Student Chapter Annual Report Form

This form is used to report on Student Chapter activities over the previous year. The report provides a useful medium to document the status and progress of individual chapters. Annual Reports are used to evaluate applications for SEG support and to keep information up-to-date on the SEG website. Please provide a summary of chapter activities in a concise form as suggested below. Description of programs may be supported by a limited number of photographs and figures in a format appropriate for publishing on our website.

Submission Deadline: September 30th Submit to: studentprograms@segweb.org

Month/Year Reported: From ______________________ (mm/yyyy) - To ______________________ (mm/yyyy)

Chapter Name: University of Leeds

Chapter Mailing Address: leedsuniseg@gmail.com

Chapter E-mail: leedsuniseg@gmail.com

Chapter Website: http://www.segleeds.com/

Chapter Facebook: https://www.facebook.com/groups/Leedsuniseg/

Chapter Executive Committee (in office during the time frame captured on this report) (type “Vacant” if position not filled):

President: Jakub Skrzynecki
Name
E-mail

Vice President: James Ball
Name
E-mail

Secretary: Lucy Angel
Name
E-mail

Treasurer: Lauren Tuffield
Name
E-mail

Chapter Academic Sponsor (SEG Fellow membership in good standing):
Robert Chapman
Name
E-mail
R.J.Chapman@leeds.ac.uk
Phone
+44(0)113 343 3190

8.19 SCR, University of Leeds, Leeds LS2 9JT, United Kingdom
Address
Fax

Chapter Industry Sponsor (SEG Fellow membership in good standing and not affiliated with the student chapter’s institution):
Sandy Archibald
Name
E-mail
sarchibald@aurumexploration.com
Phone

Address
Fax

Sponsoring Institution or Company (name):

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Attach: 1. a list of names of all Student Chapter members (please indicate by * if SEG Student Member).
2. complete Student Chapter Membership Information form with the current Executive Committee listed on page 1.

On a separate page(s) provide a summary of student chapter annual activities:

1. Regular meetings, lectures
2. Field trips (dates, area visited, field trip leaders, number of participants, sponsors, benefits for students).
   Note: this is not the place for a detailed field trip report that is required from a chapter who has received funding from the Stewart R. Wallace Fund.
3. If your chapter received funding from the Stewart R. Wallace Fund, please submit a separate actual accounting of how chapter funds were spent/used.
4. Organization of conferences, workshops, short courses (theme, number of participants, benefits for students)
5. Participation in conferences, workshops, short courses (theme, number of participants from the chapter, benefits for students)
6. Fund-raising programs
7. Other programs
8. Future plans

Aug2015VS
Annual Report of the Society of Economic Geologists University of Leeds Student Chapter 2017/2018

Foreword from the president

2017/2018 year academic year came to an end. For Leeds chapter it was a year full of changes. We started with a completely new committee (none of the committee members had served in the Leeds Student Chapter before). It was challenging to learn about all of the responsibilities and implement them appropriately. However, we had managed to organise a range of talks and excursions, presenting a full spectrum of mineable commodities from coking coal, through gold and copper, ending on lithium, uranium, fluorite. I believe our chapter members have benefited from the diversity, and our chapter has acted as an additional source of knowledge about the economic geology.

In Leeds, we traditionally focus on gold. In 2017/2018 schedule, we discussed the full supply chain of gold and a role of a geoscientist in it. Our chapter members could learn about gold exploration and studies of gold mineralisation. Additional talks and films discussed a lifecycle of gold – what happens with the ore deposits when they are targeted and mined. I hope that the complete picture will help our members and University of Leeds graduates in locating themselves in the academia or in the industries related to the natural resources.

For me, it was a pleasure to lead the society and I would like to thank all of the committee members for their contribution. I would like to thank our academic advisor Dr. Rob Chapman for all of the tips and guidance. Also big thanks go to the University of Leeds PhD students, who gave us a lot of advice regarding the organisation of the society. Finally I would like to thank all of the speakers and people involved in the society. The chapter has been a vibrant place, gathering individuals interested in the economic geology and I hope that it will maintain its role.

Jakub Skrzyniecki
President 2017/2018
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A list of Student Society Members – Undergraduates, Postgraduates, and PhD students. In 2017/2018 had 34 chapter members, a rise from 28 in 2016/2017 academic year.

The list was prepared by Lucy Angel, Secretary 2017-2018.
2017/2018 Chapter’s Committee

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jakub Skrzynecki</td>
<td>President</td>
</tr>
<tr>
<td>James Ball</td>
<td>Vice-president</td>
</tr>
<tr>
<td>Lauren Tuffield</td>
<td>Treasurer</td>
</tr>
<tr>
<td>Lucy Angel</td>
<td>Secretary</td>
</tr>
<tr>
<td>Craig Winning</td>
<td>Executive committee member</td>
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</table>

Financial breakdown

<table>
<thead>
<tr>
<th>Income</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>Membership fees</td>
<td>34*20.00</td>
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<tr>
<td>Alderly Edge trip</td>
<td>180.00</td>
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<td>Greenhow Mine trip</td>
<td>25.00</td>
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</table>

<table>
<thead>
<tr>
<th>Expenses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation costs</td>
<td>-196.63</td>
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<tr>
<td>Entrance and administrative costs</td>
<td>-112.50</td>
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<tr>
<td>Speaker’s accommodation</td>
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</table>

<table>
<thead>
<tr>
<th>Operation</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at the beginning of the year</td>
<td>1194.01</td>
</tr>
<tr>
<td>Income</td>
<td>885.00</td>
</tr>
<tr>
<td>Expenses</td>
<td>-349.13</td>
</tr>
<tr>
<td>Balance at the end of the year</td>
<td>1749.88</td>
</tr>
</tbody>
</table>

All amounts in GBP

Financial Breakdown was prepared by Lauren Tuffield, Treasurer 2017-2018.

We started and ended the year with a solid surplus in cash. The majority of our income came from a high membership fee, which had remained unchanged from the last academic year. During 01.05.2018 Annual Meeting Lauren Tuffield suggested a decrease in the fee and her suggestion might be implemented by the new committee, as it shall increase the number of chapter members.
List of organised or co-organised talks and meetings

02.10.2017 Welcome Talk

The first talk of the year was organised straight after the Freshers Fair to explain the rules of membership and encourage students, we had met during the preceding week, to join our society.

The intention was to explain what we do, offer, and are planning to organise in the following academic year. We presented the committee members, had a short talk from Dr. Rob Chapman, our academic advisor, presented the rules of membership and underlined the benefits of Society of Economic Geologists membership.

During the event we had 26 sign-ups for our mailing list. Together with the Freshers Fair sign-ups we had received above 40 students on our mailing list. The majority of them bought our membership later.

18.10.2017 Vancouver AME Roundup Introductory Talk

Our chapter organised the information session to advise our members of the necessary preparations for the conference. Dr. Rob Chapman and our PhD member Carl Spence-Jones told us about their experiences from the last years, while chapter’s committee prepared a list of anticipated expenses and documents to be handed in.

23.10.2017 ‘An Update on the Unconformity Uranium Deposit Model in the Athabasca Basin, Canada, and Current Exploration Techniques’ by Ken Wheatley, Forum Uranium Corp.; organised with the Institute of Applied Geosciences (IAG) at the University of Leeds

Our first purely deposit oriented talk focused on one of the largest Uranium deposit worldwide – Athabasca basin. The talk covered an evolution of the deposit model, which have been modified due to an input of the new information during the resource exploitation, which have been conducted for 40 years. During the talk, a variety of exploration methods and current prospects in Uranium mining in Canada were discussed.

25.10.2017 Ore research and deposits group talk by Dr Rob Chapman and Leeds PhD students: Carl Spence-Jones, James Shaw, and Matt Grimshaw

Our PhD students (and also active collaborators in our Society) presented an overview of different orogenic gold deposits. Carl talked about Cononish in Scotland, James about Curraghinalt, while Matt about a few prospects in Yukon, Canada. The talks were particularly beneficial as they tried to compare all of the projects with a model of Orogenic Gold Mineralisation, proposed by Groves. Their conclusions underlined the heterogeneity of orogenic gold deposits, and the fact the majority of Phanerozoic gold deposits was not related to crustal scale fluid migration.
09.11.2017 ‘Whitehaven Coking Coal Project’ by Dennis Rowland; Cumbria Mining

Dennis is Leeds graduate and a former member of our SEG chapter. He gave us a presentation about a late stage exploration and the current mine planning in Cumbria, where the largest coking coal project in Great Britain is being developed. His talk covered not only geological issues but also ecological, political, and environmental problems every geologist needs to account when planning a mining operation. Students enjoyed a comparison of working in the UK with conditions in Queensland, Australia (Dennis had worked on a coal project in Australia before). A clarification of coking coal’s irreplaceable role in the industry was also crucial, as ‘the public immediately panics when hears about coal, but at the current conditions there is no simple and affordable substitute of coke in the steelmaking’.

23.11.2017 ‘Jungle Gold – Mineral Exploration in the Guyana Shield’ by Chris MacKenzie; Peak Minerals

The talk covered the geology and mineralisation on the Guyana shield with a focus on mineral exploration in the Guyana’s proper. Chris compared his experiences in Guyana with working in the West African Birimian terrains, located on the second side of the Atlantic, but previously being part of the same province. He underlined how the contemporary vegetation and weather changes exploration techniques in two geologically similar areas.

30.11.2017 ‘ ‘From Drilling to Jewellery’; the lifecycle of gold, the state of the mining market and how you could fit in’ by Greg Rodwell; S&P Global

Greg is Leeds recent graduate and he currently works as a mining analyst. His talk was very different from others. Geology was not covered extensively as the financial side of resource exploitation, related to market conditions, changes in demand. Greg told us about his career path and underlined the importance of market, sometimes neglected and not that well understood by the earth sciences graduates.


Johannes Preuss has received a student Oscar for the best short documentary. Due to our research interests in gold we decided to contact him to organise an official screening to learn a bit about the consequences of gold exploitation. The documentary presents a life of ‘Galamseys’ in Ghana. ‘Galamsey’, in the local version of English, refers to ‘gather’ and ‘sell’ and is used to describe local artisanal miners. Based in the old gold mining province of Kumasi, Galamseys illegally dig the river beds, suck up all of the sediments and later extract all of the gold using mercury. Their work is illegal and contaminates the environment but that is frequently the only source of income in the area. The screening shown us the challenges many communities need to deal with during the resource extraction.
**01.05.2018 Annual General Meeting**

During our annual general meeting the old committee summed up the current year and informed about the ongoing opportunities. Also the new committee was elected. There were 13 chapter members present, so the voting was valid according to the rules of Leeds University Union.

**02.05.2018 ‘Lithium in the United Kingdom’ by Richard Taylor, Green Lithium LTD; organised with the Institute of Applied Geosciences at the University of Leeds.**

Our final talk in the academic year focused on a very ‘hot’ commodity – lithium. It is used in lithium-ion battery production and according to the analyst its role in the global market is going to rise significantly due to an expected growth in demand for Electric Vehicles (EV). Richard presented the prospects of lithium exploration and exploitation in the UK, presented the methods of mineralisation and discussed a role of having a stable and proximal source of lithium in the supply chain of battery production.
List of organised trips

28.10.2017 Alderley Edge

The SEG chapter at Leeds organises an annual trip to the copper mines at Alderley edge. The trip is successful and popular most years and this year was oversubscribed. The aspect of caving involved, and the brilliant bright colours of the Cu-Zn-Mo mineralisation provides a stimulating entry point for our 1st year SEG members, whilst also providing them with mineralisation related field experience. The reaction fronts shown above were among the most interesting and challenging concepts that were introduced to the students. It was an excellent way to introduce our new SEG members to the complexity and depth of mineralisation studies and those that were interested will hopefully become more involved with SEG and the minerals pathway at Leeds.

The trip started at the ‘Edge’ which is a tall cliff overhanging a large flat basin that is home to Manchester. The 2nd and 3rd year students were quick to identify that the mineralisation is spatially associated with the basin-bounding normal faults, a concept that was explained by an ex-graduate and Derbyshire Caving Club member, who took us on the tour. We walked from outcrop to outcrop to determine the stratigraphy and make sedimentological observations which were related to palaeoenvironment. Making these observations and interpretations is another key skill that our 1st year members had a chance to develop during the day. After our above ground tour, we stopped for lunch at the tea rooms nearby and examined the small mining museum located inside. The museum has its own mine shaft which is a deep hole in the floor covered by a protective wooden sheet. The mine shaft can be opened and investigated; funny, it wasn’t known to have existed until the museum creators decided to change the flooring and came across it. We then proceeded underground to examine the excellent reaction fronts of molybdenite, galena and malachite in the sandstones and the colourful secondary minerals such as chrysocolla, malachite and azurite. Alderley edge itself is a well know proxy for the Zambian copper belt making a relatively local example of a key mineralisation style.

The trip report was written by the Vice-president, James Ball.
Sedimentary successions above the ground

... and below
Due to our links with the North America, Leeds Student Chapter annually sends a group of students to Vancouver to attend AME Roundup, one of the largest mineral resources focused conferences in the world. It was a great opportunity to network, learn about the current state of the industry and start the adventure with the world of mining. During the conference our members took part in a dedicated student networking event, walked kilometres in the exhibition hall and even presented their research during a poster session. We had also managed to keep in touch with UBC SEG chapter and met students from all over the North America. A few of us, also had a chat with the people gathered around SEG stall in the exhibition hall.
Visit in Vancouver was not restricted to the conference. During the week we had a chance to explore the city and socialise after the presentations. Hopefully we will all have a chance to go there again.
14.02.2018 Greenhow Mine

We spend the chilly, February evening in the Yorkshire Dales, exploring former lead and fluorite mine. The mine had operated from the 18th century till the 2nd World War. Initially, lead had been the main extracted commodity, but later miner’s focus shifted to fluorite. Currently, the mine site consists of 2 veins: Waterhole and Sun, which can be accessed from a single shaft. The main corridors were drilled 40m under the Greenhow hill. The visit lasted around 1.5 hour and due to the width of the corridors and the amount of water inside we were forced to wear complete, mining overalls. The most notable specimens were white-blue crystals of fluorite. Lead compounds were not as abundant, yet present. Dr. Phil Murphy from the University of Leeds told us a bit about the history of mining in the Yorkshire Dales and about mine surveying, as the site was used between 1970s and 1990s as a training site for the mining students at Leeds.
03.03.2018 North Wales was postponed to 10.03.2018 and ultimately cancelled

We had intended to organise our spring trip in the first week of March. Unfortunately, a massive snowstorm had begun 2 days before our planned date. There were more than 50cm of snow in North Wales and the minor roads remained impassable. We had postponed the trip by a week but the conditions didn’t improve and our guides were not able to postpone it for another week, so the trip was unfortunately cancelled.

Plans for the next year

In the 2017/2018 year a lot of 1st year students decided to join our chapter. I believe that the next year will be as fruitful! Also, our chapter has benefited a lot from the advice of the PhD students, completing their degrees at the University of Leeds. I will be grateful if they continue their invaluable support!

We would like to congratulate our new committee and wish them all the best for next year. I am sure that the new committee will do great, come up with the new ideas and continue long-term plans started in 2017/2018.

President – James Ball
Vice-president – Jack Thornton
Treasurer – Mawgan Naylor
Secretary – Bogomil Georgiev
Executive Committee Member – Kirsty Faure

Jakub Skrzynecki
23.09.2018