Dear followers,

I am pleased to announce that the GLANAM network will have its annual meeting and workshop in a couple of weeks in Longyearbyen, Svalbard to discuss the latest developments of the project. The session will have a focus on the Svalbard-Barents Sea and Greenland margin, the fellows and supervisors that are working on this particular region will show their progress and results, trying to tie them together. We also have the pleasure of hosting two guest speakers, Nina Kirchner from University of Stockholm, who will talk about modelling efforts of the Svalbard-Barents Sea Ice Sheet, and Heidi Sevestre from the University Centre in Svalbard, who instead will present the CRIOS project (Calving Rates and Impact On Sea level). The workshop will feature a field trip to Nordenskiöldbreen in Billefjorden including a visit of the abandoned Russian coal-mining town of Pyramiden.

In this June issue we will read about the experience of the fellows Emilia Piasecka and Dimitrios Ktenas. Emilia studies in the Arctic University of Norway (UiT), Tromsø; she is going to give us a taste of the student life in one of the northernmost universities on the planet. Dimitrios works between UiT and North Energy (http://www.northenergy.no/en/), a Norwegian Oil&Gas company conducting mainly exploration, development and production activities off mid and northern Norway, and GLANAM partner. Dimitrios’ PhD project connects academy to industry, his point of view is an interesting alternative to the “classic” path of a PhD student. Enjoy the read

Riccardo Arosio

Communications

• Katharina Streuff and Oscar Fransner participated to PAST Gateways International Conference in Potsdam, Germany in May. See full article p.5
• Björn Morén will attend to the XIX INQUA conference in Nagoya, Japan from 26th July to 2nd August.
• The 31st International Meeting of Sedimentology will be held in Krakow, Poland, from the 22nd to 25th June (https://www.sedimentologists.org/ims2015)
Studying and living in Tromsø: Emilia’s experience

When you think of Tromsø, probably the first thing that comes to mind is isolation, darkness and snow. Well, I thought that too. Despite the location 400 km above the Arctic Circle, Tromsø is a very lively place, with rich historical and cultural heritage. The largest city of Northern Norway, is in fact full of students and tourists all year round. Tromsø used to be called the Paris of the North, surrounded by scenic landscapes, chains of mountains and fjords. The city center, on the other hand, consists of the largest number of wooden houses…and more pubs per capita than anywhere else in Norway. The climate of Tromsø is not at all arctic, so do not worry. The influence of warm Gulf Stream washing over the northern coast creates a unique climate, a bit moody sometimes, but the views of snowy peaks in the sunshine pay off for all the rainy days. In winter, Tromsø and the adjacent areas offer perfect opportunities for all kinds of winter activities, including skiing, snowmobile rides, dog-sledging and northern lights chasing. The city center welcomes with bright decorations and cafeterias, which are always open and full of tourists. Even in the winter, the fans of art and culture can enjoy various events. Nordlysfestivalen (Northern Lights festival) and Tromsø International Film Festival are the most known and take place at the beginning of the year. The first one offers top quality performances of musicians representing different music genres, from classical, through jazz, to dance music, so everyone can find their type. Tromsø Film Festival, officially the largest film festival in Norway, has been very popular since it was held for the first time in 1991. It collects both alternative and mainstream movies from all over Europe and displays them for people in five screening venues, including one outdoor snow cinema. During summer, with the perpetual day all around the clock, the city never sleeps. At this time it is bursting with people, cultural events and festivals. Telegrafbukta, a bay on the southern tip of the island, is probably the favourite place in the city to spend summer afternoons. Since 2004, every July, Telegrafbukta changes into an open-air stage, with artist performing music from all over the world and collects almost 5000 people in audience every year. For sporty people there is also a treat – the Midnight Sun Marathon – northernmost certified marathon in the world, held annually every June.

But recreation is not all that Tromsø has too offer. The city is largely populated by students and university workers – no wonder, UiT - The Arctic University of Norway is a renowned institution, with lots of research facilities, network of international collaborators within various institutions in Norway and abroad. The University is very open for international students and most of the courses are held in English.

Fig. 1 Geophysical cruise on the R/V Helmer Hanssen to the west of Svalbard, June, 2014
This, and the selection of unique study programs is what encourage people to come and study in Tromsø. It is hard to imagine a better place to study Arctic-related topics. Tromsø is a perfect starting point for cruises to the Barents and Norwegian Sea. The UiT research vessel R/V Helmer Hanssen is well equipped with instruments for geological, geophysical and marine biological studies and it always comes back with new, interesting data to analyze. Recently founded prestigious research centers, such as CAGE (Centre of Excellence for Arctic Gas Hydrates and Environment) or ARCEx (Research Centre for Arctic Petroleum Exploration) are among 13 Centers of Excellence in Norway that have been granted a long-term funding from the Norwegian Research Council, in order to support excelling research groups and promote high scientific quality. The most important external collaborators in the Department of Geology is the industry (Statoil), Geological Survey of Norway (NGU) and Norwegian Petroleum Directorate (NPD), which provide extensive geophysical data as well as opportunities for students and researchers to work in non-academic environment. Department of Geology and CAGE in cooperation with National Research School in Climate Dynamics (ResClim) at the University of Bergen host the PhD Trainee School in Arctic Marine Geology in Geophysics (AMGG), offering cruises, courses and workshops related to glacial processes, palaeo-climate and oceanography as well as gas hydrates and geofluids. All these events provide high-quality training, such as the recent workshop in Scientific Presentation with Melissa Marshall (a professional communication teacher known from TED talks, Fig. 3), or the upcoming field trip in the subject of fluid emissions fossil analogues in Northern Apennines, Italy. Summing up, Tromsø may seem like a hostile place at the end of the world but it is actually very friendly, unique place with lots of opportunities, which you should see for yourself if you have not yet!

Emilia Piasecka

www.glanam.org
Bridging a PhD in industry with academia

I imagine that in recent times most of the geologist graduates are more familiar with the traditional university-based PhD programs, where you have to search for a project that you are interested in and then find a supervisor with overlapping interests. Well, what I discovered while I was applying for PhD positions is that this is not the only option.

So, as I was considering a PhD with an industrial component North Energy ASA, an industrial full partner of the GLANAM network, gave me this great opportunity and hired me for the industrial PhD position for which I enrolled at the Arctic University of Norway (UiT). My “headquarter” is located in the Science Park in Tromsø, Norway, where NE has established one of their offices. NE aims to be a leading industrial player in oil and gas in Northern Norway and has entered into a technical and strategic working relationship with UiT, which is a leader in Norway in scientific research in general and geoscience in particular.

Until now I have seen many benefits working on my project in house at NE. There I’ve met a lot of experienced geologists who have been working for a long time in the oil industry, in particular on the Norwegian continental shelf (NCT). As my study area is on the Barents Sea, I am part of the NE Barents Sea group and I was also encouraged by my current manager at the company to follow up their License group meetings quite often. On these group meetings I managed to get a good insight of the oil business philosophy and to see how the management works effectively with the group.

When it comes to the G&G meetings, I’m hearing that my research topic is being discussed quite often and I’m also enjoying that as I feel that my opinion is valuable to them. The uplift and erosion history in the Barents Sea plays a central role in the evaluation of prospectivity and there is a need to understand the complex geological processes that lead to generation and migration of hydrocarbons. Since I joined the company I got access to the regional geophysical data including the regional grid of high-resolution 2D multi-channel seismic data and all the exploration well logs were available as it was necessary to understand the lithostratigraphy, physical properties and depositional environments of the subsurface. Furthermore, I got access to all of the industrial software they are able to provide. Last year I had internal training and workshops regarding the seismic interpretation - in collaboration with UiT, sequence stratigraphy on the NCS, seismic well tie using the latest version of Petrel software, well management, ArcGIS software and basin modelling with MOVE software-intensive course in Glasgow from Midland Valley.

Fig. 5 (left) Poster Presentation for the Arctic Days conference in Tromsø, Norway. (bottom) Dimitrios last summer attended the (AMGG) Arctic Marine Geology and Geophysics research school cruise in Longyearbyen, Svalbard.

Favourite quote that I learned as a petroleum geologist and had an impact whilst doing my PhD project: "As long as we drill we learn"
The most important thing was that I had the chance to improve my skills interacting with commercially-minded scientists in house and geophysical companies such as First Geo ASA, located in Oslo, who are external collaborators of NE. At the moment I’m doing my secondment at GEUS (Geological Survey of Denmark and Greenland) in Copenhagen, as it is planned by the GLANAM agreement, in order to carry out part of my geophysical studies.

In my opinion there is a lot to learn working for the oil business and at a later stage you probably end up with more interdisciplinary skills than those you would get studying in a university. Moreover your research becomes a solution to real-world problems. As you are becoming more knowledgeable you notice that you are constructing on something that the company could use; test it and observe how beneficial it could be at the end.

Dimitrios Ktenas

GLANAM at PAST Gateways 2015

Being keen on visiting international conferences to present our most recent data to a number of scientists from similar fields encouraged two of us fellows and two of our supervisors to attend this year’s PAST (Paleo-Arctic Spatial and Temporal) Gateways meeting in Potsdam, Germany. The conference is now in its third year and brings together around 70 scientists from all over the world for one week of poster presentations, talks and field trips, the latter introducing the local geology. People attending generally focus their research on the northern hemisphere with particular emphasis on the Arctic, and presentations cover very interesting topics, ranging from new findings on woolly mammoths over newly developed models to better constrain ice sheet dynamics to sediment cores and tsunami indications in Greenland.

Over icebreaker, conference lunches and dinners, throughout coffee breaks and bus or bike excursions, many a conversation develops that not only leads to new contacts and a richer personal network, but also yields constructive feedback on our research. The 30km-bike trip showed us the castles around Potsdam and led us to sites coined by the last ice age around 25 000 years ago, which left an assortment of landforms including moraine ridges marking the edges of the glaciers, glacial lakes, which were later infilled by meltwater and today serve as a wonderful opportunity for kayak tours, or so-called kames, little sandy hills that derive from fast-flowing meltwater transporting this material to the glacier front. Our last stop allowed us to take a little tour of an organic brewery, and enjoy good German beer in the Biergarten bathed in the evening sun, which was a very welcome treat before starting the last 5k back to Potsdam. This year’s meeting was again a big success as the small and friendly atmosphere of the conference makes it really easy to exchange research problems or ask for help, which especially in the early years of our careers is extremely helpful and also one of the aims of GLANAM.

Katharina Streuff

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Fig. 6 Volunteering on the GPS team for the (Finnmarkslopet) Finnmark Race, which is ranked as the world’s northernmost dog sled contest, and the longest in Europe. North Energy ASA has been partner of the Finnmark race for several years. The photo was taken in Karasjok, Finnmark, Norway.

Fig. 7 Schwielowsee, one of the glacial lakes formed during the Last Glacial Maximum, source ptn.de