Advanced Series on Ocean Engineering — Volume 21

WAVES AND WAVE FORCES ON COASTAL AND OCEAN STRUCTURES



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Waves And Wave Forces On Coastal And Ocean Structures

Author :Robert T Hudspeth / Category :Technology &

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Summary: Free waves and wave forces on coastal and ocean structures pdf download - this book focuses on 1 the physics of the fundamental dynamics of fluids and of semi-immersed lagrangian solid bodies that are responding to wave-induced loads 2 the scaling of dimensional equations and boundary value problems in order to determine a small dimensionless parameter that may be applied to linearize the equations and the boundary value problems so as to obtain a linear system 3 the replacement of differential and integral calculus with algebraic equations that require only algebraic substitutions instead of differentiations and integrations and 4 the importance of comparing numerical and analytical computations with data from laboratories and or nature contents mathematical preliminariesfundamentals of fluid mechanicslong-crested linear wave theory lwt wavemaker theoriesnonlinear wave dynamics theoriesdeterministic of small solid bodiesdeterministic dynamics of large solid bodiesreal ocean waves readership graduate students and practitioners in ocean and coastal engineering keywords deterministic and nondeterministic wave-structure interactions linear and nonlinear wavemaker theories linear and nonlinear wave theories fundamental fluid mechanics chaotic analysis of crosswaves

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