

Volume 1

Coastal Engineering 1996

Proceedings of the
twenty-fifth international conference

September 2-6, 1996
The Peabody Hotel
Orlando, Florida

Held under the auspices of the
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Edited by Billy L. Edge

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Abstract:

This proceedings contains over 370 papers presented at the 25th International Conference on Coastal Engineering which was held in Orlando, Florida, 2-6 September, 1996. 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, 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.

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FOREWORD

The *Silver Conference* represents the 25th International Conference on Coastal Engineering. The first conference was held in Long Beach, California, in 1950, approximately a half a century ago. This conference series has maintained and still represents the major forum for presentation and discussion of the ongoing research in the field of coastal engineering, applications to design projects and case histories of completed projects. Moreover, the conference is not limited to just coastal engineers but it is open to other related disciplines including geologists, meteorologists, oceanographers and construction for example. Traditionally, each conference was hosted by a different country to allow the problems and solutions of that country to be shared with others attending from around the world. This also provided a unique opportunity for the young engineers to benefit by having a coastal engineering conference hosted in their country which they could more easily attend. As the conference series evolved, many formats have been introduced to help promote the discussion and learning opportunities, but the conference series has remained dedicated to the highest standard of presentation and dissemination of information that can aid the practitioners as well as the researchers. The competition to present work at the conference has continued to increase as the research has increased and the works become ever larger and more exciting.

In recognition of the *Silver Conference* (also known as ICCE96) and celebration of our "Coastal Engineering History and Heritage," the organizers of the conference commissioned a coastal engineer in each of the countries which had hosted a conference in the series to prepare a history of coastal engineering in that country. Papers were prepared by authors representing 15 countries, presented at the conference and published in a separate volume¹ edited by the Conference co-chair Dr. Nicholas C. Kraus. The volume is available from the American Society of Civil Engineers.

The *Silver Conference* was the largest in the long series with largest number of papers being submitted for consideration. The 850 papers were each reviewed by four members of the technical review panel. Unfortunately, only 435 papers could be accepted for presentation during the week long conference. This necessitated changing the normal 30 minute presentations to 20 minute presentations in order to accommodate the large number of presentations --nearly 100 more papers than previous conferences have accommodated. The technical aspects of ICCE96 were very successful and to support the discussions, informative field trips to the East and West shorelines of Florida were arranged and well attended. This allowed participants to view the coastal engineering solutions to problems in inlet management, beach fill technology, shoreline and environmental protection and restoration and coastal water quality.

Lastly, the 25th International Conference on Coastal Engineering was a family oriented meeting with special emphasis on an "American Experience." Being located in Orlando, Florida, near such facilities as Disneyworld, Epcot Center, MGM Studios and Sea World, provided many opportunities for family and social interaction.

¹ Kraus, Nicholas C. 1996. *History and Heritage of Coastal Engineering*. American Society of Civil Engineers. New York, NY.

The first 25 conferences have been held at venues noted in the table below; the table also includes the upcoming ICCE conferences which have been selected.

Conference	Year	Venue
1	1950	Long Beach, California
2	1951	Houston, Texas
3	1952	Cambridge, Massachusetts
4	1953	Chicago, Illinois
5	1954	Grenoble, France
6	1957	Gainesville, Florida
7	1960	The Hague, The Netherlands
8	1962	Mexico City, Mexico
9	1964	Lisbon, Portugal
10	1966	Tokyo, Japan
11	1968	London, United Kingdom
12	1970	Washington, D.C.
13	1972	Vancouver, Canada
14	1974	Copenhagen, Denmark
15	1976	Honolulu, Hawaii
16	1978	Hamburg, Germany
17	1980	Sydney, Australia
18	1982	Cape Town, South Africa
19	1984	Houston, Texas
20	1986	Taipei, Taiwan
21	1988	Torremolinos, Spain
22	1990	Delft, The Netherlands
23	1992	Venice, Italy
24	1994	Kobe, Japan
25	1996	Orlando, Florida
26	1998	Copenhagen, Denmark
27	2000	Sydney, Australia

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 into sharp focus the amount of work required to develop and conduct a successful conference. The members of the LOC worked tirelessly to ensure the success of the ICCE96. 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 425 abstracts in a very brief period of time. One special person deserving of recognition who continues to support the conference and the preparation of the *Proceedings* and communicates with authors of papers is Becky Edge. She has unselfishly given her time and energy to producing the databases from which the conference and *Proceedings* are maintained and over the years has 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 say "Thanks."

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ACKNOWLEDGMENTS

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Florida Shore and Beach Preservation Association
Institution of Civil Engineers, United Kingdom
international Association for Hydraulic Research, Maritime Hydraulics Section
Japan Society of Civil Engineers, Committee on Coastal Engineering
Permanent International Association of Navigation Congresses (PIANC)
Royal Institution of Engineers in The Netherlands
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U. S. Geological Survey
U. S. Army Corps of Engineers, Waterways Experiment Station

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