark, June 22-26, 1998. The proceedings is divided into five parts: 1) characteristics of coastal waves and currents; 2) long waves and storm surges; 3) coastal structures; 4) coastal processes and sediment transport; and 5) coastal, estuarine, and environmental problems. The individual papers include such topics as the effects of wind, waves, storms, and currents as well as the study of sedimentation, erosion, and beach nourishment. Special emphasis is given to case studies of completed engineering projects. With the inclusion of both theoretical and practical information, these papers provide the civil engineer and professionals in related fields with a broad range of information on coastal engineering and coastal processes affecting design and operations in the coastal zone.

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## **Foreword**

The Editor would like to acknowledge the work of the Local Organizing Committee in developing a very successful conference. Being a member of the LOC brings the amount of work required to develop and conduct a successful conference into sharp focus. Nevertheless the members of the LOC worked tirelessly to ensure the success of the ICCE98. In addition to the Local Organizing Committee, the work of the eight members of the technical review panel were critical to selecting the highest quality papers to be presented. Each reviewer was responsible for a critical review of 310 abstracts, of the total 640 abstracts submitted, in a very brief period of time.

The ICCE's are very special in bringing together people from around the world concerned with coastal engineering. Through this conference many special relationships and friendships have been developed. With the addition of the internet to our communication it is very easy to stay in touch with friends developed at the conferences. One very special friend of the ICCE and the many people from around the world who attended these conferences was Professor Yoshito Tsuchiya. He became seriously ill immediately before the 26<sup>th</sup> ICCE, preventing him from presenting his paper, and he passed away on October 14, 1998. Because of his long and dedicated service to the leadership in the coastal engineering community, the Proceedings of the Twenty-sixth Conference is dedicated to Professor Tsuchiya.

The next ICCE will be held in Sydney, Australia, 16-21 July 2000. ICCE 2000 promises to be a unique opportunity to see Australia including the Great Barrier reef, Uluru (Ayers Rock) and Kakadu National Park, three natural wonders of the world. The 28<sup>th</sup> ICCE will be held in Cardiff, Wales, 7-12 July, 2002. The 29<sup>th</sup> ICCE will be held in Lisbon, Portugal, in 2004, and it will be followed by the 30<sup>th</sup> ICCE in San Diego, California in 2006. Updated information can be obtained from the ICCE web page at http://www.coastal.udel.edu/coastal/icce/.Two special people deserving of recognition are Joyce Hyden and Becky Edge. They continue to support the conference and the preparation of the *Proceedings* and communicate with authors. They both have unselfishly given time and energy to producing the databases from which the conference and Proceedings are maintained and over the years have developed a network among those who contribute papers to the Conference. To the above and to the many others who have helped to produce these Proceedings, I again say "Thanks."

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## **Dedication**



## Professor Yoshito Tsuchiya

Professor Yoshito Tsuchiya was a leader in Coastal Engineering in Japan and Asia for many years before becoming involved in the International Conference on Coastal Engineering and the IAHR conferences. He has worked with numerous researchers from outside Japan including Ole Madsen, Richard Sylvester, James Tarrent, John Herbich and David Basco. Although many of his contributions during his thirty-year career were related to wave dynamics, his made contributions in the areas of storm surge, tsunami, beach processes and shoreline restoration. Professor Tsuchiya was born in Nagano Prefecture, Japan, in 1930 and studied at Nagoya Institute of

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Technology and Kyoto University where he served from 1961 until his retirement in 1994. In 1968 he became affiliated with the Disaster Prevention Research Institute (DPRI) at Kyoto University and became its director in 1991. While at the DPRI he designed and constructed the offshore research tower at Shirahama and the field research pier at Ogata which are both in continuing service.

After his retirement in 1994 from the DPRI, which still carries forth largely in the directions he established, he became a Professor of Meijo University in Nagoya. While at Kyoto University he supervised 29 doctoral students. He was also well noted as an expert at a card game named "Koi-Koi" which his students and colleagues such as Dr. Ole Madsen at MIT came to respect. In spite of his dedication to his work, he found time to enjoy golf at least once a month with his wife Shoko. We will miss his contributions in coastal engineering research and most importantly his friendship and motivation. Prof. Tsuchiya passed away on October 14, 1998 and left a long list of accomplishments and an equally long list of assignments for his colleagues to continue.

## Acknowledgements

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International Association of Navigation Congresses (PIANC)
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