

## GeoBerlin 2015: From Alfred Wegener to today and beyond

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The meeting of the German Geological and Mineralogical Societies (DGGV and DMG) this year marked the centenary of Alfred Wegener's publication of his idea of continental drift. To celebrate, an especially international meeting took place at the Freie Universität in Berlin from 4 to 7 October, which it was my great pleasure to attend with the generous help of the Mineralogical Society of Great Britain and Ireland.

Keynote lectures given by Dan McKenzie, Maureen Raymo, Trond Torsvik and Barbara Romanowicz provided much food for thought, in all cases both confirming how we came from Wegener's ideas to today's thinking on mantle processes; and also challenging the current orthodoxies with ideas of plate motion's connection with mantle plumes and the lowermost mantle.

Sessions covered tremendous ground, ranging from impact craters, to the biosphere, to the inner core. My personal highlights included early results from innovative experiments on deep-Earth materials, such as ferrous-hydrous ringwoodite and single-crystal wadsleyite elasticity. It was exciting to see the progress being made in understanding the mineralogy of subducting slabs with anisotropy in them, a long-held interest of mine.

It was also appropriate, in a city rebuilt over the last 70 years, to see the novel uses of X-ray and electron backscatter diffraction in quality control of cement manufacture, something not every meeting a deep Earth geophysicist would attend normally has to offer.

At the end of the meeting, a fascinating three days of work in Earth sciences, I suspect the question of when plate tectonics started still has some way to run. But along the way, many longstanding questions were addressed, and several new ones created. I am very grateful to the MinSoc for the bursary which made attendance possible.