

STUDENT CHAPTER ANNUAL REPORT 2013/2014

The past year has continued on the success of the previous year's chapter with lots of events and activities. The chapter has members from across the undergraduate program and there is already lots planned for next year.

The events of the year are listed chronologically:

Fresher's Fair and Barbeque – 16th September

At the fresher's event we had a stall alongside the other societies within the geology department and signed up around 40 new members to our chapter. Students ranged from first years to final years showing that interest in the chapter is still strong.



Committee Members on the SEG Stall within the School of Earth and Environment

Introductory lecture - 30th September

Our first event introduced the purpose of the chapter and how students are able to benefit from being a member. It was also a chance for the new committee to share their experiences from years abroad and summer work. We had more signups here as interest had spread.

Fieldtrip - Carrock Fell – 27th October

In October we travelled to Carrock Fell Tungsten occurrence in Cumbria. The fieldtrip introduced some exploration techniques and mapping with a chance to look for some mineral specimens at the historical occurrence. This trip provided valuable extra field experience for new undergraduate students.



A group photo of the chapter at Carrock Fell

Tara Mine, Co. Meath, Ireland, 4th-5th November

15 Students attended our first trip to the Pb-Zn Navan Ore body, owned by New Boliden Minerals Ireland. After flying into Dublin airport we visited Aurum Exploration services based in Kells. We had a talk on Irish Zinc deposits and exploration in Ireland. After that we toured the core shack and saw samples from projects worked on by the company. On the second day we went to Tara Mine at the Navan ore body. After an introductory talk from Chief Geologist John Ashton we kitted up for our trip underground. We reached almost 1km depth into the South West extension and saw active blast faces and the workings of the mine. We also toured the core shack and onsite processing works that were incredibly interesting. It was the first trip underground for many members and was definitely enjoyed by all. Thanks to New Boliden's helpful geologists for the guidance, and to Amira International for partial funding of the trip. This trip is becoming a regular venue for Chapter visits and it complements the ore deposits teaching in the final year.



A group photo of the Chapter in Navan Pb-Zn Mine, Ireland

Mines and Money – 2nd - 4th December

Two Leeds students attended the Mines and Money conference in London for 3 days. It offered a great insight to mining companies financial background and the investor side of the business. The delegates attended many talks and it worked as a great networking tool as there was only one other student in attendance and the professionals were free to talk.

Jeff Bond, Yukon Geological Survey – 6th December

We were glad to welcome Jeff Bond in conjunction with the Earth Surface Science Institute (ESSI) at Leeds. The talk centred on exploration in the Glacial Limits of Northern Canada. We heard about the element migration and the on-going exploration in NW Canada as well as surficial geology and procedures in sampling.

Mineral sample evening – December 12th

The evening was a chance for students to study a range of mineral samples which are often not available, including specimens from around the world. The event built on last year's success and also complemented current teaching modules. Information on samples from various deposit types were displayed, allowing students to relate the specimens to previous lecture material. The informal quiz was very successful with a top prize of a vial of gold. The event was a great way to showcase the department's unique and impressive collection.



Some of the many specimens on show

Mineral Deposits Study Group conference in Oxford – 3rd-4th January

The University of Oxford hosted the event with 2 students attending from Leeds. The annual event showcases new research and discoveries with lots of interesting student presentations. This year's focus was on critical metals in the future and many novel ideas were introduced. It was also a good chance to meet old Alumni of Leeds SEG members who were visiting as professional geologists working for mining companies.

AME BC Roundup Vancouver 2013 - 28th-31st January

Four students travelled to Vancouver in January to attend the AME BC Roundup Conference 2014 and follow up on the success of the last two year's trip. The students presented a poster about their undergraduate mapping field trip to Assynt, Scotland as well as attending several talks and short courses. Unfortunately the industry enthusiasm was not as great as 2012 but it was very interesting to learn about recent discoveries. The conference is a great place to network and discover how the minerals industry works.



A photo of the students and their poster

Exploration Drilling Shortcourse – 1st February

At the start of the second semester we were lucky enough to have Exploration geologist Benedikt Steiner of Rio Tinto Exploration to come to Leeds and give a day long course on Exploration Drilling. Benedikt's talks and group exercises were very informative with all 30 students and industry professionals (From Leeds, Leicester and Cambourne School of Mines SEG Chapters) finding the practical information applicable to their future professions. It was a great chance to showcase Leeds and our SEG Chapter to the faculty and other SEG Chapters. The chapter would like to thank Bendikt for a great day.

Fieldtrip - Greenhow Trip – 12th February

After a successful trip in 2012 and 2013 a number of students travelled to the Greenhow Hill Quarry and Mine in February to revisit the lead and limestone deposits. The trip is a great chance to go underground and witness the eighteenth century mining techniques that were used to extract the lead-fluorite mineralisation. We even managed a bit of pot holing in the area which proved to be a thrilling experience for all.



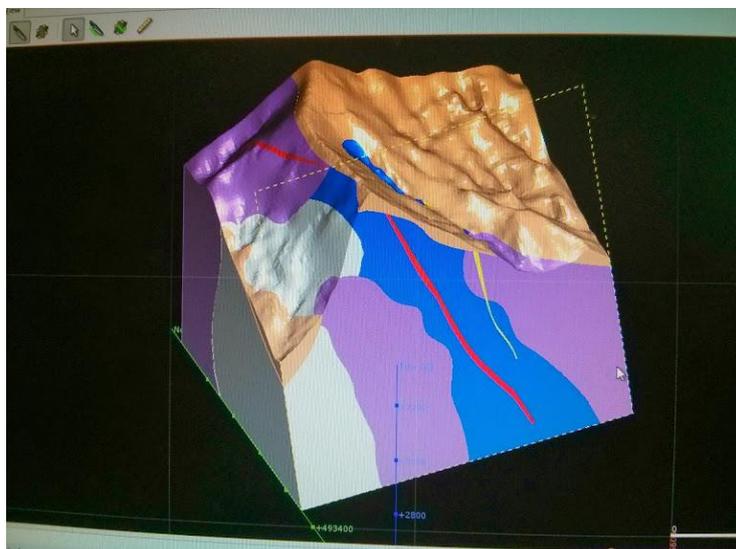
Students outside the Greenhow mine entrance

Dr. Udayaganesan Palaniraj, Visiting Professor – 26th Feb

Leeds hosted a talk on the placer mineral wealth of India with a view to its economic impact on the country. We were informed about the abundant ilmenite and rutile sands of coastal Indian deposits as well as the source and concentrating mechanisms of offshore deposits. This information tied in well with the Placer Mineral Group (PMG) research cohort at Leeds. This was an area of the world we knew little about so were grateful for the interesting talk from Dr. Palaniraj about these economic deposits.

Shortcourse – Leapfrog Geo Fundamentals 12th – 13th March

This 2 day shortcourse was attended by 14 SEG members and was complemented by the Master Students and industry delegates. Working with this industry standard software was an incredibly useful experience and will benefit all members in terms of assessing the integrity of a geological model and data integrity from drill results. The course leaders were helpful and patient, and we extend our thanks to Leapfrog for running the day.



An example model from the taught session.

Fieldtrip - North Wales – 16th March

We held a day excursion to visit the two most famous gold mines in North Wales, the Gwynfynydd and the Clogau. We were able to look at the geological setting of both mines and gained an understanding of how principles learnt at the Welsh Gold mines could aid a wider understanding of orogenic gold mineralization.



Students on the trip to N.Wales Gold fields

Gavin Berkenhenger Employability talk – 18th March

The event was a chance for all students to get some advice from a professional geologist on working as a geologist and setting up your own exploration company. We welcomed Gavin Berkenhenger who gave an engaging talk on his own experiences of the industry including his personal experience of setting up his own business specialising in Scottish Gold Exploration. We engaged in active discussions regarding the industry and we thank Gavin for his time to come and talk to us. This was also the AGM where new committee members were voted in according to SEG rules.

IAEG Porphyry epithermal 2 day short course in Ireland – 18-19th March

Two masters and PhD students from SEG attended this short course organised by the Irish Association of Economic Geology. The talks were given by Greg Corbett, a high experienced exploration geology consultant and were highly informative for academic research aims of the chapter members in their own research.

Toro Gold Ltd. & Mineral Show – 28th April (not happened at time of writing)

Our final event of the academic year will be from Howard Bills of Toro Gold Limited. Howard is a Director and group Exploration Manager with over 30 years of experience in Gold and Diamond exploration across Africa. The talk will encompass a variety of deposits and information about working in Africa. The evening will continue with a mineral show for all students in the faculty and will wrap up the end of year with the official hand over to next years committee.

2014/2015 Committee

President – Matt Cook

Vice President – Rowan Gill

Secretary – Elizabeth Roberts

Co-Treasurers – Jonathon Aldcroft

Dan Reeves

Sponsors:

We had generous support from the School of Earth and Environment (LEEP) who have helped fund various events through the Student Experience Fund.

Our industry sponsors include:

- SRK Consulting UK
- Aurum Exploration Services
- Klondike Gold Corp
- Placer Mineral Group (Leeds Uni)
- Amira International, Australia.

Future Plans:

There a number of events and speakers already planned for the next academic year that starts in September:

- Boulby Mine trip (October 2014)
- Mark Cooper of the Geological Survey of Northern Ireland (Confirmed)
- Jon Russil of SRK Consulting (TBC)
- Richard Gray of De Beers Marine (TBC)
- Owens contact from Roundup
- A number of guest speakers from industry and academia
- Potential short course with Sustainability Research Group at Leeds about corporate responsibility of mining companies
- Field trip to the Iberian Pyrite Belt in September of 2015. (Itinerary and information collected, timing and funding issues yet to be addressed)
- Continuation of field trips and activities listed in this report.

Closing Remarks

It has been a pleasure to run this ever growing and evolving society over the past year. I hope students involved have enjoyed their time with SEG related activities and trips, but also learnt more about the exploration and extraction industries. I feel this society gives back as much as you put in, and without the on going support of Rob Chapman and the Leeds School of Earth and Environment this society wouldn't exist. Thanks also to Vicky Sternicki from SEG HQ in Littleton, Colorado for her patience and understanding with regards to applications and funding. As demand continues to grow for metals and resources world over, the role of the Economic Geologist will become more important in securing supplies of critical metals. I believe in the SEG for providing the experiences and academic underpinning that will enable this to occur for students world over; and I am thoroughly pleased to have been a small part of it.

Matt Sweeney

SEG President, Leeds, 2013-2014

Balance

Balance carried forward from previous year **£1906.88**

Memberships

38 £15 = £570 1 £10 = £10 (Dave Collins) **£580**

Trips

Carrock Fell – Participants 13 £10 **£130**

North Wales – Participants 19 £5 **£95**

Greenhow – Participants 9 £10 **£90**

Work Shops

Drilling short course (Benedikt Steiner) - **£240**

Mineral Sampling event

Alcohol **£25.93**

Expenditure

Trips

Carrock Fell – Mini Bus Hire and Fuel **£200**

North Wales – Mini Bus Hire and Fuel **£230**

Greenhow – Individual Fuel and voluntary contribution **£97.42**

Benedikt Steiner

Catering and Room Hire (Room hire claimed back off SEF) **£389**

Gavin Berkenheger & AGM

Gavin Travel - **£62.70**

Catering and AGM costs - **£95 +**

Mineral Sampling Evening

Alcohol **£36.00**

Posters **£20**

Miscellaneous

Pens and sweets for SEG stand **£5**