



## **Public perceptions of geology**

Hazel Gibson (1), Iain Stewart (1), Mark Anderson (1), Sabine Pahl (2), and Alison Stokes (1)

(1) School of Geography, Earth and Environmental Sciences, Plymouth University, Plymouth, UK  
(science.en@plymouth.ac.uk), (2) School of Psychology, Plymouth University, Plymouth, UK (office@psy.plymouth.ac.uk)

Geological issues are increasingly intruding on the everyday lives of ordinary people. Whether it be onshore exploration and extraction of oil and gas, deep injection of water for geothermal power or underground storage of carbon dioxide and radioactive waste, many communities across Europe are being faced with potentially contested geological activity under their backyard. As well as being able to communicate the technical aspects of such work, geoscience professionals also need to appreciate that for most people the subsurface is an unfamiliar realm. In order to engage communities and individuals in effective dialogue about geological activities, an appreciation of what 'the public' already know and what they want to know is needed, but this is a subject that is in its infancy. In an attempt to provide insight into these key issues, this study examines the concerns the public have, relating to geology, by constructing 'Mental Models' of people's perceptions of the subsurface. General recommendations for public engagement strategies will be presented based on the results of selected case studies; specifically expert and non-expert mental models for communities in the south-west of England.