

VOLUME 1

1 RAD

Coastal Engineering 1994

Proceedings of the
twenty-fourth international conference

October 23-28; 1994
Kobe, Japan

Conference held under the auspices of the
Coastal Engineering Research Council of the
American Society of Civil Engineers

Organized by the Japan Society of Civil Engineers

Edited by Billy L. Edge



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ABSTRACT

This proceedings contains over 200 papers presented at the 24th International Conference on Coastal Engineering which was held in Kobe, Japan, October 23-28, 1994. The book is divided into six parts: 1) Characteristics of coastal waves and currents; 2) long waves and storm surges; 3) coastal structures; 4) coastal processes and sediment transport; 5) coastal, estuarine and environmental problems; and 6) case studies. The individual papers include such topics as the effects of wind, waves, storms and currents as well as the study of sedimentation 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 related fields with a broad range of information on coastal engineering.

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FOREWORD

The 24th International Conference on Coastal Engineering was held in Kobe, Japan. The 24th ICCE, like the ones before it, was organized and managed by volunteers from within Japan representing private, industrial and governmental contributors. This Conference represented an opportunity to share scientific and engineering information and provided a forum for interaction with other engineers and scientists working on similar coastal problems. The time and effort contributed to the development and organization of each conference becomes more complex and difficult as they continue to grow in size and content. The Local Organizing Committee worked on the planning for this Conference for four years. The 24th ICCE was a tremendous success in every way. The **Proceedings** of this Conference will represent a major step forward in the field of coastal engineering.

The chapters in this **Proceedings** have been prepared by the authors who were selected to make presentations at the 24th International Conference on Coastal Engineering. The authors were asked to make presentations at the Conference based upon review of the abstracts which were submitted well in advance of the Conference. The Technical Review Committee included six professionals who are active in the field of coastal engineering. One of the members is a representative of the Local Organizing Committee; the other five members were selected for their broad understanding and recognition in the field. The papers included in this volume are eligible for discussion in the **Journal of the Waterways, Port, Coastal and Ocean Division** of the ASCE. All papers are eligible for ASCE awards.

Venues for the upcoming conferences are listed below:

25th ICCE - Orlando, FL USA	1996
26th ICCE - Copenhagen, Denmark	1998
27th ICCE - Sydney, Australia	2000

Coastal engineers who would desire to host a future conference in their country should contact the Secretary of the Coastal Engineering Research Council to receive information about submitting a proposal.

The continuing coordination of the International Conferences on Coastal Engineering is through the Coastal Engineering Research Council of the ASCE. The Research Council began at the instigation of Professor Boris Bakhmeteff who as chairman of the Research Committee of the Engineering Foundation suggested the formation of the Council on Wave Research. The Council was established in June 1950 under the Engineering Foundation. In 1963 the Council was transferred from the Foundation to the ASCE and was renamed the Coastal Engineering Research Council which better described its expanded function.

Members of the coastal engineering community recognized that the problems they faced required broad based research to better define the coastal and ocean phenomena with which they dealt. The Foundation felt that it was important that all disciplines working in the coastal area should have an opportunity and be encouraged to communicate with one another through the mechanism of interdisciplinary conferences.

The first conference was held in Long Beach, CA in 1950. The papers which were delivered at the conference were published and became the first coastal engineering conference **Proceedings**. Although the conferences began with a national focus they quickly became international in scope. After planning and conducting 24 conferences on coastal engineering the Series has been established as the principal conference on coastal engineering in the world. Contributors to the conference represent nearly all coastal nations and the numbers of abstracts which are submitted for consideration are generally twice as large as the available opportunity for presentations. The **Proceedings** of the conferences are all available from the ASCE.

Billy L. Edge, Secretary
Coastal Engineering Research Council
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