
Preface

A better living in the future environment is the common wish of the whole of mankind. With the rapid development of coastal and marine resource exploitation and utilization worldwide, coastal and marine engineering geology has become a key component in human activities. Many engineering geological problems have been encountered in the process of planning, building and servicing in coastal and marine environments.

This session focuses on coastal management and shore protection, taking into account storm-related events and relative sea level change, planning of waste disposal, works for the remedy of coastal pollution, sea-floor pipeline engineering, slope stability analysis, and tsunami propagation and flooding. The session aims to provide a forum for engineering geologists who play a pivotal role in investigating, managing, using, exploiting and protecting the coastal and marine domains so that they can share their overall views, creative ideas and advanced knowledge. This is also an opportunity to generate profitable interactions with other experts, such as civil, forest and agrarian engineers, geomorphologists, oceanographers, geologists, geophysicists, biologists, land planners and environmentalists.

This volume contains more than 40 peer reviewed technical papers related to coastal and marine engineering geology on the topics of: (1) Coastal and offshore geohazards; (2) Coasts at threat: causes and consequences of coastal settlements and maritime transportation; (3) Monitoring and measurement of seabed dynamic processes; (4) Relative land subsidence in transitional coastal environment: causes, effects, quantification and monitoring; (5) Submarine mass movements: hazards and risk assessment. This collection of papers covers recent case histories, theoretical advances, laboratory and field-testing, and design methods beneficial to practitioners, researchers and other professionals. This volume will also showcase the rapidly evolving technologies used in investigating coastal and marine environments.

We would like to thank all authors and participants for sharing their ideas and results in the area of coastal and marine engineering geology. We are also appreciative of the conference organizers for their hard work in putting up so many interesting sessions. We wish to acknowledge the help from all the reviewers in advising and refining the contributions. The reader may find that in some of the papers they are left on their appetite, which is largely due to the guidelines limiting the number of pages to a maximum of 6. Readers are encouraged to directly contact the authors if they wish to have more information.

Finally, we hope that the proceedings will reflect the success of the XII IAEG Congress, which is the 50th Anniversary of IAEG.

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