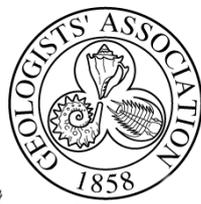




The Geological Society

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Geological Society North West Regional Group and Manchester Geological Association

Joint Meeting

Thursday 14th November 2019

Geology and Geodynamics of The Betic Cordilleras, South East Spain

By Professor Ernie Rutter

Professor Rutter's current research project is the development of the Sorbas basin (stratigraphy, structure, gravity, petrophysics) and its geodynamic relationship with the adjacent Carboneras fault zone, in the south-east corner of Spain.

The Carboneras fault system is an onshore stretching transform -a new kind of transform fault- with contemporaneous volcanism. This whole geodynamic system is mirrored in the Calabrian arc and the Hellenic arc, both of which are of the same (late Miocene) age and involve subduction rollback. This region is used by many UK and European universities for field teaching, because of its clearly displayed features, ongoing tectonic activity, and with every rock type known to humankind being represented!

Professor Rutter will discuss his studies of the internal structure of the Carboneras fault zone and its links with the adjacent Sorbas extensional basin, marrying field geology with laboratory petrophysical properties of the rocks (acoustic velocity properties of the fault rocks and their protoliths, deformation of porous sandstones; fracture and friction).



Ernest Rutter is Professor of Structural Geology and Geomechanics at the University of Manchester. He has worked on a wide range of field-based studies, on upper-crustal basin formation and faulting in S.E. Spain and faulting in the N.W. Himalayas, deep crustal structure in the Italian Alps and on long-term monitoring of the Mam Tor creeping landslide. High Pressure/Temperature laboratory studies have been made on plastic and brittle deformation of carbonate and quartz rocks. These studies have resulted in over 140 peer reviewed publications and have led to the award of the Lyell medal of the Geological Society of London, the European Geoscience Union's Néel medal and election to Fellowship of the American Geophysical Union. He has served as Associate Editor of the Journal of Geophysical Research and on the Editorial Boards of Geology and Tectonophysics, on the UK Research Assessment panel, and on the UK Shale Gas task Force.

Lecture starts promptly at 6.30pm, **drinks and biscuits from 6pm**

Venue: Williamson Lecture Theatre, Manchester University, Oxford Road, Manchester M13 9LP
<http://www.manchester.ac.uk/discover/maps/>

Organised by the North West Group of the Geological Society of London and the Manchester Geological Association

For further information contact the group secretary, Catherine Kenny at:

Geologicalsociety.northwest@gmail.com

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.

