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Nota di contenuto	Introduction -- Experimental study on thermal consolidation behavior of saturated silty clay under non isothermal conditions -- Thermal consolidation behavior of saturated clay induced by multistage heating and cooling processes -- Thermal consolidation behavior of saturated clay under cyclic temperature loading -- Thermal consolidation tests on saturated clay subjected to thermal loading on inner and outer surfaces of hollow cylindrical specimens -- Thermal consolidation of saturated silty clay considering overconsolidation effect with different heating-cooling paths.-Thermal consolidation model of saturated clay based on thermoelastic theory -- Thermo-hydro-mechanical model for unsaturated clay soils based on granular solid hydrodynamics theory --

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## Conclusion.

### Sommario/riassunto

This book presents a detailed study of the thermal consolidation behavior of saturated clay from experimental and theoretical aspects, analyzes the thermal consolidation response of saturated clay under the influence of different drainage conditions, confining pressures, temperature paths, and over-consolidation ratios, and carries out theoretical modelling of thermal consolidation based on thermoelasticity theory. The study of thermodynamic properties of clayey soils under temperature load has a wide range of applications in the fields of geothermal resource development, thermal energy storage, and nuclear waste disposal. This book provides an in-depth analysis of the thermal consolidation properties of saturated clay through systematic experimental studies and meticulous theoretical modelling. The relevant experimental results and theoretical analysis methods can provide valuable references for the study of soil thermal properties. This book is intended for graduate students and researchers in related fields such as geotechnical engineering, environmental engineering, soil science, as well as design engineers.

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