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 Recent Advances in the Modeling of Wave and Permeable Structure Interaction
 1. Introduction; 2. Porous Flow Models; 3. General Governing Equations and Matching Conditions; 4. Wave Interaction with Structures. Linear Solutions; 5. Shallow Water Models; 6. Short Wave-Averaged Flow; 7. Modeling Based on the Navier-Stokes Equations; 8. Conclusions; 9. Future Work; References; Descriptive Hydrodynamics of Lock-Exchange Flows; 1. Introduction; 2. Experimental Facilities; 3. Basis for Interpretations of Flow Images; 4. Features of Gravity Currents; 5. Features of Internal Bores
 6. Flow Expansion of Gravity Currents and Internal Bores

Sommario/riassunto

This invaluable volume consists of five articles covering a wide range of topics in coastal oceanographic engineering. The reader can find an article discussing the modern bubble measurement techniques applied to field studies of bubble dynamics in coastal shallow water. A comprehensive review paper on nonlinear modulation of water waves provides readers with a new perspective on nonlinear processes in the coastal and ocean wave environment. For those who are interested in wave modeling, there are two review articles discussing various wave models, which can be used to study wave-structure int
