



Next HEDG presentation:
6pm, Thursday 30th April 2009
Customs House, Newcastle

April 2009

Abstract: Precambrian Earth: its tectonic evolution. This is an iconoclastic survey of the tectonic history of the Earth from 3.1 to 0.6 GA. The basic message is that plate tectonics did not operate until 0.6, that before 3.1, tectonics was driven by gravity inversion, and that we do not know what the heck was going on between 3.1 and 0.6, although I have some ideas!!

Biography: John Frederick Dewey was born in 1937. He graduated from the University of London with a First Class Honours in 1958 and then read for a PhD at Imperial college, London on the Ordovician and Silurian of South Mayo, Western Ireland. His PhD was awarded in 1960, followed by MAs from both Cambridge and Oxford. John attained his ScD from Cambridge in 1987 and DSc from Oxford in 1988. Currently Distinguished Professor Emeritus at the University of California - Davis, John has lectured at Manchester, Cambridge, the State University of New York at Albany as well as being Chair at Durham and Professor of Geology at Oxford. John has had a long-term association with the Lamont Doherty Observatory, Columbia University, New York.



John has received many awards for his work, including the Lyell (1983) and Wollaston Medals (1999) of the Geological Society, the Penrose Medal of the Geological Society of America (1992) and the Arthur Holmes Medal of the European Union of Geosciences (1993). John was elected a Fellow of the Royal Society in 1985.

John's paper in *Nature* (Dewey, 1969) was the first to attempt to apply the then new global tectonics to an ancient orogen. This was followed by many seminal papers, many with John M. Bird (e.g. Dewey and Bird, 1970) that related plate tectonics, which so well described the tectonics of oceans, to continental tectonics. Following on were a series of papers with Kevin Burke describing many of the world's principal orogens in plate tectonic terms. John has also researched and published on the evolution of fracture zones, the obduction of ophiolites and the recognition of ancient sutures.

John is in Australia for the Macquarie Arc Conference, an International conference on Island Arc–Continent Collisions in Orange, 13–21 April 2009.

Adapted from RYAN, P.D. in Mac Niocaill, C. and Ryan, P.D. (eds) 1999. Continental Tectonics, *Geological Society Special Publication No. 164*, The Geological Society and Nuzzo, R. 1995. Profile of John F. Dewey. *Proceedings of the National Academy of Sciences*, vol. 102, issue 43, pp. 15283–15285. <http://www.pnas.org/content/102/43/15283.full>

Please RSVP by 29 April via email to Phil Gilmore: phil.gilmore@dpi.nsw.gov.au



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NSW DEPARTMENT OF
PRIMARY INDUSTRIES

2009 program

Tuesday 30th June Peter Buckley (Eastern Iron Limited):
'The maghemite mammoth: coming to terms with a new kind of elephant'

Plus Dale Sims (Newcrest Mining Limited):
"Doin' the ton" at Newcrest's Kencana gold mine, Indonesia'

Tuesday 25th August Dr Judy Bailey (University of Newcastle)
'Mineral sequestration of CO₂: the need to be viable'

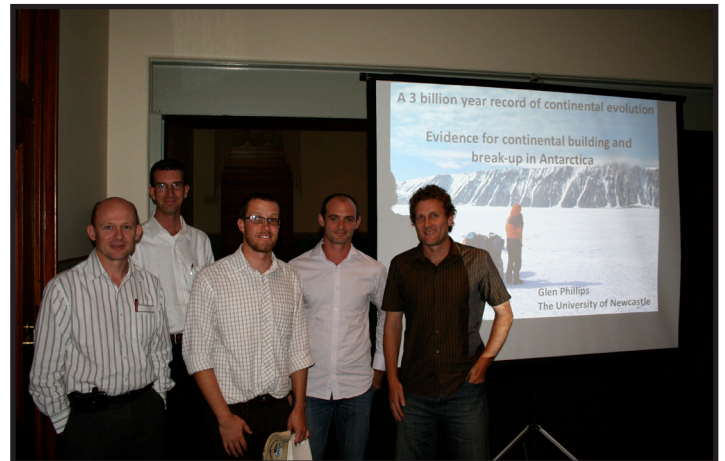
11–17th October Earth Science Week
HEDG presentation — to be confirmed
Newcastle Foreshore Geological Ramble — to be confirmed

All presentations at Customs House, Newcastle, 6 for 6.30pm. For further information or suggestions on potential speakers / topics, please contact Phil Gilmore, phil.gilmore@dpi.nsw.gov.au

Last presentation: 10th March 2009

Over 50 people attended the last HEDG presentation. The main speaker was Dr Glen Phillips (University of Newcastle) who presented 'a 3 billion year record of continental evolution — evidence for continent building and break-up in Antarctica'. This excellent presentation drew on Glen's research in East Antarctica into the accretion and dispersion of the Rodinia and Gondwana super-continents. Jamie Robinson (CSIRO – Division of Exploration and Mining) presented a snapshot of the Minerals Down Under National Flagship – a national initiative to ensure long term viability for the minerals industry in Australia.

Many thanks to both speakers and attendees!



L/R: Jonathon Law (CSIRO), Warren Potma (CSIRO), Glen Phillips (Uni of Newcastle), Jamie Robinson (CSIRO), John Greenfield (NSW DPI)



Geological Society of Australia (GSA),
Hunter Valley Branch

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Other links:

Geological Survey of NSW:
<http://www.dpi.nsw.gov.au/minerals/geological>

NSW Department of Primary Industries:
<http://www.dpi.nsw.gov.au/>

Sydney Mineral Exploration Discussion Group
SMEDG: <http://www.smedg.org.au>

Amateur Geological Society of the Hunter
Valley: <http://agshv.com>

AusIMM – Hunter Region Branch:
<http://www.ausimm.com.au/content/default.aspx?ID=213>