



EUROPEAN REGION NEWSLETTER

Unlocking the Future

December 2013, Vol. 8

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PRESIDENT'S MESSAGE



Dear Reader,

Welcome to the December edition of the European Region's newsletter. In the last newsletter I had the pleasant task of welcoming a number of members who were beginning their new terms of office on the Executive Council. This month I am

delighted to welcome Ailsa Messner (BG) as the new Education Officer for the European Region. I look forward to working with Ailsa and our Conference Manager Neil Frewin over the coming months to turn into reality some of the exciting new ideas for educational events that you have submitted to the Executive Council.

In this editorial I would like to focus on the activities of some of our Student Chapters and Young Professional (YP) groups. Our young professional and student members are critical not just to the future health of the membership of AAPG, but also for their contribution in bringing new ideas and ways of working into the organisation. These groups also provide excellent networking opportunities for students and professionals in the early stages of their careers. I have drawn on three examples from recent months which illustrate many excellent attributes of this talented group of geoscientists. Three particular qualities run through these examples like red threads and these are qualities which I am sure we all see as key attributes of all of our members;

- A genuine enthusiasm for learning and great geoscience.
- A pro-active "can-do" mentality which will serve the participants well in whichever direction their future careers may take them.
- A clear desire to work collaboratively with an acknowledgement that we are all more efficient and creative (and have more fun) in groups rather than as individuals.

The first example is the tremendous collaborative work by the student chapters of the Universities of Bucharest and Cluj in Romania and the Eotvos Lorand University in Hungary. During the last three years each of these student chapters has hosted a summer event based on

the fascinating geology of the Transylvanian Basin, Lake Balaton and, this year, the Moesian Platform and Eastern Carpathians. 40 students participated in the event this year which involved technical presentations from industry experts followed by five days in the field studying the excellent outcrop geology in the region. These days were "bookended" by two very successful social events and the entire program was an excellent opportunity for the participants to hone their presentation skills and expand their personal networks. Great credit should go to all those who helped organize these events that were sponsored by AAPG Europe and Chevron, and ably supported by the University of Bucharest and Geological Society of Romania.

My second example shows great initiative by past student members who found themselves in new surroundings. Earlier this year the Student Chapter of Oslo University was founded by five PhD students who had all been members of vibrant AAPG student chapters at their previous Universities. Within a month the number of members had doubled and a program of lunch time seminars and visits by Distinguished Lecturers organized. This new student chapter now has members from 10 different countries and plans to enter a team for the 2014 IBA competition.

The final example comes from much closer to my home and focuses on the activities of our young professionals. It illustrates how a spirit of collaboration can form a group much stronger than its component parts. In the Netherlands our young professionals have joined forces with the YP group of the national petroleum geological society (PGK) to form an AAPG-PGK YP cohort serving the young professionals of the country. The new expanded group acts as an excellent forum for members to build networks and has already held a number of career workshops and social events with more to follow.

These examples, and the talented young individuals who organise and take part in these events, illustrate both the benefit of AAPG membership at an early stage of a career and that the future of the organisation is in good hands.

I look forward to meeting more of you all in 2014 and I wish you all a wonderful festive season and health and happiness for the New Year. ■

Keith Gerdes
AAPG European Region President

Analysis of an Exhumed Oil Accumulation: the Oligo-Miocene Carbonate Ramp Deposits of the Majella Mountain (Central Italy)

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INTRODUCTION

The northern-western side of the Majella Mountain, Central Italy (Fig. 1) is well known for the occurrences of bitumen since the ancient Roman times. These bitumen occurrences are often (but not only) found within Oligo-Miocene carbonate ramp deposits belonging to the so-called Bolognano Formation.

hydrocarbon occurrences belong to a wider petroleum system that extends also in adjoining onshore Abruzzo and Molise regions and off-shore areas in the Central Adriatic Sea (Scrocca et al., 2011).

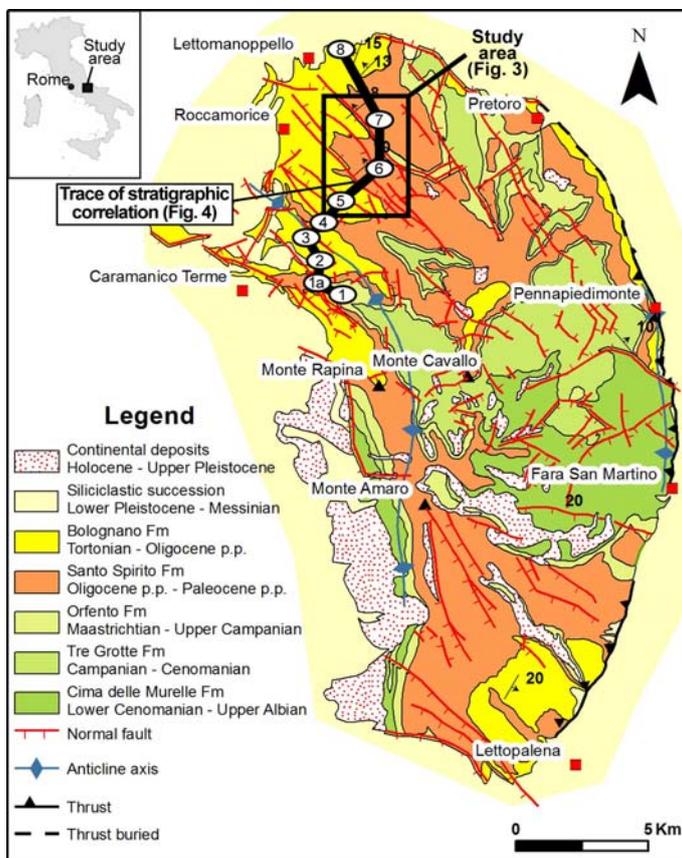


Figure 1: Schematic geological map of the Majella Mountain (modified after Vezzani and Ghisetti, 1998).

The abundance of bitumen within both matrix and fracture porosity (Fig. 2), mainly in the *Lepidocyclina* calcarenite of the Bolognano Formation, has justified the industrial exploitation of these accumulations between the end of nineteenth century and the 1960'.

The extraction of bitumen took place at mining sites, from rocks fragments heated up in furnaces, that arrived to employ more than 4000 workers in the Lettomanoppello area.

The bitumen impregnations in the north-western sector of the Majella structure can be considered as a frozen and exhumed oil accumulation within a reservoir made up by the Oligo-Miocene Bolognano Fm. These outcropping

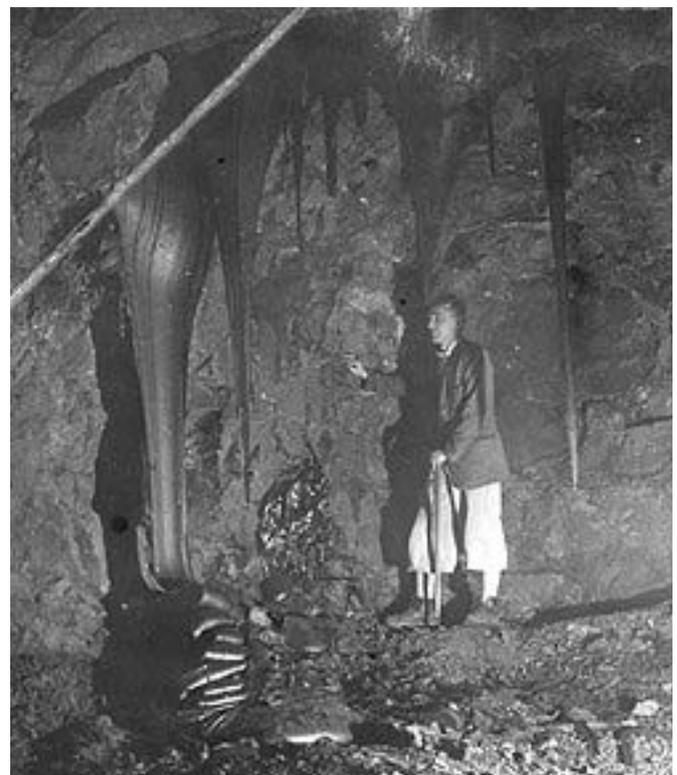


Figure 2: Dripping bitumen in a mine in the 1950' (after <http://www.laroccaluett.com/Rocc.html>).

The available outcrops in the study area provide a magnificent opportunity to observe an exposed combination of the main classical elements of a petroleum system (with the exception of the source rock): reservoir, seal, trap, and migration pathway. Moreover, at regional scale, the Majella outcrops represent a good analogue for both on-going exploration effort in the region, and for existing fields in the Mediterranean Basins and in the Middle East.

Several components of the petroleum system outcropping in the northern Majella area have been already studied in the past (see, for instance, Task Force Majella Project web site, Agosta et al., 2009; Rustichelli et al., 2013 and references therein).

However, given the availability of these excellent exposures, a new joint R&D project has been carried out in the Majella north-western side (Figs. 1 and 3) to analyse in detail: i) the relationships among sedimentary structures and depositional processes and among stratigraphic architecture and syn/post-depositional tectonics, and ii) how these elements controlled the migration and trapping of hydrocarbons.

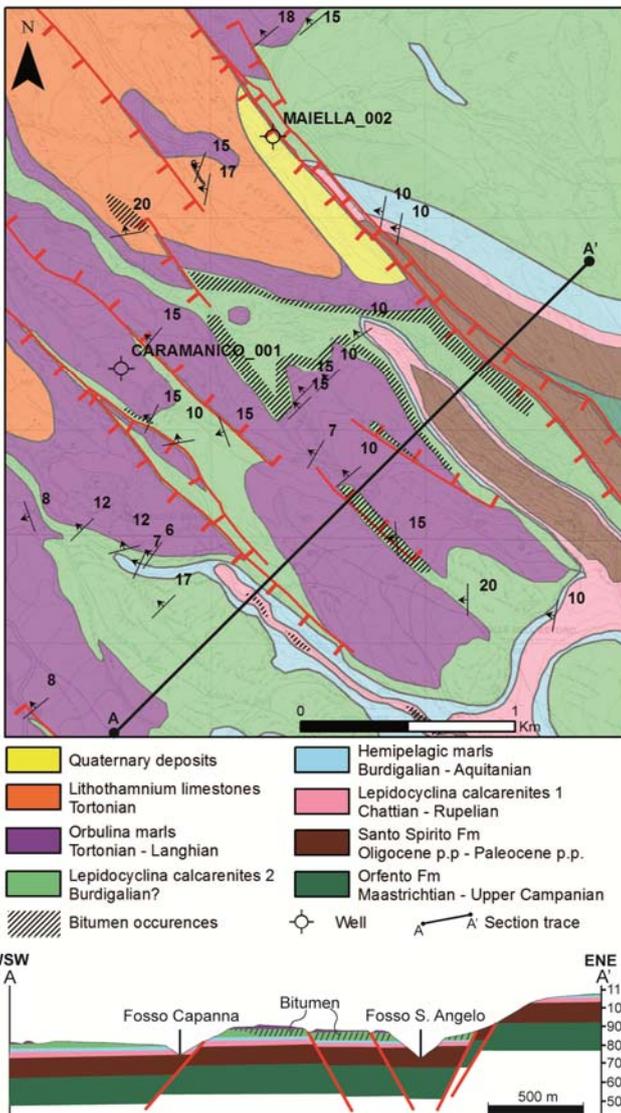


Figure 3: Geological map of the study area (location in Fig. 1). Known bitumen occurrences are also shown.

The geological map in Fig. 3 shows the distribution of known hydrocarbons occurrences and the location of the two exploration wells drilled in the study area.

GEOLOGICAL SETTING

The Majella massif, located in the Central Apennine fold-and-thrust belt, is a N-S/NW-SE oriented thrust-related anticline that plunges both to the north and to the south (Cosentino et al., 2010 and references therein).

The Majella succession records Upper Jurassic to Miocene carbonate platform to basin sedimentation (Crescenti et al., 1969). During the Chattian to early Messinian interval, a carbonate ramp developed above the former shallow water deposits: in literature this interval is known as the Bolognano Fm (Crescenti et al., 1969), which has been subdivided into various informal members.

Although contrasting interpretations have been proposed for the tectonic evolution of the Majella area and for its deep structural setting, it is generally agreed that the involvement of the Majella domain in the Apennine fold and thrust belt occurred after the end of the early Pliocene and continued at least until the late Pliocene (e.g., Scisciani et al., 2002). According to Patacca et al. (2008), the structural elevation of the Majella massif had to be modest during the late

Pliocene while its strong uplift has been passively produced during the early Pleistocene by the growth of a deep seated back-thrust located in the footwall of the Majella basal thrust.

BOLOGNANO FM.: STRATIGRAPHIC ARCHITECTURE AND STRUCTURAL SETTING

The Bolognano Fm (from "Fundum Belonianum") is dominated by heterozoan skeletal carbonates, that were deposited into a wide middle to outer carbonate ramp depositional environment within the oligophotic to aphotic zone, with reworked inner ramp material swept from the shallowest zone and re-deposited into the middle ramp environment. The sedimentological characters of these heterozoan carbonates (dominated by grain supported textures, low percentage of mud and silt fraction, low percentage of aragonite grains) resulted in a combination of petrophysical properties that make them a good potential carbonate reservoir.

The Bolognano Fm consists of shallow-water carbonates that interfinger with marly deposits (Fig. 4). The basal unit is represented by *Lepidocyclus* Calcarenites 1 with thickness ranging between 20 m up to 50 m. This unit represent a carbonate ramp. The inner ramp does not crop out.

In the middle ramp a wide submarine dune field developed that interfingers with bioturbated and horizontally bedded deposits in the outer ramp. The skeletal assemblages is dominated by larger benthic foraminifera with an increasing amount of bryozoan colonies moving towards the outer ramp.

The *Lepidocyclus* Calcarenites 1 are overlaid by bioturbated, bioclastic planktonic foraminiferal marly limestones (Hemipelagic Marls in figure 4). Chert nodules occur in some horizons. This unit has a thickness ranging between 8 and 25 m and it is overlaid by another cross-bedded unit, the *Lepidocyclus* Calcarenite 2.

The *Lepidocyclus* Calcarenite 2 show similar compositional and sedimentologic characters of the basal *Lepidocyclus* Calcarenites 1. Also the *Lepidocyclus* Calcarenites 2 are characterized by a wide submarine dune field developed under a downslope oriented current (Fig. 5). The thickness of this *Lepidocyclus* unit ranges between 2 and 50 m in the north-eastern sectors. The *Lepidocyclus* Calcarenites 2 are overlaid by cross-bedded bryozoan calcarenites in the Orfento valley and by hemipelagic marls and marly limestones in the north eastern sector.

The cross-bedded Bryozoan Calcarenites are dominated by bryozoans, planktonic and small benthic foraminifera, mollusc and echinoid fragments. The hemipelagic marly limestones to marls are rich in planktonic foraminifera and are informally known as *Orbulina* Marls. Both these units show a wedge shape geometry.

The last shallow water-unit lies unconformably above the *Orbulina* Marls and it represented by the *Lithothamnium* Limestone. The *Lithothamnium* Limestone consists of up to 30 m of limestones to marly limestones with abundant red algal nodules. Also this unit is overlaid by approximately 30 m of hemipelagic marls.

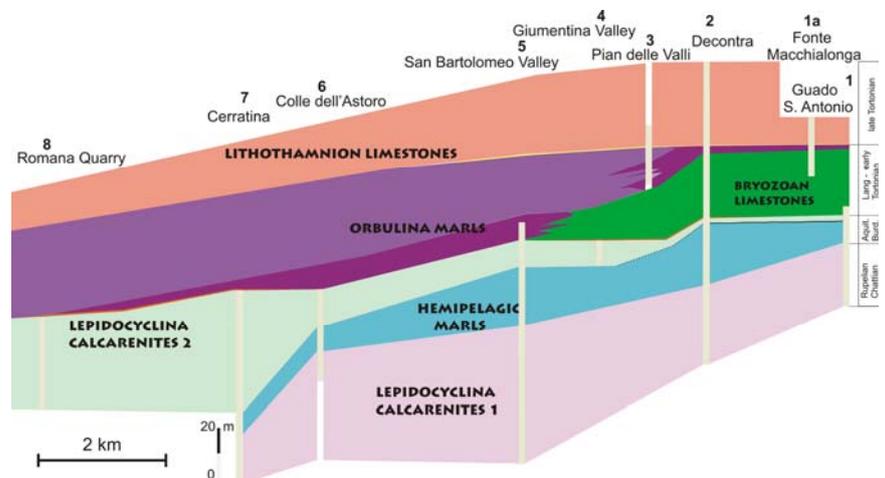


Figure 4: Stratigraphic architecture of the different Bolognano Fm informal members.

High values of connected primary macroporosity (up to 30%) characterize the *Lepidocyclus* Calcarenes 2, while cementation is responsible for porosity reduction (8 to 16%) in the *Lepidocyclus* Calcarenes 1 and in the Bryozoan Calcarenes (Fig. 6). In these units two main types of macropores have been recognized: intergranular and intragranular. In the marly lithologies (Hemipelagic Marls, *Orbulina* Marls and *Lithothamnion* limestone) the high percentage of matrix is the key sedimentologic factor responsible for low values of scattered macroporosity and microporosity (up to 8%).



Figure 5: The AcquaFREdda mine is excavated along strata in the upper portion of the cross-bedded *Lepidocyclus* Calcarenes 2.

Our study area is crosscut by several fault systems, mainly NW-SE trending, with both normal and strike-slip components of movement (Fig. 3).

Available field evidences suggest that at least some of these faults may have developed as normal faults during the flexural bending of the lithosphere responsible for the development of the Lower Pliocene foredeep basin.

During the following growth of the Majella

anticline, as also proposed by Agosta et al. (2009), oblique normal faulting developed by shearing of pre-existing structures (e.g., pressure solution seams and deformation bands). With the uplift and exhumation of the Majella structure, deformation mechanisms evolved to opening mode failure with linkage of slip surfaces and brecciation and ended with strain localization around major slip surfaces.

CONCLUSION

Although some of our analysis are still in progress, the following conclusion can be drawn.

1) The carbonate ramp environment provided the right condition for the deposition of an effective reservoir rock (*Lepidocyclus* Calcarenes 2) with

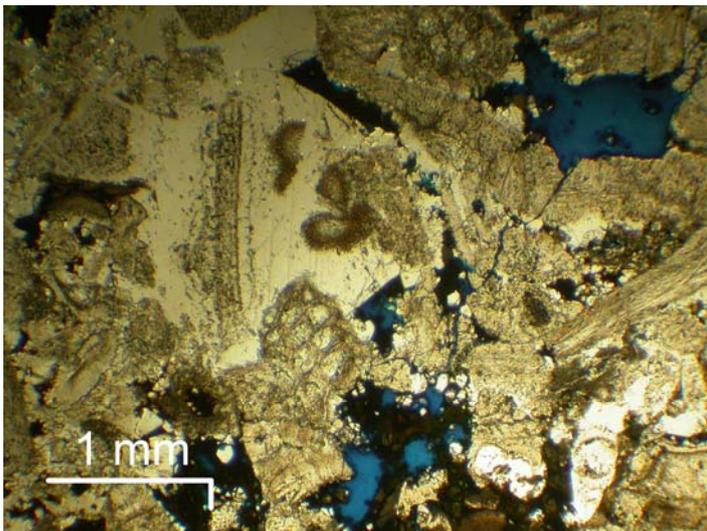


Figure 6: Microphotograph of sample from *Lepidocyclus* Calcarenes 2 unit. Echinoid plates and bryozoan colonies are common components. Diagenetic features indicate burial diagenesis. Echinoid plates show overgrowth of syntaxial cement.

high percentage of well-connected macroporosity (30%) and seals (e.g., *Orbulina* Marls) with a reduced macroporosity (3-8%).

(2) The deeper well drilled in the area (Caramanico 1 well, Fig. 3) proved the absence in the study area of the late Triassic source rocks (e.g. Burano Fm.) responsible for the genesis of northern Majella hydrocarbons. Since, according to Mattavelli & Novelli (1990), this source rock reached the oil window at depths, ranging between 5000-6000 m or more (during the rapid burial related to the formation of the Pliocene foredeep basin), a lateral southward migration from the northern area, where other oil occurrences are known, can be proposed.

3) Migration likely occurred during the early stages of growth of the Majella anticline in Lower Pliocene following an early expulsion of the probably over-pressured early generated heavy oils inside late Triassic source rocks (Mattavelli & Novelli, 1990).

4) Some structural blocks in the northern part of the Majella anticline are found locally filled with hydrocarbons, both in the rock's matrix and in fractures, while hydrocarbon migration was likely essentially driven by faults zones.

5) After the de-activation of the Majella basal thrust, the development of other deep-seated thrust-related structures located in its footwall caused the final strong asymmetric uplift of the Majella Mountain. This process led to the present day overall regional northward dip of about 10-15° and to the exhumation of the petroleum accumulations in the north-western Majella area.

ACKNOWLEDGMENTS

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Bucharest AAPG SC Summer Project

Depositional Settings & Hydrocarbon Systems Part III

Petroleum Play Potential at the Contact of Moesian Platform with the Carpathian Orogeny

BACKGROUND

Successful collaboration between chapters is key to their development and this project, now in its third year, unites students from Romania and Hungary to do just that. AAPG Student Chapters from; the University of Bucharest (Romania), "Babes Bolyai" University of Cluj (Romania), "Eotvos Lorand" University (Hungary), and the University of Miskolc (Hungary) came up with the idea of a series of workshops comparing the petroleum systems from the Carpathian Area, Moesian platform and Pannonian Basin.

In 2011, the Cluj Student Chapter organized the first phase of this project in the Transylvanian Basin (Romania), followed by the student chapter from Eotvos University who organized the 2012 phase near Lake Balaton, Hungary. In 2013 the Bucharest Student Chapter took the initiative, arranging a third phase of the project, this time focusing on the petroleum systems formed within the Moesian, Schytian and Moldavian platforms (Romania), and their contact with the Carpathian Orogeny and the Black Sea province.

40 students participated in 2013: 8 from "Eotvos Lorand" University (Hungary), 6 from University of Miskolc (Hungary), 6 from "Babes Bolyai" University of Cluj (Romania), 4 from "Alexandru Ioan Cuza" University of Iasi (Romania) and 16 from University of Bucharest (Romania).

WORKSHOP

To kick off the event the organizing team hosted an Icebreaker Party. This was held at "GEOBAR"; a bar opened by a former Bucharest AAPG chapter president, Cezar Iacob.

The next day was devoted to technical presentations delivered by industry representatives: Dr. Csaba Krezsek from OMV – Petrom gave the presentation "Petroleum Geology of the Eastern Carpathians" at "Petrom City". Dr. Rodica Negulescu from Prospectiuni S.A. then followed with a talk about "Romanian Oil and Gas Exploration Potential" in the "Vasile Lazarescu" conference hall in the University of Bucharest. Finally Mr. Gelu Gatej and Mr. Dan Rata gave us a general presentation about Chevron, then introduced the natural shale gas concept and talked about the extraction procedures and the associated risks. The day ended with a visit to "Parliament Palace" and the old part of the Bucharest, known for its stunning architecture and cozy pubs.

FIELD TRIP

The first three days in the field were coordinated by former sedimentology professor, Dr. Cristina Panaiotu, who guided us through the carbonate deposits of the Moesian Platform – South & Central Dobrogea – describing the geology of the area, the types of carbonate reservoirs that could exist and how these may have been affected by diagenesis.

One of the main objectives of this project was to improve the communication skills of the students and develop their capacity to work with others, so the students were divided into teams. During the first three days of field work, each team made its own observations and then one student from each group had to present their conclusions to the other teams.

The last two days were spent in the Eastern Carpathians, Lepsa area, Vrancea County, with Dr. Relu Roban and Dr. Csaba Krezsek from OMV – Petrom. In this part of the field trip we were challenged to observe the tectonic events that led to the formation of the Carpathians and their effects on the depositional settings and hydrocarbon systems on this area. The students remained in their teams and, along with making observations, the students then offered their opinions about the reservoir potential of the outcrops.

CONCLUSIONS

The 3rd phase of this ongoing project achieved its goals, enabling students to gain a better understanding of how tectonic events impacted the evolution of the adjacent sedimentary basins in relation to the Carpathians and the Moesian Platform.

The final evening was held in the same place as the Icebreaker Party. It was a well deserved reward for the time and patience shown by the students and especially the coordinating professors.

ACKNOWLEDGMENTS

We would like to write a few words in order to show our sincere appreciation for all those who have given great support throughout the entire project. As expected, AAPG Europe have proved to be a reliable sponsor and also an understanding and confident collaborator and for that we owe them our sincere gratitude. We are very thankful to Chevron, who have been actively involved in organizing our project, both financially and also academically through the technical presentation offered by several company representatives. Two important partners, Petrom member of OMV group and Prospectiuni S.A., have offered a great support and held technical presentations during the event. Finally, all of this would not have been possible without the involvement of the Faculty of Geology of Geophysics, University of Bucharest and the Geological Society of Romania, towards which we would like to express our respect and gratitude.

PHOTOS

Left: Group photo at Nicolae Balcescu – limestone quarry

Right: Group photo at Lepsa Waterfall



New student chapter at the University of Oslo!

Whilst studying Petroleum Geosciences in a country where hydrocarbons contribute significantly to GDP, a group of PhD and Masters students at the University of Oslo began to wonder why the University of Oslo did not have an AAPG chapter. As all of these particular students had previously studied in universities with very active chapters and were also long time members in the AAPG, they took the initiative and formed their own chapter. Here they describe how and why they founded their chapter, what they have achieved so far, and what they hope to achieve in future.

“Founding our University of Oslo (UiO) AAPG Student Chapter”

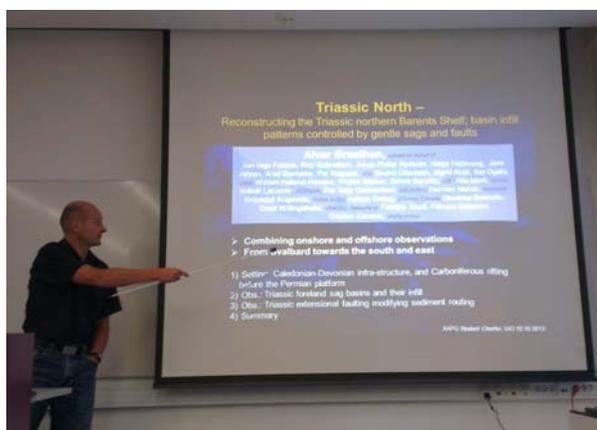
By Steven Mueller, Aatisha Mahajan & Oluwakemi Yetunde Ogebule

aapg-chapteroslo@geo.uio.no

The reasons for founding our chapter are multifold. We hope to integrate different geoscience disciplines and provide access to recent scientific contributions from the department and international academia to students. We also plan to increase industrial cooperation with the UiO students and aim to provide opportunities for those keen to run the chapter and also test teamworking and leadership skills.

The executive committee of our chapter consists of five people:

- President Steven Mueller (MSc in Integrated Petroleum Geosciences from the University of Aberdeen, now doing a PhD in biostratigraphy)
- Vice-president Aatisha Mahajan (MSc in Geosciences from Heriot Watt University, doing a PhD in Structural Geology and Basin Analysis)
- Secretary Mohsen Kalani (Masters in Sedimentology and Sedimentary Petrology from Bu-Ali Sina University, Iran, doing a PhD in CO₂ Seals)
- Treasurer Oluwakemi Yetunde Ogebule (Masters from Heriot Watt University now doing a PhD in Petroleum Geosciences).
- Tauqeer Ahmad Saadi, a Master’s student at UiO who joined us during our formation as our Master-students’ representative.

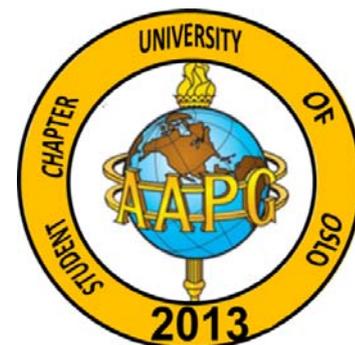


Prof. Alvar Braathen giving a talk about the Triassic northern Barents Shelf.



Roy H. Gabrielsen giving his talk about structural geology.

UiO AAPG Chapter logo.



To create the chapter, a faculty advisor was needed and Prof. Jens Jahren very kindly agreed to take on this role. We are very grateful to him for his support and for always being available for advice.

In just one month we’ve been able to double the number of members by recruiting new students with more diverse and international background, from around 10 different countries. We also organized the existing AAPG members located in the department. At present our main focus is in recruiting new members, mainly master students.

We have already established a distinguished lecturer series as a lunch time seminar. To start we invited and welcomed Prof. Alvar Braathen (University Centre in Svalbard, UNIS) who presented a talk titled “Reconstructing the Triassic northern Barents Shelf; basin infill patterns controlled by gentle sags and faults”. For our second seminar we invited Prof. Roy H. Gabrielsen (University of Oslo) to talk about “The Use of Analogue Models in Structural Geological Studies”. Both seminars were highly successful with a high attendance from students and senior researchers. Besides the lecture series we are also in the process of setting up a notification board with our sister society the SEG Student Chapter Oslo where we announce upcoming meetings and provide students with general information about our activities. We also try to use social media to promote our activities (e.g., @AAPG Oslo).

Currently, we are working on finding a corporate sponsor to support our chapter and are hoping to increase the activities within the department in accordance with the original mission of the AAPG which is to promote scientific research and to advance the science of geology.

Finally, provided we can get support from our faculty we are hoping to send a team for next year’s Imperial Barrel Award competition. An abstract for the 2014 AAPG Annual conference in Houston submitted by our chapter president was accepted and he will represent the Oslo AAPG Chapter there. In future we hope to continue to provide talks in our department, enhance the interaction between industry professionals and students, and establish contacts with fellow chapters in Norway and around the world.



Group photo of the UiO AAPG Chapter (from left: Tauqeer Ahmad Saadi (Master-Representative), Aatisha Mahajan (Vice-president), Mohsen Kalani (Secretary), Oluwakemi Yetunde Ogebule (Treasurer), and Steven Mueller (President).

AAPG-PGK Young Professionals Chapter re-launched in the Netherlands!

In the Netherlands Young Professionals have joined forces across the petroleum geology to run a joint AAPG and PGK (Petroleum Geologische Kring) YP Chapter. The Chapter was re-launched in early 2013 with a program of events aimed primarily at Young Professionals, but also at Students. The key aim of the AAPG-PGK YP NL is to enhance the personal and professional development of young professionals based in the Netherlands, working in the petroleum industry.

WHY DID WE RE-LAUNCH THE AAPG-YP CHAPTER?

The AAPG-PGK YP Chapter brings together early career workers in the petroleum industry, students and more experienced industry professionals. These events provide an opportunity for informal networking, as well as support for young professionals developing their careers within the petroleum industry. The Chapter provides a great opportunity for members to build personal and professional networks and to take part in discussions and workshops. It aims to work closely with the existing AAPG\PGK student chapters to host events for both young professionals and students.

WHAT SORT OF EVENTS DOES THE CHAPTER HOST?

Since the 2013 re-launch the Chapter has hosted three types of event; formal workshops, visits to places of interest and informal social sessions.

- The first session in March was entitled 'My Career' and commenced with a series of presentations from individuals talking about their career paths. The presentations were followed by interactive breakout sessions, where the focus was on sharing experiences and different strategies for career development.
- In May the group visited Amsterdam for a walking tour to learn about the types and origins of various building stones found in the city, by the Dutch author Wim Dubelaar. The tour was followed by a social in Amsterdam.
- In November the group ran a CV workshop at the University of Utrecht. The aim of this workshop was to provide guidance on the tailoring of CVs and also to provide participants with 1-1 feedback on their own CVs.

In future the group would like to hold events including, professional workshops, fieldtrips and social evenings and welcomes suggestions from other Chapters.

WHO ARE WE?

There are YP members from Shell, TNO, Schlumberger, GDF Suez & SGS Horizons. There is also good participation from the AAPG Student chapters from universities in Delft, Amsterdam and Utrecht.

The AAPG-PGK YP Chapter is currently run by a team of four: Jo Venus, Erik Sens, Indira Shatrybayeva and Viki Wood. Their profiles can all be found on LinkedIn.



Author Wim Dubelaar talking about the geology of the Amsterdam building stones



AAPG Member Herman Darman shares his experience with participant at a CV workshop

AAPG Student Chapter Field Trip in the Dolomites – July 2013

By Viktória Ünnepe, Zoltány Teczely, Lilla Tőkés



Our enthusiastic Italian guide

In late July 2013 members of the AAPG Eötvös Student Chapter together with participants from the AAPG Student Chapters of Bucharest, AGH University of Krakow, Miskolc and Cluj-Napoca began a 6 day field trip to the Dolomites, in the Southern Alps of Italy. This area was chosen because this region and Hungary's Transdanubian Range share a similar geological evolution.

The week primarily consisted of excursions to the surrounding mountains and valleys as well as field lessons given by Professor Piero Gianolla from the University of Ferrara and Professor János Haas, Faculty Advisor of the AAPG Eötvös University Student Chapter.

27 students from the invited chapters travelled by bus from Budapest to the Dolomites. After a long trip we arrived to Canazei at night and pitched our tents. Our camp site was located in a little town surrounded by the mountain peaks of the Dolomites, many over 2000m high.

Each day we visited different places, covering a large part of the region. The succession of outcrop stops mostly followed the chronology of the area; this way we gained an insight into the paleogeographic evolution. We had the chance to learn about carbonate sedimentology and sequence stratigraphy, with the beautiful landscapes of the Dolomites serving as the backdrop.

On the first day we visited the Bletterbach Canyon, known for its spectacular Permian outcrops and plant remains, where we learnt about Upper Permian successions. The thick Upper Permian deposits display features of an early-rift succession and we got to see how the deposition environment changes from continental (Val Gardena Sandstone Formation), to evaporitic and carbonate deposition (Bellerophon Formation).

On the second day we targeted the Middle Triassic Latemar platform and the surrounding basins, where we could study the carbonate sedimentation and sequence stratigraphy of a Triassic platform. With the help of our lecturers we could recognise the correlation between the Middle Triassic basinal deposits and the Latemar platform. The next day we continued to examine the platforms and basins with the Upper Triassic Sella isolated platform and its surroundings and admired its radial progradational geometry.

We finished our fieldtrip with visits to outcrop of the Karnian Cassiani platform carbonates, the Heiligenkreutz and Travenanzes formations and the Norian peritidal Dolomia Principale sequences. We celebrated the end of the field trip with a party at the camp site where we had the opportunity to taste the national drinks of the other chapters.

Every locality provided stunning views and everyone had their personal favourite. Each evening we socialized and by crossing language barriers we created an international yet relaxed mood. We had wonderful weather during the field trip, which meant that tents proved to be comfortable accommodation.

Altogether it was a very useful as well as spectacular trip where we not only saw the geology of the Dolomites but learnt how to make geological observations of palaeoenvironments and gathered lifelong field experiences. The impressive outcrops of the Dolomites showed us structures we had never seen before in Hungary. Last but not least we formed new links between the participated student chapters and enjoyed ourselves together. Finally we would like to express our gratitude to the AAPG and MOL for their support of our trip!



Group photo - Five chapters together (in front of Tofane)

AAPG Budapest Education Days – 5-6th September 2013

By: Attila Balázs

After the success of the 2012 Budapest Education, the Eötvös Student Chapter of AAPG worked to organize the 2013 Budapest Education Days, with the support of the MOL Plc. The aim of the Education days was to participate in petroleum geology-related short courses presented by experts from both the regions' universities and oil companies. In the audience were university students and young professionals from Poland (**AMU Poznan SC AGH University SC from Krakow**), Romania (Bucharest SC), Brazil and of course Hungary (Eötvös SC, Miskolc SC, Szeged University, MOL Plc., Wildehorse Energy). Our student chapter was represented by several members.

The first day began with two structural geology themed presentations. Firstly Bruno Tomljenović from the University of Zagreb, who talked about the structural styles and tectonic evolution of the Dinarides and the Pannonian basin of Croatia and secondly László Csontos from MOL Oil and Gas Plc., who talked about structural geology case studies from Kurdistan (Iraq). In the afternoon session the focus switched to sequence stratigraphy with former PhD student Peter Vail and then Gábor Vakarcs (Kuwait Energy) reviewing siliciclastic sequence stratigraphy. Exercises to support the topics presented were then undertaken.

On the second day, we had the opportunity to examine the structural geological features of the Gerecse and Vértes Hills by visiting some outcrops with László Fodor and Márton Palotai, experts in this area. Here we had the opportunity to observe the important Mesozoic deformation phases of the evolution of the Transdanubian Central Range.

We hope that we will have the chance to organize the Budapest Education Days in future years because was an excellent opportunity for university students, young professionals and industry experts to meet and learn from each other.



Fieldtrip participants in front of a folded sequence.



Theory & practice of the sequence stratigraphy by Gábor Vakarcs.



Introduction to the AAPG - University of Aberdeen October 2013

The Aberdeen Student and Young Professionals Chapter recently held an event entitled 'Introduction to the AAPG' at the University of Aberdeen. The evening introduced new geoscience students to the services AAPG can offer them and also gave a flavour of working life within the oil industry. The event was open to undergraduates, MSc and PhD students from the University and there were over 50 attendees.

The evening began with the Student Chapter elections during which Larissa Hansen and Oluwarotimi Alabi were elected to the positions of Secretary and Treasurer respectively. The event also marked the last duty of President Thomas Haines who has handed over the reins to Abdullah Hussein. The University thanked Thomas for his hard work with the AAPG Student Chapter and wished him every success as he finishes his PhD and moves onto the next stage in his career.



Past president Thomas Haines introducing AAPG



New president Abdullah Hussein greeting students

Two young professionals gave presentations at the event; James Archer of Chevron and Tom Sandison of Shell. Both shared their experiences within the industry so far and gave advice to students looking to make the transition from academia to industry.

James was first to speak and covered a large range of topics including; how he got his current job, what skillsets and competencies energy companies are looking for, and also providing some great tips for applicants. He also included a technical aspect to his talk taking the students through the interpretation of a seismic section. James highlighted how important it is to have a scientific approach to data interpretation and also described some of the thought processes interviewers often hope to see in candidates. The example shown was large mounded feature which many had interpreted previously to be a carbonate accumulation prior to its drilling. However James showed with correct observations that this feature is most likely of igneous origin and gave the students a lesson on "how not to drill a volcano..."

Tom was second to speak and shared his experience working with Shell over the past 5 years. His jobs roles have included working as a field abandonment geologist, a wellsite geologist in the Netherlands and a project geologist for some of Shells wells in the Central North Sea. He talked about the time he was woken up at 4 am to make the call on whether or not to TD a well, as well as some of his top application tips ("make sure you do your research on the company you are applying for!") and some funny stories about his first job interviews.

The talks were followed by more informal discussion over pizza with more young professionals in attendance to chat to the students. This gave students a chance to ask the questions they were a little too shy to ask during graduate recruitment presentations, as well as enjoy some free food.



James Archer - "How not to drill a volcano"



Tom Sandison - Informal Q & A session

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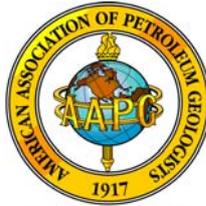
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