

**Papers***Published*

Davidson, S.K., **Hartley, A.J.**, Weissmann, G.S., Nichols, G.J. & Scuderi, L.A. 2013. *Geomorphic elements on modern distributive fluvial systems*. *Geomorphology*, 180-181, 82-95.

**Hartley, A.J.**, Weissmann, G.S., Bhattacharya, P., Nichols, G.J., Scuderi, L.A., Davidson, S.K., Leleu, S., Chakraborty, T., Ghosh, P., and Mather, A.E. 2013. *Soil development on modern distributive fluvial systems: Preliminary observations with implications for interpretation of paleosols in the rock record*. In: Driese, S., (Ed.), *New Frontiers in Paleopedology and Terrestrial Paleoclimatology*. Society for Sedimentary Geology (SEPM), Tulsa, Oklahoma, USA.

Weissmann, G.S., **Hartley, A.J.**, Scuderi, L.A., Nichols, G.J., Davidson, S.K., Owen, A., Atchley, S.C., Bhattacharya, P., Chakraborty, T., Ghosh, P., Nordt, L.C., and Tabor, N.J. 2013. *Prograding distributive fluvial systems — Geomorphic models and ancient examples*. In: Driese, S., (Ed.), *New Frontiers in Paleopedology and Terrestrial Paleoclimatology*. Society for Sedimentary Geology (SEPM), Tulsa, Oklahoma, USA.

**Lu Li**, Peter D. Clift & Hung The Nguyen. *The sedimentary, magmatic and tectonic evolution of the southwestern South China Sea revealed by seismic stratigraphic analysis*. *Marine Geophysical Research* DOI 10.1007/s11001-013-9171-y.

**McMahon, S., Parnell, J., Ponicka, J., Hole, M.** & Boyce, A. 2013. *The habitability of vesicles in Martian basalt*. *Astronomy and Geophysics*, 54, 1.17-1.21.

Michalski, J.R., Cuadros, J., Niles, P.B., **Parnell, J.**, Rogers, A.D. & Wright, S.P. 2013. *Groundwater activity on Mars and implications for a deep biosphere*. *Nature Geoscience*, doi: 10.1038/NGE01706.

Pontefract, A., Osinski, G.R., Lindgren, P., **Parnell, J.**, Cockell, C.S. & Southam, G. 2012. *The effects of meteorite impacts on the availability of bioessential elements for endolithic organisms*. *Meteoritics and Planetary Sciences*, 47, 1681-1691.

Haug, C, Haug, J.T, Fayers, S.R., **Trewin, N.H.**, Castellani, C., Walosek, D. and Maas, A. 2012. *Exceptionally preserved nauplius larvae from the Devonian Windyfield chert, Rhynie, Aberdeenshire, Scotland*. *Palaeontologia Electronica*, 15, Issue 2;24A, 43p.

**Trewin, N.H.**, Gurr, P.R., Jones, R.B. and Gavin, P. 2012. *The biota, depositional environment and age of the Old Red Sandstone of the island of Kerrera, Scotland*. *Scottish Journal of Geology* 48, 77-90.

**Trewin, N.H.** 2012. *Historic specimen is not a tetrapod trackway with tail-drag from the Upper Old Red Sandstone of Tarbat Ness, Easter Ross, Scotland*. *Scottish Journal of Geology* 48, 143-145.

*In Press/Accepted*

**Bond, C.E.**, Wightman, R. & Ringrose, P.S. *The influence of fracture anisotropy on CO<sub>2</sub> flow*. *Geophysical Research Letters*.

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**Funding**

**Clare Bond** has secured funding for 2 PhD studentships: *Uncertainty in expert interpretation of geological cross-sections and its propagation into 3D geological framework models* (with Co-Is Lark, M. and Monaghan, A. (BGS); **Butler, R.W.H.**) from the BGS-BUFI NERC algorithm and University of Aberdeen College of Physical Sciences £73.5k; and *Geological Storage of CO<sub>2</sub>: Suitability analysis and potential implementation challenges in the Niger Delta basin, Nigeria* (with Co-Is **Iacopini, D., Butler, R.W.H.** and Akhurst, M. (BGS)). Nigerian Petroleum Technology Development Fund, PhD studentship £53k.

**Dave Healy** and **Andrew Hurst** have secured funding for a new PhD studentship entitled *Fractured basement reservoirs: Linking fracture networks to rock physics*. University of Aberdeen College of Physical Sciences £73.5k.

**Joyce Neilson** has secured a £7k grant from AFES for microscope equipment.

**Presentations**

**Stuart Archer** delivered a lecture and practical exercise at the PESGB Young Professionals Evening at the Carmelite Hotel; and a two day short course entitled Petroleum Geology for non-geologists to CNOOC engineers.

**John Parnell** lectured on the deep biosphere in Galway; and had samples of Ordovician basalt confiscated at Dublin Airport.

**Nigel Trewin** gave a lecture to the Highland Geological Society on 7 Nov. Permian and Penguins in the Falkland Islands.

**Esteem**

**Stuart Archer** was the lead convenor for the Geological Operations conference, held in October.

**David Iacopini** gave an invited talk at the 7<sup>th</sup> annual technical GeoTeric conference: A visualization workflow for deepwater thrust belts using GeoTeric.

**Other**

**Dave Healy** and **Rob Butler** (assisted by Clare Bond, Joyce Neilson, David Iacopini, David Cornwell, David Macdonald, Mark Cooper and Stephen Bowden) organised and led two 1-day workshops on Structural Geology in Industry and Carbonate Fold & Thrust belts, February 13<sup>th</sup> and 14<sup>th</sup>. Day 1 was held in a rather chilly Elphinstone Hall, where invited industry guests heard about research in progress given by the postgrads and ideas for future collaborations by staff. On day 2, the carbonate fold & thrust belt workshop was held on the top floor of the Duncan Rice Library. Plans are afoot to develop these discussions into full

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**Other (continued...)**

joint industry and RCUK research proposals, a range of new training courses and wider avenues of knowledge exchange.

**David Iacopini** has signed an agreement between UoA and PGS to access the full central and North sea Megasurvey seismic data for research (“Characterization of seismic disturbance zones in normal fault systems”) and teaching purposes (IPG MSc). This agreement reinforces an existing agreement signed in 2010 between exploHUB and PGS.

**John Parnell** contributed to a minerals-microbes workshop in Edinburgh; and attended the launch of the NERC Security of Supply (metals) programme in London.

**John Parnell** attended ExoMars Oversight committee meeting in London

**John Parnell** attended Lake Ellsworth post-drilling review meeting in Bristol.

**Nigel Trewin** led an excursion with Bob Davidson (Hon Staff) to Elgin for the AGS; and contributed to the Science Festival Stall on behalf of the Friends of Hugh Miller.

**Nigel Trewin** hosted a research visitor, Dr Nick Fraser, of the Royal Museums Scotland to the Palaeo Collection; and a further 4 research visitors from The Natural History Museum led by Dr Paul Kenrick to examine Rhynie chert material. He took the party on a field excursion to Rhynie. 5-6 Nov.

We welcome **Bappah Umar**, a new PhD student working on “Geological Storage of CO<sub>2</sub>: Suitability analysis and potential implementation challenges in the Niger Delta basin, Nigeria”, supervised by Clare Bond.

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

Dave Healy

[d.healy@abdn.ac.uk](mailto:d.healy@abdn.ac.uk)

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