

# ***The Engineering Geology and Geomorphology of Glaciated and Periglaciated Terrains***

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## **Abstract**

Some 6 years ago, the Engineering Group of the Geological Society set up a Working Party to update our knowledge and understanding of glacial and periglacial terrains and materials.

The report's terms of reference were:

- “State-of-the-art review on the ground conditions associated with former Quaternary periglacial and glacial environments and their materials, from an engineering geological viewpoint.
- “Appropriate coverage of the modern processes and environments that formed these materials.
- “Not intended to define the geographic extent of former periglacial and glacial environments around the world, but to concentrate on ground models that would be applicable to support the engineering geological practitioner.
- “Illustrated with numerous high quality and original case studies, figures, and photographs.
- “Act as an essential reference handbook for professionals as well as a valuable textbook for students and others.
- “Working Party members will be collectively responsible for the whole book.

The presentation will explain the background to the book, summarise its contents and be illustrated with a number of case histories that highlight various aspects of glacial and periglaciated environments.

## **About the Speaker**

Martin Culshaw is an independent researcher, editor and consultant, and a Chartered Geologist. He is currently a visiting Honorary Professor in Engineering Geology in the School of Engineering at the University of Birmingham and an Honorary Research Associate at the BGS.

## **Previous Professional Positions Held:**

- Director of Environment and Hazards at the British Geological Survey (BGS).
- Member of the BGS's Executive Committee
- Managed the BGS Physical Hazards Programme, the Urban Geoscience and Geological Hazards Programme, the Coastal and Engineering Geology Group and the Engineering Geology and Geophysics Group.

- He has been involved in engineering geological research, environmental and engineering geological mapping, geohazard assessment, site investigation, urban geoscience and the application of geology to land use planning for over forty years. During this time he has spent a number of years overseas in Asia, Africa, Europe and Central America.
- He has been an external examiner and a research assessor at a number of universities at home and abroad.

### **Professional Achievements**

- He has written over one hundred and eighty published papers, maps, books and articles and over a hundred and ten technical reports for the BGS, the UK, and overseas, government departments and private clients.
- He has co-edited twelve published conference proceedings serving on the editorial boards of three international journals.
- He was an Assistant Editor of the Quarterly Journal of Engineering Geology and Hydrogeology from 2009-2012 and was appointed Editor-in-Chief of the Bulletin of Engineering Geology and the Environment at the start of 2013.
- He received the Engineering Group of the Geological Society's Award for 1989. A recipient of the Glossop Medal in 2004 and E B Burwell Jr Award from the Geological Society of America in 2006. In 2010 he was awarded the International Association for Engineering Geology and the Environment's Hans Cloos Medal.
- He has served on numerous committees, steering groups and working parties for the International Association for Engineering Geology and the Environment, the Geological Society of London, the Institution of Civil Engineers (UK) and the Construction Industry Research and Information Association (UK).