

About the Book

Modeling and monitoring of coastal marine process is a collection of selected overview article presented in a training workshops conducted over a decade. In this volume the authors reviewed the basic fluid dynamics and physical processes of the coastal marine environment, marine pollution, marine hazards and coastal marine policy and management.

The articles are targeted primary for non-specialists and practicing professionals who have do not have extensive background in coastal marine processes. This book can also serve as a reference monograph for advanced undergraduate and graduate students. Examples of regional applications in this book illustrate the use of models and techniques.

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Coastal marine environment: Theory and Measurements

1. *The Coastal Ocean*
2. *Introduction to transport phenomena*
3. *Coastal marine diffusion processes*
4. *Measurement of currents in the coastal Oceans*
5. *Remote sensing applications to coastal Oceanography*

Modelling of coastal marine pollution

6. *Coastal transport and dispersion modeling*
7. *Modelling circulation and salinity in estuaries*
8. *Modelling and measurement of sediment transport in Lakes*

Coastal Marine Hazards

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10. *Deterministic methods for prediction of tropical cyclone tracks*
11. *Risk analysis for Oil spillage in marine environment*
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12. *National legislations and international conventions for regulation of coastal zone activities*
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