

Mentoring

The PESGB YPs run a mentoring scheme where we match experienced industry professionals to those with less than ten years' experience. Great care is taken to ensure that the mentor/mentee pairs are a good fit for each other using their discipline, career aspirations/achievements and location.

In 2017, the mentoring scheme was further improved. In an effort to understand what we were doing right and what could be improved on, we conducted a health check. A survey was sent to all who have been part of the scheme since its inception. The feedback was overwhelmingly positive with snippets such as: "It's great to be a sounding board for ideas"; "Made me think more about my career choices and how I could do better in my current role and in looking for future roles" and "helped me understand other people (including in my own company) and the issues that might be bothering them". We also received excellent suggestions for improvement. In response, we created a new Mentoring Handbook which contains helpful suggestions on what to expect from mentoring and forms to complete to help guide the relationship through its lifecycle. This ensures that both mentor and mentee get the most out of the programme.

Through continued advertisement of the scheme, we have recruited a number of highly experienced mentors (average industry experience of 25 years) who are very keen to be involved and mentor young professionals in the industry for career advice/planning, technical development, and life experience (working in different countries, etc). We have also had previous mentees offering themselves to be mentors to early career professionals indicating how successful and rewarding the scheme is!

The PESGB YPs are looking forward to continuing to grow the mentoring scheme, including tapping into our network across a variety of experience levels to devise ideal mentoring pairings for those young professionals in the industry and those looking to enter it.



View Mentoring Scheme Information Pack online at
www.pesgb.org.uk/people-community/special-interest-groups/young-professionals/mentoring-scheme/

2017 YEAR IN REVIEW

The highlight for The Petroleum Exploration Society of Great Britain Young Professionals (PESGB YPs) group in 2017 was the addition of a new location: The Ireland Branch based in Dublin.

In the spirit of **Community, Technical Excellence** and **Charity**, the YPs delivered an excellent programme of knowledge transfer seminars and networking events in London, Aberdeen and Dublin, whilst improving and expanding our offering through the mentoring programme and undergraduate mapping scheme.

This was all achieved with the generous sponsorship from NEXEN CNOOC and financial support from the PESGB.

The below highlights the main accomplishments for 2017 and sets a foundation for continued growth in 2018 and beyond.

Our aim is to promote, for the public benefit, education in the scientific and technical aspects of petroleum exploration with a special focus on the support and development of early career geoscientists.

CHARITY

Undergraduate Mapping Scholarships

The PESGB YPs aim to support young geoscientists and encourage participation in the oil and gas industry. Our main outreach project involves a donation of £100 to numerous students at a range of UK universities, including Durham, Liverpool and Manchester. We look forward to continuing this scheme in 2018 as well as expanding it to our our Ireland Chapter. Below are a few words from a number of students that benefited from sponsorship in 2017...

Chenaillet Ophiolite, Montgenèvre, French Alps Tom Reershemius, University of Oxford

The area I chose to work on for my undergraduate mapping project was the Chenaillet Ophiolite in the Cottian Alps, situated close to the French-Italian border. This is regarded as one of the most spectacular and best-preserved slices of Tethyan oceanic crust found anywhere in the Alps, and it's easy to see why (see photo). I undertook to map the precise boundaries of the lithologies in the ophiolite and the rocks in the area around it, and from it deduce how this feature was formed.

Doing fieldwork in the Alpine summer has obvious perks and challenges. The beautiful scenery and near-perfect conditions (almost) let us forget the physical challenges we faced daily in mapping a mountainous area with peak elevation of 2650m. Over the six weeks we spent in Montgenèvre, I climbed the equivalent of Mt Everest 1.3 times. Despite the few hardships, mapping was one of the best experiences of my degree and has definitely made me a better geologist. I am very grateful to PESGB for contributing to the cost of my fieldwork. This funding is incredibly helpful in providing financial flexibility to students and allowing them to pursue their academic interests in the field, wherever that may be.

Lago di Cignana, Val d'Aosta, Italy Christopher Terry, University of St. Andrews

I would like to thank PESGB and everyone who supports the PESGB Young Professionals for the opportunity I have been given. For my undergraduate mapping project, I decided to map a section UHP metamorphism at Lago di Cignana, Val d'Aosta, Italy. For this, I spent 5 weeks camping in the shadow of the Matterhorn, and thanks to the funding I received I was able to prolong my stay a further 10 nights.

Drawn to the area by the exclusivity of being one of only two known coesite locations in the Alps, the aim of my mapping project was to determine the genetic relationship between the UHP metabasite unit and the adjoining Zermatt-Saas eclogite. By investigating the structure and nature of contacts between the units, the mineralogy and geochemical analysis using XRF the following conclusions were made. 1) Both units are formed as tholeiitic MORB sharing similar major element concentrations, 2) The presence of a mylonitised zone on the contact of the two units indicated a varied metamorphic path determining the two units to be mutually exclusive.

Without the funding of PESGB, the ability for my mapping project to succeed as it has would have been impossible. The extra 10 nights allowed me to expand the mapping area, and work on finer detailed maps to determine the structural relationships throughout the area.

Vera basin, Almeria, Spain Elizabeth Tamayo, University of Manchester

I did my independent mapping during June-July for six weeks. The area where I mapped is located in the province of Almeria, Spain. This area is tectonically active and records important features about the African and European configuration. The stratigraphic record of the inner and outer basins in the Betic Cordillera evidence this active tectonism. The basin studied during the mapping project is the Vera basin. The size of the basin only allowed the study of its south-east part, which is located between the Sierra Los Filabres and Sierra Cabrera. The extent of the mapped area is about 42km². The outcrop of the Vera basin formations is the result of the exhumation that the late uplift of Sierra Cabrera caused. The 4 sedimentary formations outcropped were deposited during the Tortonian – Messinian epoch, while the 5th formation was deposited during the Quaternary as the response to the active tectonism.

The logistics of the mapping project can require a large budget, mainly in large areas where the hiring of a car is necessary. The support that PESGB offers to the geology students through "The PESGB Mapping Scholarship" helped me to cover part of the expenses that mapping in a large area in Spain requires. Overall, my mapping experience was great as the province of Almeria is one of the best places where to map because its weather conditions allow a great exposure of the geology, while its people and places offer you wide range of possibilities to enjoy your free time. Thanks PESGB for your support!



NATIONWIDE

COMMUNITY

University of Derby

The PESGB YPs have an ongoing relationship with the University of Derby. For the 6th consecutive year we were invited to participate in a day of mock interviews with the students on the MSc in Applied Petroleum Geosciences Program. Held in February and organized by course director Dorothy Satterfield, it provided the opportunity for a YP representative to give their time and energy to the soon to be graduates. Collaborating with an experienced professional, lecturers and the careers department, the representative had the opportunity to ask technical questions as well as to give feedback on interview skills, CVs and cover letter. At the end of the formal interviews there was time for discussion where the YP, and experienced industry participants could field questions from the students. It was evident from the lively discussion that the students were motivated and enthusiastic at the opportunity to get information regarding the state of the industry and it was great for the PESGB YP to understand what the primary concerns of the next generation of Young Professionals.



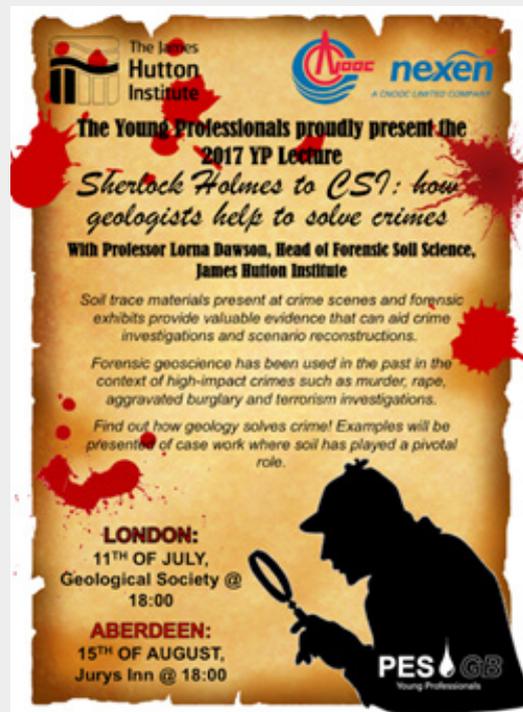
TECHNICAL EXCELLENCE

COMMUNITY

Evening Lecture 'From Sherlock Holmes to CSI: How Geologists Solve Crimes'

For one month of the year the YPs takes over the PESGB monthly lectures. We host the same talk in Aberdeen and in London. This year we hosted Professor Lorna Dawson, Head of Forensic Soil Science at the James Hutton Institute, who presented the lecture 'From Sherlock Holmes to CSI: How Geologists Solve Crimes'.

The event was held in London on the 11th of July and mirrored in Aberdeen on the 15th of August. Lorna explained the role that Geology plays in that solving crime. For example gravel, soil or even a microscopic flake of metal found at a crime scene can be traced to its origins and play a key role in a prosecution. It is not as portrayed on CSI, Criminal Minds or Law & Order., however there are several similarities with hydrocarbon exploration. Most notably, the effort to remove bias and look squarely at the evidence and working together in a collaborative team of technical experts from various fields. This successful event will be repeated in our Dublin chapter in 2018.



TECHNICAL EXCELLENCE

YP Session at DEVEX 2017

The PESGB YPs organized the Young Professionals session at DEVEX in May. The event took the form of a panel discussion entitled 'I Get Knocked Down, But I Get Up Again', in line with the DEVEX Conference title 'Building Resilience, Driving Growth'. We had a panel of industry experts from different disciplines who shared their experiences of riding the peaks and troughs of the oil industry and highlighted some of the ways that we can adapt to the challenging situations we face. Speakers included Professor John Howell (Chair in Geology and Petroleum Geology at the University of Aberdeen), Beverley Smith (Director of POWERful Women), Mike Cooper (Director of M7 Geoscience), David Townsend (Founder of Town Rock Energy) and Carla Wise (Director of Wise Transformations). The panel brought a fresh look at the industry, with some great ideas and tips for staying relevant and resilient. The mood was hopeful and energetic and everyone left with practical suggestions that they could take away.



DEVEX Panel Carla Wise (Wise Transformations), David Townsend (Town Rock Energy), Professor John Howell (University of Aberdeen), Beverley Smith (POWERful Women), Shereen Nairne (PESGB YP), Mike Cooper (M7 Geoscience)

In April, the PESGB YPs welcomed Professor Andrew Hurst from the University of Aberdeen to present a talk titled 'Sand Injectites: What Are We Missing?'. Andrew highlighted the significance of injected reservoirs in the North Sea, outlining fields which have been in production for many years (Gryphon, Alba and Harding), and those currently being developed across the basin (notably Premier's Catcher, Statoil's Mariner and Enquest's Kraken projects). There was a lively Q&A session which promoted new ways of thinking with topics ranging from geomechanics to sand-box modelling.



TECHNICAL EXCELLENCE

Seminars

In November the PESGB YPs collaborated with the young professional branches of the Institute of Mechanical Engineers (iMechE), the Institute of Chemical Engineers (iChemE), the Energy Institute (EI) and the Society of Petroleum Engineers (SPE) to present a session entitled 'Soft Skills Matter'. Willie MacColl, a People Specialist with Re:markable, engaged with a room of 65 geoscientists and engineers to tease out which soft skills they believed to be most important to effectively perform their roles at work and which skills they admired in their colleagues. Willie explained the importance of the top ten soft skills, including communication, adaptability, problem solving and self-confidence. The talk was followed by a Q&A session, where advice was sought from Willie on a variety of subjects including how best to manage meetings, how to influence others and how to instill positivity within teams.

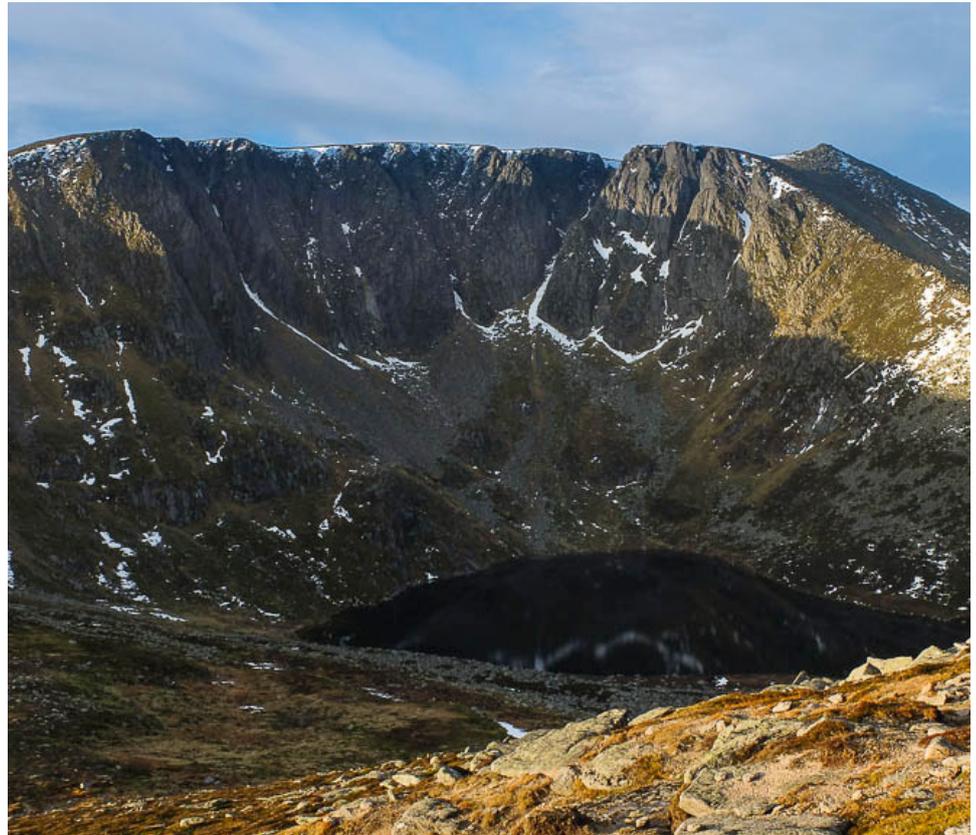


COMMUNITY

Social

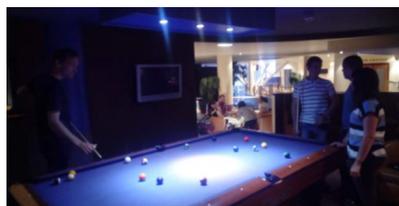
A key focus for the PESGB YP group was to rebuild the community in Aberdeen which has been challenged since the downturn. One way we implemented this strategy was through a focus on social events which varied in type and activity. We launched three new events which had not been previously run in Aberdeen, a hillwalking event, training and running the Baker Hughes 10k and an arcade night. In addition we launched monthly networking socials at the Albyn and continued our popular YP Quiz night and a fun offering at the Granite City Reception.

The fourth annual Aberdeen Quiz Night was held on the 19th January at the Albyn. There were 4 teams competing for the top prize of 2x Monopoly Board Game Oil Industry Edition sets, and boxes of chocolates for second place, kindly donated by MMbbbs Ltd. Team "Let's Get Geophysical" won first place, and "I don't think we have a pub quiz team name yet, we're still thinking about it" came a close second!



In April there was a change of pace as the PESGB YPs got our walking boots on for the first Lochnagar Hike through the Cairngorm National Park. There were seven attendees who bravely walked through the Cairngorm National Park and even though the weather was good, it was not too warm so the walking pace was brisk! An enjoyable outing for all and some good networks formed!

In May we continued our outdoor activities by participating in the Baker Hughes 10k on behalf of the Aberdeen Cyrenians, a charitable organization that provides support for unemployed and homeless in Aberdeen. The PESGB YPs trained together in 2016 and this year successfully completed the run. Feedback received suggested that our members really enjoy the outdoor events we provide and are an excellent way to form new friendships!



In September, the PESGB YPs went to the Amusement arcade to spend a relaxed evening enjoying, American pool, music, arcade games along with a few drinks. This was a new event for the group and it was great to catch up and get to meet new people in a different setting and somewhere warm! Attendees were drawn from a wide range of service companies, operators and academia giving a good balance of perspectives. The mood was certainly one of cautious optimism with many commenting on the increasing volume of projects in the pipeline. As the evening unfolded there was stiff competition between members with the Petrolink-Aberdeen University team eventually being crowned AirHockey champions!

Over the latter half of 2017, the PESGB YPs launched a series of monthly networking events on the last Thursday of every month at the Albyn. These started in June and continued until November. These events are an effort to reconnect with young professionals outside of the technical seminar environment. They have been slowly building momentum in this year and the foundation has now been set to grow these in 2018.

As in previous years the YPs ended the year with an offering at the Granite City Reception (formerly Aberdeen Christmas Party). This year we offered the opportunity to attend Beer School at the Brew Dog's Under Dog Bar. Attendees had the opportunity to learn about what goes into beer; how it's made and what makes Brewdog's Brews so tasty. The sessions were a great opportunity for attendees to network in a relaxed atmosphere, comparing tasting notes and personal favourites. Apparently petroleum geoscientists have a real passion for good beer...who knew?!



The PESGB YPs in London were focused on continuing to deliver a number of high quality events, to engage with more and varied members and to road test ideas which could be deployed to Aberdeen and Dublin if appropriate. We delivered a number of seminars, hosted the second annual Technical Session and started a new event: 'Curry Night'!

TECHNICAL EXCELLENCE

Seminars



This year's PESGB YP London seminar series kicked off in February with an engaging talk on pore pressure prediction by Richard Swarbrick (Swarbrick GeoPressure Consulting), held at Shell's offices in Canary Wharf. Richard, an independent consultant and trainer specialising in sub-surface pressures, described the devastating impact overpressures can have whilst drilling a well. The lecture focused on how we can reduce the risk of an overpressure event through good data collection, analysis and communication between numerous specialised disciplines. Richard stressed the responsibility we have as young professionals to broaden our understanding of operations geology to be able to communicate effectively and clearly with all disciplines to help mitigate the risk associated with exploration drilling.

In May, the YPs hosted Mr Charles Thomas (Senior Vice President – Africa & UK, EMGS) who spoke on 'Looking Back to the Future - Understanding Electromagnetic (CSEM) data in petroleum exploration', a candid appreciation of the evolution of CSEM technology. This engaging talk attracted a good turnout of YPs who learnt about the development of CSEM from the initial waterbed tank experiment in the late 1990's, the first proof of concept marine acquisition in Angola through to modern wide azimuth 3D CSEM acquisition and interpretation techniques.

In June, Dr. Gary Nichols gave a great lecture on 'Pitfalls in using modern analogues for clastic reservoirs'. Gary opened the lecture with the phrase 'the present is the key to the past' and asked the question, does that include all the past? We are conditioned to see environments from an ice house perspective, however, some of the geological past relates to greenhouse conditions and therefore there are potentially environments that share no resemblance to anything we can even picture in the modern day. Food for thought! The lecture finished with a number of questions, sparking some engaging discussions that carried on in the pub afterwards.

TECHNICAL EXCELLENCE

Technical Seminar



Following the great success of the first technical seminar in 2016, we ran the event again with the aim to give young professionals the chance to present technical work to an audience of their peers outside of their immediate work environment. The seminar took place on 20th September in Shell's Canary Wharf offices. Four young professionals presented from across academia and industry with talks encompassing geology and geophysics. Neil Frewin, President Elect PESGB and David Cleverly past PESGB YP President were the judges for the evening. They commented on how impressed they were with the quality of the talks. Daan Beelen from Imperial College University who presented his research on the effect of differential compaction on shelf edge trajectories won the prize for best presenter.

House of Commons Discussion



The highlight of our events calendar in London was the Annual House of Commons Panel Discussion. Given the current environment, our distinguished panel were invited to discuss "The Oil and Gas Industry in an Uncertain Geopolitical Climate". Panel members included Sir Edward Davey MP, Emma Wild, Head of Upstream Advisory Practice at KPMG, Jim Washer, Executive Editor, Energy Intelligence, and Malcolm Brown, President of The Geological Society.

After being welcomed by a drinks reception, the discussion centred around a number of key geopolitical themes that could impact upon the oil and gas industry: OPEC, Saudi Arabia and China; the state of play in US shale; the UK in the context of Brexit; and the potential growth of renewables and Carbon capture and storage.

The speeches were followed by audience participation in a Q&A session. Questions covered a wide range of topics, including; the future of Carbon capture and storage, the outlook for frontier exploration on the UKCS, and how to quantify geopolitical risk. The discussion then continued enthusiastically over canapes and refreshments. The event provided an excellent learning and networking opportunity, befitting of our showcase event, and the Committee aims to build on this success for next year's event.

A Successful Launch!

The launch of the Irish Chapter of the PESGB YPs in Dublin was one of the highlights of the year for the committee. The event was held on Wednesday, 7th of June at the Geological Survey Ireland. The event saw good turnout from industry and academia. The speakers for the evening were Myles Watson (Providence Resources), Sean Mulligan (Tullow Oil), Shereen Nairne (PESGB YP/ Woodside Energy) and Conor O'Sullivan (iCRAG). Topics discussed included the Porcupine basin and the upcoming drilling program of the Druid and Dromberg prospects, making exploration decisions in frontier basins in a low-oil price environment and the early career progress of a Young Professional. The talks were followed by a very successful networking event at Slattery's Pub. There was enthusiasm in the air as looked to further engage with young professionals in Ireland through an exciting programme of networking events and technical talks. The mentoring scheme was actively encouraged and there are plans to roll out the undergraduate mapping programme to Irish Universities in 2018.



COMMUNITY

Social



TECHNICAL EXCELLENCE

Seminars

The PESGB YP Ireland Chapter hosted Dr Lawrence Amy of University College Dublin for a technical seminar. Dr Amy presented on 'Upslope Turbidite Stratigraphic Traps: Understanding Pinch-out Development'.

As deepwater turbidite systems with stratigraphic pinch-out are prime targets for exploration companies, the seminar focussed on approaches to better understand the development of these traps to reduce the risk of exploration failure. This was an engaging discussion with an enthusiastic audience and a great way to kick off the technical seminar series in Ireland.

The Beer Bites and Barrels of Oil series of networking events quickly followed the successful launch in June. July saw young professionals in Dublin, Ireland meeting for a cheeky Guinness and some industry chit-chat at the Workman's Club at Wellington Quay. This event was a success and so was repeated on in September at the The Drunken Fish. The inaugural YP Ireland Christmas Quiz took place on the 7th of December in the Black Sheep Bar on Capel Street. Attendees were challenged by two rounds of general knowledge questions plus a picture round, with questions like 'What does the L in Samuel L. Jackson stand for?' and 'List all US states beginning with M' and the fan favourite 'What are the names of Santa's Reindeer?' Javier and Emma of the Lone Star State team took first prize and had a bottle of wine to celebrate!

SUMMARY

In 2017 the PESGB YPs continued to thrive and innovate in an effort to provide quality events which are in demand by our target group and are cost effective to run. The group has benefited from the generosity of individuals and companies who have volunteered their time and their office space to help us achieve our aims. We are grateful to NEXEN CNOCC who sponsored us this year.

In 2018 we will continue to build and deliver on this strong foundation. As well as repeating our program of events highlighted above, we hope to add a debate in Aberdeen of the scale of the House of Commons debate in London. Furthermore, we plan to expand our events in Ireland and offer more technical events in London. All of these events are warmly received by our members, supporting and developing early career geoscientists, allowing everybody from students, new graduates and not-so-new graduates to benefit from cross-industry communication channels. As part of our work we look to assist in the career decisions of current undergraduate and postgraduate geoscience students who are contemplating what opportunities are open to them, making them aware of what the petroleum industry can offer and giving them a support network if they decide to join. Our efforts contribute to delivering on the PESGB core values of enhancing community, technical excellence in education, and charitable distributions. This is only possible due to the time given by volunteers working as part of the Young Professionals Committee and the generous sponsorship we receive from companies.

We welcome suggestions on how we can better serve our membership, if you have questions or suggestions please email youngprofessionals-director@pesgb.org.uk.