
An all-day meeting organised by the Engineering Group of the Geological Society (EGGS)

Synopsis

This meeting will present the Engineering Group’s state-of-the-art review of ground conditions associated with former Quaternary periglacial and glacial environments and their materials, written from the viewpoint of those working in ground engineering. Glacial and periglacial history usually results in a complexity of ground conditions whose vertical and lateral variability create a high degree of uncertainty that is best reduced with the use of conceptual ground models. This book concentrates on the development of such ground models. The ground models have been developed so as to communicate by the extensive use of illustrations, the complex and variable ground conditions that could be expected in the periglaciated and glaciated terrains, so as to provide an informed starting point for the development of ground models at a site scale.

The subject is covered in 7 Chapters which represent the combined work of experts in engineering geomorphology, Quaternary science, sedimentology, engineering geology and hydrogeology, as follows; an introduction to using the work and the problems it will help solve on-shore and off-shore; the Quaternary setting; geomorphological frameworks in these terrains; conceptual models for glaciated ground, and conceptual models for periglaciated ground; the geotechnical properties of the materials encountered in these terrains and their geo-hazards; the ground investigation and assessment of the ground in these materials, including their groundwater; considerations for design and construction in this ground; and conclusions for the ground engineer. Case histories are used extensively to illustrate key conclusions and issues for concern. The book represents a fundamental step forward in our understanding of glacial and periglacial land-systems in the UK and offers practical advice for conducting ground investigations in these complex and variable terrains. It provides a key reference in the subject and forms essential reading for all engineering geologists, ground engineers and geomorphologists working in these terrains. The book launch offers participants an excellent opportunity to hear and discuss key contributions on the topic from lead authors of chapters.

The Working Party thank those organisations who provided financial support to sponsor the colour printing of the final publication. Please contact the convenors if your organisation would also like to contribute.