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### **Papers**

### Published

- **A. Ebinghaus**, T. McCann, and C. Augustsson, 2012. *Facies and Provenance analysis of Palaeogene-age alluvial conglomerates from the northern part of the Mesta Basin, SW Bulgaria*. Geological Journal.
- J. Garland, J. Neilson, S. E. Laubach & K. J. Whidden, 2012. *Advances in carbonate exploration and reservoir analysis*. Geological Society, London, Special Publications 370, pp 1-15.

## **Funding**

**Randell Stephenson** has received a grant of US\$15,000 from CALE (Circum-Arctic Lithosphere Evolution), an ILP and IASC project with sponsorship from these organisations as well as several oil and gas companies, based at the University of Stockholm. The money is to support publications based on his Arctic Canada passive seismology and other geophysical projects.

### **Presentations**

Alena Ebinghaus gave a talk at the BSRG AGM in Dublin (18<sup>th</sup> – 19<sup>th</sup> Dec 2012), entitled 'Sedimentation in Large Igneous Provinces – the Columbia River Basalt Province (Washington State, USA) as a case study'.

**Alena Ebinghaus** gave a talk at Sediment in Hamburg (24<sup>th</sup> Sep 2012) entitled 'Characterisation of the Miocene Drainage System and Ecosystem within the Columbia River Basalt Province, Washington State, USA'.

The Department also had a very strong showing at 3 recent conferences:

Industrial Structural Geology at the Geological Society in London, November 28<sup>th</sup> – 30<sup>th</sup>

**Abdullah Awdal** gave a poster entitled 'Geometric analysis of lozenges and fluid flow in faulted sandstones'.

**Clare Bond** gave a talk entitled 'Constraining the question - addressing uncertainties in industry data without trying to reduce the irreducible'.

Natalie Farrell gave a poster entitled 'Petrophysical Anisotropy in Faulted Porous Sandstones'.

Dave Healy gave a talk entitled 'An Integrated Tensorial Approach for Characterising Fractured Rock'.

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# Fall meeting of the American Geophysical Union (AGU) in San Francisco, December 3<sup>rd</sup> – 7<sup>th</sup>

**Abdullah Awdal** gave a poster entitled 'A Quantitative Comparison of Fracture Attributes and Fracture Patterns: Insights from Deformation Bands and Basement-hosted Fractures'.

**Rob Butler** convened and chaired a session: 'Formation and Reactivation of Rifted Margins', and gave a poster entitled 'Hyperextension, rifted margin geometry and its incorporation into mountain belts: Insights from the western Alps'.

**Clare Bond** convened and chaired a session: 'Cognition: A Key Factor in Interpretation and Visualization?'.

Clare Bond and Rob Butler gave a poster entitled 'A bird's eye view: the cognitive strategies of experts interpreting seismic profiles' and Clare Bond gave a talk entitled 'The influence of open fracture anisotropy on CO<sub>2</sub> movement in geological storage complexes'.

**Natalie Farrell** gave a poster entitled 'Effects of Petrophysical Anisotropy on Fault Stability in Porous Sandstones'.

**Dave Healy** convened and chaired a session: 'How well do we predict fractures and their patterns?', and gave a poster entitled 'The Quantification of Natural Fracture Patterns: How Good is the Crack Tensor?'.

# Tectonic Studies Group AGM in Leeds, January 3<sup>rd</sup> – 5<sup>th</sup>

**Abdullah Awdal** gave a talk entitled 'Geometric analysis and scaling relations of lozenges and lenses in deformation bands and normal faults' and a poster entitled 'Statistical analysis of fracture trace angles to guide models of 3D fracture orientation'.

**Rob Butler** gave a talk entitled 'Hyperextension, rifted margin geometry and its incorporation into mountain belts: Insights from the western Alps'.

**Clare Bond** gave a talk entitled 'The influence of open fracture anisotropy on CO<sub>2</sub> movement in geological storage complexes'.

**Natalie Farrell** gave a talk entitled 'Permeability anisotropy and its origins in faulted porous sandstones' and a poster entitled 'Effects of mineralogical variations in sandstones on deformation mechanisms during normal faulting'.

**Tom Haines** gave a talk entitled 'Understanding the evolution of ultrasonic velocities in carbonate hosted normal fault zones'.

**Dave Healy** gave a talk entitled 'Earthquake focal mechanisms in anisotropic rocks and minerals: a cautionary tale', and a poster entitled 'The Quantification of Fracture Patterns'.

Emma Michie gave a poster entitled 'Fault rock in carbonate-hosted normal fault zones'.

**Hannah Watkins** presented a talk entitled 'Geometry of the Achnashellach Culmination; forward modelling to analyse strain evolution', and a poster entitled 'Reconstructing geometries of the Achnashellach Culmination using forward modelling algorithms in Move'.

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#### **Esteem**

**Rob Butler** has taken over chairmanship of the Geological Society's Geoconservation Committee (formerly the UK's Geoconservation Commission) and will continue to serve on the GSL Council and the External Relations Committee.

**Joyce Neilson** was invited to speak at the ICCR meeting in Rio de Janeiro, Dec.  $10^{th} - 13^{th}$ , and gave talk entitled 'The influence of facies and fracturing on the petrophysical properties of carbonates'.

**Randell Stephenson** has been appointed to the editorial board of the journal "Petroleum Research (English edition)", to be published in 2013, an academic journal sponsored by the Chinese Petroleum Society and supervised by the China Association for Science and Technology.

### Other

We have 2 new arrivals in the Department: **Dr Steven Andrews** and **Christabel Osunde**. They are both joining the Triassic Mudstones Research Team, Steven as a postdoctoral researcher and Christabel as a postgraduate researcher.

**John Millett** and **Alena Ebinghaus** attended the short course "Pyroclastic Rocks", given by Hans-Ulrich Schmincke and Mari Sumita,  $1^{st} - 5^{th}$  Oct 2012, at the Geomar in Kiel, Germany.

Next copy deadline: March 10<sup>th</sup>, 2013

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