

STAFF PROFILE

CLAIRE GLOVER

B.Sc. (Hons.), M.Sc., Ph.D.

STRUCTURAL GEOLOGIST

NATIONALITY: British

DATE OF BIRTH: 6th April 1980**EMPLOYMENT HISTORY**

2009 - Present	Structural Geologist, Robertson (UK) Limited
2003 - 2009	Ph.D. Research, The University of Manchester
2002 - 2005	M.Sc., The University of Manchester
1999 – 2002	B.Sc. (Hons) Geology, The University of Manchester

AREAS OF EXPERTISE

Fracture analysis – surface fracture studies including outcrop data and satellite imagery interpretation integrated with core analysis and seismic interpretation. Compilation of a fracture analogues database and associated fracture knowledgebase.

Plate tectonic modelling – combining rigid plate tectonic reconstructions with deformable models for the Atlantic margins.

Experimental Rock Deformation – uniaxial and triaxial compressional and extensional testing, and use of servo-controlled pore volumetry to determine physical properties of low porosity carbonate rocks and high porosity sandstones.

PROFESSIONAL EXPERIENCE**Regional Studies:**

- Kurdistan Region, Northern Iraq: Structural evaluation of license blocks in this region for industry clients including seismic interpretation and surface fracture analysis.
- Offshore Western India: Seismic interpretation and basin analysis

Plate Tectonic Modelling

- Global reconstructions for the Mesozoic and Cenozoic
- Deformable plate modelling
- Reconstructions of extensional basins along passive margins of the Atlantic

Industry Teaching Experience

Wide-ranging experience of delivering courses in structural geology, seismic interpretation, and exploration and appraisal workshop to industry clients and for recruitment programmes.

- Robertson (UK) product training delivered at management level to industry clients.
- Prepared materials and taught Structural Geology module for the University accredited course 'Postgraduate Diploma in Applied Petroleum Geoscience modules'
- Structural Geology: delivered to Lukoil and to CGG.
- Seismic Interpretation and Mapping: delivered to Petronas
- Basin Analysis: delivered to Ethiopian Ministry of Mines
- Advanced Basin Analysis: delivered to Lukoil
- Exploration Team Management: taught key principles and modules to Wintershall, KEC, KUFPEC, Petronas and as part of graduate recruitment programmes.

Modules included:

Project planning and data collection and organisation

Geophysical assessment, tectonic and structural development of the basin

Stratigraphy and facies mapping: identification of reservoir/seal potential

Source rock facies and hydrocarbon generation

Play fairway mapping and prospect evaluation

- Petroleum Geology for Non-Geologists: delivered to CGG.

Field Work & Teaching Experience

- Field leader for a structural geology field trip around the Rhoscolyn anticline, Anglesey for industry clients.

STAFF PROFILE

- Field leader for East Irish Sea Basin field trip in North Wales and the Wirral for prospective industry clients and as part of a recruitment programme.
- Six week field mapping of the Carboneras Fault Zone, SE Spain.
- Assisted on an undergraduate Field excursion for 5 consecutive years, examining the structures and stratigraphy of the Variscan mountain belt in NW Spain.
- Organised and conducted practical classes for undergraduate level Global Tectonics course.
- Assisted in undergraduate level practical classes; Structural Geology, Geological Map Interpretation & Seismic and Volcanic Hazards.

Ph.D. Research

“Experimental determination of the brittle failure characteristics of high porosity sandstone”

- Full characterisation of the mechanical behaviour of a porous sandstone hydrocarbon reservoir rock.
- Combined aspects of experimental rock deformation, soil and fracture mechanics, and acoustic wave velocity measurements to determine the mechanical properties, yield parameters and loading stress paths of a weakly cemented sandstone.

M.Sc. Research

“The Use of Anisotropy of Magnetic Susceptibility to characterise the extent and geometry of experimentally-induced microcrack arrays in Carrara Marble”

- Samples of Carrara Marble were experimentally uniaxially deformed to generate oriented microfracture arrays and impregnated with a ferrofluid using Core Magnetic’s Magpore technique.
- AMS was then measured and used to determine the geometry and orientation of the experimentally-induced microfracture networks.

Software experience

Familiarity with ESRI’s ArcGIS, PaleoGIS, and ArcMap.

PUBLICATIONS AND PRESENTATIONS

Rutter, E.H. & Glover, C.T. 2012. The deformation of porous sandstones; are Byerlee Friction and the Critical State Line equivalent? *Journal of Structural Geology*, 44, 129-140.

- Oral and poster presentations at national and international conferences on the experimental deformation of low and high porosity rocks.
- Numerous marketing presentations to multi-national companies publicising Robertson (UK) products and services.
- Poster presentations at national and international conferences on Robertson (UK)’s global plate tectonic reconstruction model and Fractures knowledgebase and database.

LANGUAGES

English, basic Spanish, French & German