

The Earth Science Education Forum (England and Wales)

Minutes of the twenty-seventh meeting

Held at the Institute of Materials, Minerals and Mining, 1 Carlton House Terrace, London, at 1.30 p.m. on Tuesday 11 March 2008.

Present: Allan Rogers, Chairman
Chris King, Co-Chairman (and Earth Science Education Unit)
Cally Oldershaw, ESEF(EW) Executive Officer (Association for Science Education)
Martyn Bradley (Geology Trusts and UKRIGS)
Chris Carlon (Anglo American)
Judith Mansell (Royal Geographical Society with Institute of British Geographers)

1 Apologies for absence

Apologies for absence were received from representatives of the following organisations: British Geological Survey; Geographical Association; Geological Society of London; Institute of Physics; Learning, Teaching and Skills Network – Geography Environmental and Earth Sciences; National Stone Centre; STEMNET; UKRIGS and University of Derby; Natural History Museum; Royal Society of Chemistry; Peter Warren; Earth Science Teachers' Association; Geologists' Association and Rockwatch; Imperial College; Committee of the Heads of University Geoscience Departments; Mineral Industries Research Organisation; Gemmological Association and Institute of Materials, Minerals and Mining.

2 Chairman's introduction

Chairman welcomed everyone. He reminded members that the meeting would be followed by the Christmas meeting of the All-Party Parliamentary Group for Earth Science at which Matthew Carse (Managing Director, Prenergy Power) would give a presentation "Growing Energy".

Prenergy Power recently received permission from the Department for Business, Enterprise and Regulatory Reform (BERR) to build a world scale biomass fuelled renewable energy plant on disused industrial land at Port Talbot. Operating as a baseload generator, the plant will generate the equivalent amount of energy as the London Array offshore wind farm – sufficient to supply one in two Welsh homes. The plant will consume 2 million green tonnes of wood chip per year. One of the key challenges to meet in delivering the project lies in supplying sufficient sustainable feedstock for the lifetime of the plant. Matthew Carse, will talk about the development of the project, Prenergy's strategy for fuel sourcing, and discuss the role that biomass has to play in the future of renewable power generation.

The Chairman outlined the difference between ESEF(EW) business meetings held in London and ESEF Cymru meetings which include presentations from invited speakers. He asked members for suggestions for the form of future ESEF(EW) meetings. It was agreed that new style meetings should include a short presentation. Themes suggested included: educating scientists; geology in schools, Earth science graduates and the perceived shortage of geologists; Earth scientists in the workplace. Chris King to contact Annette Thomas (OPTIO) and invite her to give a presentation on the Oil and Gas Academy

Action: C King

3 Minutes of the twenty-sixth meeting, 21 November 2007

The minutes of the twenty-sixth meeting with minor amendments were accepted as a true record. D Bailey to upload a copy to the ESEF(EW) website.

Action: D Bailey

4 Matters arising

[Numbers in square brackets are paragraph numbers from the minutes of the previous meeting.]

- 4.1 [4.2] *Geological Society 'first destinations' survey:* CK reported that the Geological Society had now carried out a 'first destinations' survey and results were presented at a meeting of the Education Committee of the Geological Society and will be published on their website in a couple of months. Overall the results showed that of about 1,000 geoscience graduates a year,

about a third went on to work in geoscience related jobs and a third continued studies in further education. The first destination of the remainder was unknown. It wasn't clear what was meant by 'geoscience related job' nor which 'further education' studies were included in the report. The results were as expected and conclusions were similar to those of other reports such as that carried out by Steve Roberts (Senior Lecturer - Southampton University). A Rankin said in the previous ESEF(EW) meeting that about 20% of earth science graduates would go on to study for a post-graduate qualification. Members felt that CHUGD members and geoscience employers could produce more robust statistics, but had not been approached by Bob Ward, who collated published information for the Geological Society's report.

C Carlon noted that of the graduates whose first destination was employment in the geosciences, approximately 15% went into the mining industry (45 recent graduates). There is no shortage of new graduates; the difficulties for employers are in finding graduates with 5 years experience. Graduates finding it difficult to find employment as a graduate may decide to continue with further education in order to gain further qualifications; this doesn't give them experience.

C Carlon explained the 'boom and bust' cycle of employment in the minerals and mining industries. The 'boom and bust' cycle usually on a 5 year cycle, however the industry has been in the 'boom' period for the last 7 years. The last 'bust' period was 1997-2001. The shortage of experienced geochemists, geophysicists, exploration and mining geologists is a result of the 'baby boomers' (born 1946-1960) having gone through 3 periods of 'bust' during their working lives, many of these highly experienced geoscientists had had enough and left the industry (exploration geologists are some of the first to be made redundant during times of 'bust'). To fill the skills shortage, overseas nationals are being employed rather than UK nationals. Changes in NERC themes may also had an effect, funding research promoting resource development and assessing environmental consequences rather than funding the exploration and discovery of new resources.

- 4.2 [4.3] C Carlon recommended a recent paper by Steve Roberts (Southampton University) on this subject. Electronic copy was sent to D Bailey for dissemination to Forum members. Copy to be re-sent. **Action: D Bailey**
- 4.3 [4.5] Chairman said that he would speak to the officers of the Houses of Parliament about the possibility of holding a follow-up conference to that held in 2004. **Action: Chairman**
- 4.4 [4.7] [5] WJEC GCSE Geology — proposed withdrawal: C King reported that WJEC will continue to run the Geology GCSE. The specification has been drafted.
- 4.5 [4.8] [5.11] Conference Study Group: To be discussed at next meeting. **Action: members**
- 4.6 [4.9] [12.2] International Year of Planet Earth: C King attended the UNESCO launch, approx 300 attended.
- 4.7 [5] Threat to funding for University Adult 'Open Studies': Chairman had asked M Bradley to forward a copy of the letter. Other Forum members could lobby on behalf of their organisations if they wished. M Bradley noted that Warwick University will provide support from their own funds in order to keep their Adult 'Open Studies' classes from closing. Chairman will follow up with the Minister (John Denham). **Action: Chairman/M Bradley**
- 4.8 [6] Finance: C Carlon had provided a list of contacts in the mineral industry.

5 Finance report

- 5.1 C Oldershaw to write to members again asking for subscriptions, mentioning the target (£10k) and giving the option of paying more than the minimum subscription of £100 for members, while industry contacts would be approached for more substantial contributions. Members were asked to forward to C Oldershaw or D Bailey nominations for organisations to be contacted. **Action: C Oldershaw/members**

6 Executive Officer's report

6.1 C Oldershaw reminded members that they could propose discussion topics for consideration by the officers of the All-Party Group. C Carlon gave a presentation 'Minerals Geoscience – Myths and Reality' to the Group on 10 December. M Bradley attended the Groups meeting 'Shanghai and Beyond- tunnelling into the future' by Professor Mair held in conjunction with the All-Party Group for Underground Space and the Associate Parliamentary Engineering Group on Tuesday 22 January. The Group plans to have further joint meetings. The next meeting on 17 June on clean coal technologies will be held in conjunction with the All-Party Coal Communities Group.

6.2 Dates for meetings in 2008 (Forum and All-Party Group)

- Tuesday 17 June
 - Forum presentation – Joint presentation on The Oil and Gas Academy (Annette Thomas, OPTIO) and ESEU (Chris King)
 - Group presentation – Clean coal technologies (speaker to be confirmed)
- Tuesday 14 October
- Tuesday 9 December - Christmas meeting of All-Party Group

Dates for ESEF-Cymru meetings in 2008:

- Tuesday 10 June – National Museum of Wales, Cardiff
- Tuesday 7 October – Techniquist, Cardiff Bay, Cardiff (in conjunction with Techniquist and the Association for Science Education (ASE))
- Tuesday 10 December - Christmas meeting

One of the ESEF-Cymru meetings will be at Techniquist in Cardiff with the ASE.

7 ESEF(EW) website (www.esef.org.uk)

7.1 The ESEF(EW) website had been updated and new pages containing information about ESEF-Cymru and the All-Party Parliamentary Group for Earth Sciences had been added. Officers had approved the new changes.

7.2 Members were reminded to forward information about their educational resources and events to D Bailey for inclusion on the website. **Action: All members**

8 SESEF update

Nothing to report.

9 Government policy issues

Nothing to report.

10 Annual Conference

Nothing to report

11 Potential collaborative projects

Nothing to report

12 AOB

Nothing to report

13 Date of the next meeting

The next meeting was scheduled for **1.30 p.m.** on **Tuesday 17 June 2008** at IOM³ in 1 Carlton House Terrace [NB see Agenda Item 6 for further dates].

Cally Oldershaw, 20 March 2008