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Integrated Geophysical Methods for Shallow Aquifers Characterization and Modelling

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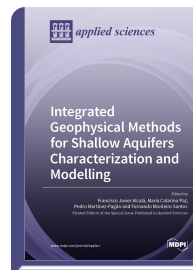
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The book collects nine original contributions in the field of integrated geophysical methods for the characterization and modeling of shallow aquifers. The first contribution introduces the following eight contributions into the overall framework of the topic. The second contribution integrates seismic and electrical techniques to define geometry and identify the transient groundwater features in a coastal alluvial aquifer. The third contribution assesses the effectiveness of electrical and electromagnetic techniques to study the geometry of a thick carbonate aquifer. The fourth contribution couples electrical techniques with implicit modeling tools to characterize the geometry and saltwater intrusion in a coastal alluvial aquifers. The fifth contribution combines electrical techniques and datasets from borehole logs to analyze the inner geometry of a gravel-bed ephemeral stream. The sixth contribution uses electromagnetic and seismic techniques to evaluate the groundwater resource in a coastal town hydrologically influenced by peri-urban irrigation agriculture. The seventh contribution uses geophysical and hydrochemical data to assess groundwater contamination in an industrial chemical complex. The eighth contribution compiles and examines different geophysical prospecting surveys of interest in groundwater research in a large urban area. The ninth contribution uses electrical and electromagnetic techniques to assess surface water and shallow groundwater salinity in a coastal groundwater-dependent



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