



The
Geological
Society

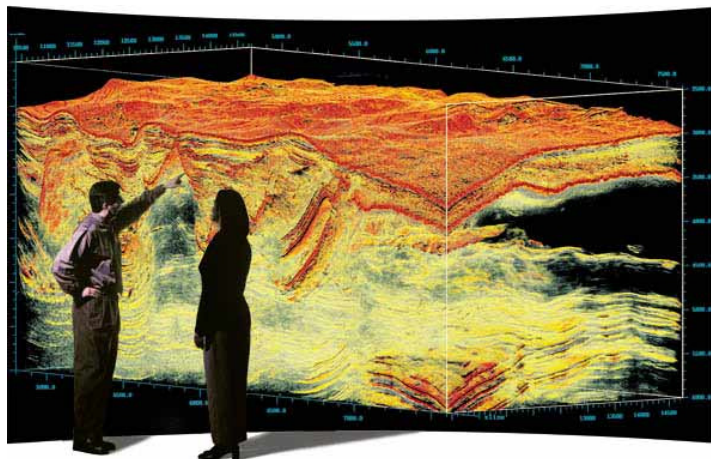
-serving science & profession

North West Regional Group

Meeting

Thursday 29th September 2016

Britain, Geology and Surveying in a modern BGS



Last year, 2015, marked the 200th anniversary of William Smith's famous geological map. The first national map of its kind, it set a template for geological maps and surveys that remained largely unchanged until the start of the 21st century.

William Smith used observations from mines, rock outcrops and the general shape of the landscape to assemble, in his mind, a fully 3 dimensional understanding of the geology and stratigraphy of the rocks beneath our feet. The paper map was the best available technology at the time to communicate this understanding to his fellow scientists, and to the engineers and miners who needed this knowledge to build and fuel the industrial revolution. His other outputs, notably his cross-sections, stratigraphical tables, memoirs and texts, demonstrated an extraordinary vision of how to organise and communicate geological knowledge and are the direct precursors of the geological information systems of today.

Modern geological surveys are similarly tasked to provide the essential knowledge needed for secure energy and water supplies, critical mineral resources, and a safe and sustainable environment. We also face all the challenges, opportunities and expectations presented by 21st century technology for publishing our science, and communicating contentious geoscience issues to the public. This talk will highlight the challenges that motivate the William Smiths of tomorrow and that define the purpose and mission of a geological survey, and will discuss the tools and technologies we will use to map and model our subsurface environment in a rapidly changing world.

Dr Andy Howard has been a geologist with the BGS since 1984. A Sheffield University graduate, he went on to complete a PhD on the sedimentology and environments of the Yorkshire Jurassic, starting his career at BGS working on the Department of Energy funded hydrocarbons programme in the southern and central North Sea. In the late 80s he moved on to onshore geological mapping focussing on urban areas in the midlands and north west England, also working with the International Union of Geological Sciences and EuroGeoSurveys to develop best practice in urban geology for planning. He joined the BGS senior management team in 2005, mainly with responsibility to deliver the BGS National Geological Model, and currently leads the BGS national programmes in geology and regional geophysics.

Venue: **Williamson Lecture Theatre, William Building, Oxford Road, Manchester M13 9LP.**

<http://www.manchester.ac.uk/discover/maps/>

Time: Prompt 6:30pm start.

CPD: These events may be considered for contributing to a recognised Continuing Professional Development (CPD) scheme as part of personal development. Delegates should check their individual scheme requirements.

For further information contact the Group Secretary, Catherine Kenny at: geologicalsociety.northwest@gmail.com

