



Focusing services on local needs



John Underhill
President EAGE 2011–12

John Underhill, president EAGE, writes: As new president of EAGE for 2011–12, I am very pleased to be able to introduce myself to our members in the Middle East region via this newsletter. We have of course recently held our Annual Meeting in Vienna, which I know some of you attended. I can report that the event was an outstanding success on every level – an excellent Technical Programme, well-supported Exhibition, the biggest Student Programme ever, not to mention a wealth of high quality workshops, courses

and field trips, and not forgetting our legendary Conference Evening which once again lived up to its billing. I encourage as many of you as possible to make the trip to Europe to this annual event, which next year will be held in Copenhagen. It is an amazing opportunity to deepen your knowledge about current geoscience and engineering disciplines, find out where research is leading us next, and of course meet like-minded professionals from around the world.

From the perspective of the EAGE Board, I can say that we have been very encouraged by the move to increase our profile in the Middle East in order to better serve members in the region. The now well-established office in Dubai has proved a very effective focus for our activities, the scope of which continues to expand where we perceive a requirement or a geoscientific need is recognized. The Regional Council has been extremely helpful in this regard, coming up with proposals for Middle East oriented events. In 2012, for example, we are considering a workshop hydrogeological issues in Jordan, and an event focusing on the interests and issues for women and students in the geoscience community. With the cooperation of the Regional Council we are also tailoring the next Middle East EAGE Education Days to ensure that it meets the specific interests of members and their organizations. We will also be participating fully in GEO 2012.

We also have to thank the Regional Council for its part in advising how we can reach out to more geoscientists and engineers with the portfolio of services we have to offer and the networking opportunities that a global association of our size presents. These efforts have already led to a significant increase in our membership in the region, and we are now seeking to develop and support geoscientists in countries such as Jordan, Iran, Iraq, Qatar, and Yemen where we believe we are under-represented.

Al Ain to host international conference

Al Ain, UAE is all set to host the First International Conference on Engineering Geophysics (ICEG) 2011. The United Arab Emirates University (UAEU) and Al Ain city municipality in association with EAGE are presenting the event on 11–14 December 2011. Preparations are well underway for the inaugural conference and the venue will be the newly opened IT auditorium of UAEU.

The aim of the conference is to provide participants and Abu Dhabi communities with an understanding of state-of-the-art and recent/ongoing technology development pertinent to engineering and environmental geophysics. The conference is intended for all interested professionals and academics from the geoscience community.

In addition to the three days of technical sessions, short courses, and exhibition, some exciting additional activities are available for all fully registered delegates of the workshop.

Read more on p. 2 ➤

Trivia Question

What is the name commonly given to the liquid used in drilling a well?



- A - Syrup
- B - Black gold
- C - Hole Milk
- D - Mud

Answer on p.6

Read more on p. 2 ➤

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We are very hopeful too, from contacts and discussions underway, that we will be able to bring some important new Associated Societies into the EAGE family, for example, in Iran, Iraq, Kuwait, and Oman. With the help of the Regional Council, we are also enjoying some success in universities and other academic institutions across the region, encouraging the creation of EAGE Student Chapters which should be up and running in 2012.

“ I am looking forward to seeing some of EAGE’s Middle East activities first hand at some point during my year in office. ”



These are all very exciting developments, and I am looking forward to seeing some of EAGE’s Middle East activities first hand at some point during my year in office. At this stage I would just like to congratulate the Regional Council on its ongoing work on EAGE’s behalf, thank our local team operating in the Dubai office, and earnestly hope that the news and information in this publication is helpful to members. As ever your feedback to the office will be welcome and you can always contact me personally (E-mail: jru@staffmail.ed.ac.uk).

Getting up to date with Learning Geoscience

One of the EAGE initiatives which has enormous potential for EAGE members around the world is Learning Geoscience. It is being launched as a service that can benefit people at any stage of their career. Visitors to the EAGE Exhibition area in Vienna had the opportunity to visit the Learning Geoscience booth and find out about the website (www.learninggeoscience.org) and the opportunities it offers.

The site provides EAGE members detailed information on all education related events organized by EAGE.

It also offers easy access to a broad spectrum of online learning: EAGE e-courses and e-lectures. This is a free service to EAGE members. So the best advice is to check it out!



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Al Ain to host international conference

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These activities are being organized by the UAEU and the municipality of Al Ain city.

An afternoon trip to Jabal (Arabic for mountain) Hafit is one option available to all conference delegates. The city of Al Ain lies at the northern edge of the mountain which rises about 1160 m above sea level. The anticline structure has been formed during the last 50–30 million years by the late Alpine orogeny and related development. The rocks house a variety of interesting marine fossils in addition to caves, fractures, faults, and large crystals of minerals. The field trip will be concluded with a dinner at the mountain top.

Conference delegates will also be entitled to visit the palace of His Highness the late Sheikh Zayed Bin Sultan Al Nahyan. Built in 1937, the palace was Sheikh Zayed’s residence in Al Ain until 1966, before being converted into a museum and opened to the public in 2001. Dinner will follow after the guided visit.



Jahili Fort, Al Ain.

On the evening of the final day (14 December 2011), a desert safari trip is also being planned to conclude the conference activities.

Registration is now open! Further information on the conference programme and social activities are available on the EAGE website (www.eage.org). We hope to see you in Al Ain!

Sign up now 2012 EAGE membership!

Believe it or not, it is almost time to renew your EAGE membership for 2012. Membership is on a calendar year basis, therefore all fees have to be paid before 31 December 2011. From October you can start renewing your membership via EAGE's website. It's easy, fast, and secure! (Go to www.eage.org and login to My Account with your membership number and password, click on My EAGE and select 'Renew Membership'). For those of you who are still in doubt about what the Association offers, here are some good reasons to renew your membership today.

As a member you will receive every month EAGE's flagship magazine *First Break*, filled with technical articles, special topics, industry news, reports on EAGE past and upcoming events, and more. In addition, you can choose one online subscription to one of EAGE's scientific journals (*Geophysical Prospecting*, *Near Surface Geophysics*, *Petroleum Geoscience* or *Basin Research*), and get free access to EarthDoc, EAGE's online geoscience database with over 37,000 scientific papers which you can search by author, topic, keyword, and more.

EAGE members always register at discounted rates, both for the workshops and for the larger events worldwide. EAGE's Annual Conference &



Entrance to Vienna 2011.

Exhibition attracts over 6000 geoscientists and engineers from all over the world. In 2012, Copenhagen (Denmark) will host this event from 4-7 June. And don't forget the online EAGE Bookshop. It offers more than 600 titles, and members receive discounts on all books. Then there's the new EAGE Education website, Learning Geoscience, which offers geoscience courses

on different topics and E-lectures starting from 2010. All this is included in your membership fee.

Staying (or becoming) a member is a clever step to take. You will be up-to-date with geoscience related news and upcoming events, and stay part of a professional network of over 15,000 geoscientists and engineers.

EAGE and AAPG join forces for workshop on tight gas reservoirs

Dubai has been chosen as the location for the EAGE/AAPG Middle East Tight Gas Reservoirs Workshop, to be held from 30 October – 2 November 2011. Registration for this event is now open!

Tight gas reservoirs of the Middle East have increasingly become targets for exploration assessments during the last few years as they possess the potential for substantial gas resources. With interest at an unprecedented level, an initiative for a series of workshops to address all aspects of the future of tight gas in the Middle East was launched. Two successful workshops were conducted in 2009 and 2010, and this 2011 workshop will follow on from the previous successful events.



Attentive participants at the 2010 workshop.

The workshop will address all E&P aspects of tight gas reservoirs, but will concentrate particularly on the area of integration between G&G and engineering. A new addition to this year's workshop will be discussion of the economics of tight gas resources in the Middle East. The workshop will include a mixture of presentations and group discussions with ample time for interaction among the participants. With attendees from North America, Europe, and East Asia, the workshop is expected to be a great opportunity for exchanging experience and knowledge as well as for having fruitful discussions.

For more information on the workshop and the online registration form go to www.eage.org.

World class workshop will rock Dubai!



Some of the world's experts on rock physics and quantitative geophysics are coming to Dubai early next year. The occasion will be a workshop being held for the first time in the region entitled 'Applications and Challenges of Rock Physics for Quantitative Geophysical Interpretation'. Event location will be The Palace Hotel Old Town, Down Town Dubai.

“ The technical programme includes presentations from some of the most respected speakers on rock physics and quantitative geophysics. ”

Rationale for the event is that the E&P industry is being increasingly challenged to explore more unconventional reservoirs such as heavy oil, shale gas/oil, tight reservoirs, and fractured reservoirs. Estimation of reservoir properties using surface seismic data, married with wells and

engineering data, is gaining momentum in the industry as the way forward with rock physics seen as the link between seismic and reservoir properties. This is putting pressure on the rock physics community to provide accurate and more complex rock physics solutions and models.

The workshop will bring together experts in rock physics and seismic inversion as well as general quantitative geophysics to discuss these evolving challenges for the E&P industry. The event serves as a good venue for participants coming from all over the globe to share their experience and exchange new ideas with regard to the utilization of rock physics and quantitative geophysics in general to optimally develop and/or explore these challenging reservoirs.

The technical programme includes presentations from some of the most respected speakers on rock physics and quantitative geophysics including Per Avseth (Odin Petroleum) and Tor Arne Johansen (University of Bergen), and Mike Hall (Geokinetics).

Per Avseth is a geophysical advisor at Odin Petroleum in Bergen, Norway, and adjunct professor in geophysics at the Norwegian University of Science and Technology (NTNU) in Trondheim, Norway. His research interests include applied rock physics and AVO analysis, for quantitative

seismic exploration and reservoir characterization. Tor Arne Johansen is a full professor in reservoir geophysics at the Department of Earth Science, University of Bergen, and a scientific advisor for NORSAR. His research interests cover remote sensing techniques, rock physics, and seismic modelling and processing.

Mike Hall, from Geokinetics (Canada) has over 40 years of experience covering seismic acquisition, processing, interpretative processing, and seismic survey design. He has a strong interest in the use of time-lapse (4D) and multi-component surveys plus accurately imaging the subsurface in depth. His experience covers land, transition zone, OBC, and marine seismic throughout the world. Hall will give a keynote presentation on quantifying pre-stack seismic AVO style attributes and their sensitivity to geology and fluids in two different basins, namely the Gulf of Mexico and the Southern North Sea Gas Basin. The talk will include some elements of pre-stack data conditioning, related to noise and multiple attenuation, along with comparisons between ray theory and full elastic modelling compared with real data.

Dr Salim Al-Rawahi, chief geophysicist at PDO, Oman will give the opening address in Dubai. Dr Al-Rawahi started his career with PDO in quantitative interpretation before he moved to the exploration seismic evaluation team, geophysical data processing, and more recently to operational geophysics.

Commenting on the quality and experience of the contributors, workshop co-chairman Dr Jalal Khazanehdari (Schlumberger) said: 'ME not only contains well over 40% of proven oil and gas reservoirs globally but it has some of the most challenging reservoir rocks such as tight classics, fracture carbonates, oil shale, with even more deep and tectonically and geologically complex reservoir structures. This workshop is an ideal venue to bring together some of the experts from both academic and the oil and gas industry to discuss their experiences and share their knowledge as well as



Regional landscape for geoscientists.

establish a future road map for rock physics and QG.'

In addition to the three day workshop programme a two day short course on 'Explorational Rock Physics and Seismic Reservoir Prediction' will be led by Dr Per Avseth and Prof Tor Arne Johansen. The course will cover the fundamentals of rock physics, ranging from basic laboratory and theoretical results to practical recipes that can be immediately applied in the field. They will show the importance and benefit of linking rock physics to geologic processes, including depositional and compactional trends.

“ We encourage those intending to participate to register their interest by email as soon as possible. ”

Dr Avseth explained: 'Rock physics is really a bridge between qualitative geology and quantitative geophysics. Our geophysical models must be constrained by knowledge from experienced geologists, and our geological interpretation of seismic and well-log data must be made with a good physical understanding of the geophysical observables. In either case, rock physics is essential.'

Registration for the workshop and short course will open online on 1 November. Attendance is limited and we expect the workshop and short course to be fully subscribed. So we encourage those intending to participate to register their interest by email as soon as possible at middle_east@eage.org. Places will be allocated on a first come first served basis.



Where you can meet us

Aside from our many conferences and workshops, in the coming months EAGE staff will also be present at the following events: MEOS 2011, 25-28 September 2011, Manama, Bahrain; IPTC 2011, 15-17 November 2011, Bangkok, Thailand; 20th World Petroleum Congress, 4-8 December 2011, Doha, Qatar; and GEO 2012, 4-7 March 2012, Manama, Bahrain. Over the last two decades, GEO has established itself as the premier forum for presenting and learning about best practices, new developments, and applications in geosciences in the Middle East region. GEO 2012 promises to keep this tradition



ongoing. The theme of the conference, 'Shaping the Future of Geoscience in the Middle East', focuses on the current challenges facing hydrocarbon exploration and production with emphasis on future technology and opportunities.

Parallel to the GEO 2012 conference, an extensive exhibition will take place at the Bahrain International Exhibition and Convention Centre. A diverse collection of exploration and development products, services, technology, and techniques will be on display. There will also be the opportunity to attend specially chosen short courses on 3 and 4 March 2012 at the Gulf Hotel, Manama, Bahrain.

If you are planning to travel to one of these events, please stop by the EAGE booth for up to date information about events, questions about membership (renew your membership!), or simply for a chat. We will be happy to meet you! We will be showcasing new publications from the EAGE bookshop (one of them is 'Seismic Geomechanics' by Jörg Herwanger and Nick Koutsabeloulis). Of course, there will also be free journal copies of all the scientific journals published by EAGE.

Bookshop is font of knowledge

The EAGE online Bookshop offers a collection of well over 600 scientific, academic and specialist publications for professionals, students and anybody who is interested in the Geosciences. EAGE members receive attractive discounts on the books, CD-ROMs, and DVDs available. The wide assortment of publications covers many different fields of study within geology such as: Tectonics, Economic Geology, Environmental, Petrology, Stratigraphy, Marine Studies, Geophysics and Geostatistics. The Bookshop offers several publications related to the Middle East region, such as:

- *Saudi Arabia: An Environmental Overview*
- *The Middle East from Space*
- *Natural Gas Survey, Middle East & North Africa 2011 (NGS)*
- And more..

View our collection and go to www.eage.org/bookshop



The EAGE Bookshop is always present at major EAGE events.

EAGE launches recruitment initiatives for 2012

There has been increasing discussion in the past decade over future recruitment for the oil and gas workforce worldwide. For example, the 'baby-boomer' generation – a highly experienced group of oil and gas professionals – is retiring from the industry. The big economic turnaround and oil company downsizing just before the Millennium caused many prospective graduates to opt for careers in other industries. At the same time, worldwide hydrocarbon reserves are decreasing and oil and gas professionals are facing ever increasing technical challenges. Take all these points into account and include the recent economic crisis, and you will see that solutions are needed urgently.

EAGE has as one of its goals to support the recruitment needs of its 15,000 membership, many of whom are involved in the oil industry. One of its most successful initiatives to date has been the Job Centre, launched in 2006 as a feature of each Annual Meeting. As a result the exhibition floor at the 74th EAGE Conference & Exhibition in Copenhagen from 4–7 June 2012 will include a Job Centre, an area dedicated to recruitment where students, professionals, and company representatives can meet in a relaxed atmosphere and discuss potential career opportunities. At the event, oil and service companies like BP and CGGVeritas have a recruitment booth to present the professional employment opportunities in their companies. According to feedback from Job Centre exhibitors, it is a superb way of meeting and finding potential recruits. Furthermore, they find the quality of the visitors to be very high.

“EAGE wants to play a positive role in recruiting and is dedicated to improving the image of the industry.”

A few months earlier, from 2–5 April 2012, EAGE will organize for the fifth time its bi-annual conference & exhibition in Saint Petersburg. At



Getting the job done at the Vienna 2011 Job Centre.

this event the Job Centre will be part of the exhibition floor. With over 1000 geoscientists from Russia and abroad expected to visit, the Job Centre provides an ideal opportunity for both experienced professionals and starters and recruiters to meet and do business.

EAGE wants to play a positive role in recruiting and is dedicated to improving the image of the industry which is sometimes perceived as volatile in terms of staff job security and also environmentally insensitive in some of its operations. The Association believes it is well placed to facilitate a positive dialogue about the industry's activities and prospects. Our annual Recruitment Special, first published in 2007, plays a role in this process and is read by oil and gas professionals and students worldwide.

Meanwhile EAGE supports its senior members by offering them the opportunity to stay connected to the geoscience world and work through the Expert Alumni website. This organization is supported by several industry bodies, and helps EAGE's senior members to find where they can hire out their knowledge. More infor-

mation can be found at the Career section of the EAGE website.

The website of the Association also has an online job board with available industry jobs (www.eage.org/career). This includes all job advertisements from EAGE's main publication *First Break*, which is distributed to the entire membership every month. In 2012 EAGE plans to do more online. It wants to offer recruiters from oil and service companies more tools to search and find the right candidates. If you are interested in this or have questions, you can contact EAGE's recruitment manager Stefan van der Kooij (recruitment@eage.org).

Trivia answer

D - Mud. Many additives are mixed with water, diesel, or synthetic oil to make up mud. The properties of the mud are very important to the safe and productive drilling of a well.

SEG/EAGE DISC 2011 coming to the region!

In December a number of Middle East locations are due to welcome Julien Meunier of CGGVeritas who is touring the world with the 2011 edition of the Distinguished Instructor Short Course (DISC) sponsored jointly by SEG and EAGE. Title of his presentation is 'Seismic Acquisition from Yesterday to Tomorrow'.

Meunier will be stopping in Muscat on 11 December, Abu Dhabi on 13 December, and Dhahran on 17 December, and all the feedback suggests that this will be an occasion not to be missed.

Meunier joined Compagnie Générale de Géophysique (CGG) in 1973 after obtaining a Bachelors degree in Economics from the University of Grenoble (France) and a Masters degree in Physics from the Institut Polytechnique de Grenoble. He spent four years as a field geophysicist and party chief in various parts of the world, then served as area geophysicist and processing centre manager before taking responsibility in 1996 of the R&D team of the land acquisition product line of CGG, later CGGVeritas. Last year he became geophysical advisor in the land acquisition product line.

Meunier's main research topics in the land acquisition R&D team include 3D acquisition

design, Vibroseis acquisition, reservoir monitoring, and ocean bottom acquisition. He has been granted numerous patents and presented many papers on these techniques. He was invited to participate in the EAGE Distinguished Lecturer Programme in 2005.

Starting point of his presentation is recent acceleration in the evolution of seismic acquisition with offshore wide-azimuth surveys providing images of remarkable clarity. On land, increase in channel count has allowed the use of denser grids leading to significant noise reduction. Both onshore and offshore, the race for bandwidth extension is more competitive than ever. Meunier's course presents these developments as a natural consequence of the conjunction of our need for clearer seismic images and the availability of recent technological advances. The core of the course is the relationship between acquisition parameters and seismic image quality. The course book (which is also included in the attractively priced course fee) can be purchased separately from the EAGE Bookshop, www.eage.org/bookshop. More detailed information and registration for the DISC tour can be found on the EAGE website.

Don't miss these upcoming events in 2012

Thanks to positive feedback EAGE will continue in 2012 with its series of workshops on Geosteering & Well Placement, and Arabian Plate Geology.



Join us in Dubai for the Second Advanced Geosteering & Well Placement Workshop to be held from 18–21 November 2012. Its theme will be 'Welcome to Deep Look Around, Look Ahead Technologies'.

A brand new conference on 'Innovations in Reservoir Modelling' is planned for 25–28 November 2012 in Dubai, UAE, themed 'Integrating Data for Optimum Reservoir Management'.

The Fourth Arabian Plate Geology Workshop on 'Late Jurassic/Early Cretaceous Evaporite-Carbonate-Siliciclastic Systems of the Arabian Plate' will take place in Abu Dhabi from 9–12 December 2012.

More information on these events will be available soon on the EAGE website. We look forward to meeting you there!

PI students at EAGE Annual Meeting in Vienna



The Petroleum Institute student contingent at EAGE Vienna with Prof Karl A. Berteussen and his wife.

Students from the Petroleum Institute, Abu Dhabi report on their participation at EAGE Vienna 2011. This was our first experience of an international professional conference, but we were still able to participate in two different student activities.

First we took part in the first EAGE Field Challenge where we had to present a development plan for a field. Organized in conjunction with TOTAL, the idea of the event was to promote cross-disciplinary geoscience and engineering integration within universities. We were one of eight competing teams from different countries, and although we didn't manage to win, we learned a lot from the experience. It improved our self confidence and gave us a chance to communicate with different students and professionals from other countries.

We also entered the on-site Gequiz and really enjoyed it. During the week we also attended lectures and discussions at the conference and so we gained a good overview on global issues and working techniques in the geosciences and petroleum engineering. Another highlight for us was the field trip around Vienna's famous buildings in the centre of town providing an insight into the stones used in the city's construction over the centuries.

Finally, we would like to thank EAGE for holding the Student Programme, providing the opportunity to be more closely involved in the professional world. We hope that this participation will not be the last and look forward to further occasions.

KFUPM students make fossil visit to southern Germany



KFUPM students hunt for fossils in Germany.

Class instructor Professor Michael Kaminski reports on a geologic excursion to Austria and Southern Germany he led in April with students attending the KFUPM Paleontology course.

Dr Abdulaziz Al-Shaibani, chairman of the Earth Sciences Department at KFUPM said that trip was intended to be the start of a new direction at KFUPM to expose its geology students to different outcrop geology in other countries and collaborate with international universities that have strong geosciences programmes.

The students travelled to Vienna to begin the five-day field excursion to visit the classical fossil localities and museums of Austria and southern Germany. The excursion began with a visit to the Paleontology collections of the Natural History Museum in Vienna, which houses the 'Royal Rock Collection' that once belonged to Austria's benevolent 19th century ruler, Franz Josef I. The Natural History Museum in Vienna provides the visitor with a walk through Geological Time and the History of Life on Earth, beginning with a modern multimedia display about the origins of organic molecules and life on earth, and ending with the extinction of the large mammals at the end of the last ice age between 18–11,000 years ago. This museum is a must-see for all students interested in the history of life on Earth, and is a perfect place to study the evolution of the Earth's biosphere.

The next day we embarked on a driving tour of the Alpine foothills and fore-deep basin on

the way to the Nordlingen-Ries impact crater in the German state of Bavaria, which is now a national 'Geo-park'. The class visited the Ries Impact Crater Museum in Nordlingen, which reviews the formation of the Earth and asteroids, displays examples of different kinds of meteorites, and shows an animated video about the formation of the Ries impact crater.

The class then visited two localities within the crater rim to view fragmented and overturned Jurassic target rocks and the Impactite that settled on top of the crater after the collapse of the incandescent mushroom cloud some minutes after the asteroid impacted.

The next day the class travelled 28 km outside the Ries crater to visit one of the most famous fossil localities in the world – the Quarry and Museum in the town of Solenhofen. This is the site of a quarry that produces the Jurassic 'Lithographic Limestone', which is still exported throughout the world for use by artists who make lithographic prints. We were met by the director of the museum Dr Martin Röper, who proudly showed us some of the interesting new finds from the current year.

After making our observations in the Museum, we visited the Solenhofen limestone quarry where the lithographic limestone is produced, and spent part of the afternoon looking for fossils. We then drove back to Nordlingen, visiting another quarry situated just beyond the rim of the impact crater. At this quarry we saw the contact between the underlying Jurassic limestone

and the ejecta deposit from the Ries crater. We observed the deep scratch marks caused by boulders of ejecta rocks that fell onto the bedrock as a result of the asteroid impact. We looked at the composition of the so-called 'Bunte-breccia', which contains fragments of Precambrian, Triassic, and Jurassic rocks that were thrown out of the crater by the impact.

The next day we drove to Tübingen, stopping to view the Steinheim impact crater along the way. The impactor that struck southern Germany 15 million years ago was a binary object – much like the Levy-Shoemaker comet that struck Jupiter 10 years ago. From Steinheim we drove to Holzmaden, which is the site of the second famous fossil locality in southern Germany – the Holzmaden Quarry and Museum which houses examples of marine reptiles from the Early Jurassic times. After stopping briefly at the Holzmaden quarry, we proceeded to the university town of Tübingen, one of the most famous universities in the field of Paleontology.

We then devoted a day to visiting the Museum of the Geoscience Department of Tübingen University. A visit to the museum starts with a display dedicated to Professor Quensteadt, the mid 19th century scientist who first described the Jurassic stratigraphy of southern Germany along with its fauna. The collections displayed in the Tübingen University museum are too extensive to visit in one day. We also visited the newly-refurbished Paleontological library.

The following day we were treated to a tour of the department's Marine Micropaleontology labs by the chairman of the Geosciences Department, Prof Michal Kucera, who is himself a marine micropaleontologist. The afternoon



Prof Michal Kucera demonstrates sediment cores from the Arabian Gulf to students.

was spent in Dotternhausen, a village some 40 km south of Tübingen, at the site of the Holcim cement quarry. This company has what is perhaps the finest private collection of fossils on display anywhere. The museum specializes in Early Jurassic ammonites, but there are also wonderful examples of marine reptiles found in the Posidonian shales, and an instructive display of the local stratigraphy.

The field trip ended with a visit to the Hohenzollern Castle, some 30 km south of Tübingen – a fairy-tale castle that belongs to the Prussian royal family. This visit was purely for tourism, but the views from the castle are spectacular. We ended the trip with a walking tour of the castle, and returned to Tübingen for dinner at a typical southern German restaurant to discuss what we had seen.

The Paleontology Field Excursion not only gave us a good understanding of the Jurassic environments and life in the Jurassic ocean – but also gave us an idea of some fundamental processes in Earth’s history that affect the evolution of life on this planet.

Outcrops provide a field day for ESG

A rewarding day was spent by members of the Emirates Society of Geoscience (ESG), an affiliate society of the EAGE, when they embarked on a field trip to the Upper Cretaceous Simsima outcrops of Jebel Faiyah and Jebel Rawdah ranges in Ras Al-Kaimah in March.

The field trip was led by Dr Christoph Lehmann from ADMA-OPCO and Drs Hesham Shebl and Henry Ewart Edwards of ZADCO. The four very well exposed outcrops visited by the 25 trip participants provided a variety of carbonate rock types and interesting discussion regarding depositional sequence cycles and their areal stratigraphy, especially when related to the Omani thrust sheets, upon which they were deposited and preserved. The various possible explanations for the sequence and structural history encouraged participants to relate all the four outcrops into an areal solution for the Simsima depositional puzzle. In

summary, an excellent morning and afternoon were spent in the field capped by a sumptuous lunch at the Hatta Fort Hotel.



Spectacular view for field trip.



Well exposed outcrops.

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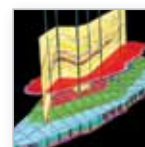
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Saudi Aramco welcomes offshore gas from Karan field

Saudi Aramco says a new chapter has opened in the company's history of managing and executing mega-projects, with the start-up of the Karan offshore gas field. First gas from Karan — the company's first offshore non-associated gas field project — started flowing recently and is being transported by subsea pipeline to the onshore Khursaniyah gas plant.

Karan is the first non-associated gas field in Saudi territorial waters in the Arabian Gulf, 160 km north of Dhahran. It was discovered in 2006 when the Karan-6 well drilled into Khuff formations, finding gas in carbonate reservoirs laid down from 200 to 300 million years ago in the Permian and Triassic periods. With Khuff's gross thickness of up to 1000 ft, Karan's is the thickest Khuff reservoir section ever encountered in Saudi Arabia. The Khuff formation ranges in depth from 10,500–13,700 ft, and Karan lies in medium-depth waters of 40-60 m.

Offshore facilities at Karan consist of five production platform complexes connected to a

main tie-in platform, installed with associated electrical power, communication, and state-of-the-art remote monitoring and control facilities for safe and reliable operations from onshore.

When in full production the field is designed to produce 1.8 billion standard cubic ft per day (SCFD) of raw dry gas by 2013.



Karan offshore gas platform when under construction.

Oman well earns early production status

Swedish company Tethys Oil reports that the onshore Oman drilling programme in which the company is a partner has continued with the drilling and completion of exploration well Farha South-11 (FS-11) on Block 3. FS-11 encountered a total of 28 m of oil-bearing



sandstone. The well has been connected to the Farha South early production system (EPS) to be part of the ongoing long term production test of the area. The measured production rate from the well for the first 12 hour test period was 517 b/d of oil of 39° API oil.

The FS-11 was drilled as a vertical exploration well through both the Barik and Lower Al Bashair formations. The well was drilled to a total depth of 1865 m, 9 km south of the FS-3 well, which produces oil from both the Barik and Lower Al Bashair formations. The FS-11 encountered the Barik at 1287 m depth. A total of 28 m of oil-bearing sandstone was drilled.

Tethys has a 30% interest in Blocks 3 and 4. Its partners are Mitsui with 20% and operator CC Energy Development (Oman branch) holding the remaining 50%.

BGP meets transition zone challenge

Chinese geophysical services contractor BGP has completed an 18 month complex 3D transition zone (TZ) seismic survey for Saudi Aramco without any lost time incidents (LTI) and five months ahead of schedule.

The S53 3D TZ project carried out by BGP Crew 8652 involved 1876 km² 3D seismic on the east coast of Saudi Arabia, which comprises terrains of desert, Gobi, seasonal lakes, and shallow water, along with infrastructures of industrial facilities, airport, oilfields, wharfs, offshore exploration platforms, plus convoluted subsea pipelines throughout the entire area. The complex surface conditions, coupled with a large number of workers and equipment, presented a major challenge.

Three different types of energy sources – vibroseis, explosives, and air guns – were deployed to best accommodate different working terrains.



Companies to explore in Kurdistan region of Iraq

Petroceltic International in partnership with Hess Middle East New Ventures have agreed two production sharing contracts (PSCs) with the Kurdistan Regional Government of Iraq (KRG). The PSCs cover the Dinarta and Shakrok exploration blocks in the central north of the Kurdistan Region of Iraq.

Calendar of key EAGE events

October 2011

30 October -
2 November 2011
EAGE/AAPG • Middle East Tight Gas Reservoirs Workshop: An Integrated E&P Perspective
Dubai, UAE | www.eage.org

November 2011

15-17 November 2011
EAGE/AAPG/SEG/SPE • IPTC 2011
Bangkok, Thailand | www.iptcnet.org/2011/

28 November -
1 December 2011
EAGE • Third Arabian Plate Geology Workshop
Kuwait City, Kuwait | www.eage.org

December 2011

4-8 December 2011
World Petroleum Council • 20th World Petroleum Congress
Doha, Qatar | www.20wpc.com

11-14 December 2011
UAEU/EAGE • First International Conference of Engineering Geophysics
Al Ain, United Arab Emirates | www.eage.org

January 2012

14-18 January 2012
EAGE • Workshop on Applications & Challenges of Rock Physics for Quantitative Geophysical Interpretation
Dubai, UAE | www.eage.org

March 2012

4-7 March 2012
EAGE/AAPG/SEG • GEO 2012
Manama, Bahrain | www.geo2012.com/



April 2012

29 April - 2 May 2012
EAGE • First EAGE Workshop on Iraq - Hydrocarbon Exploration & Field Development
Istanbul, Turkey | www.eage.org

May 2012

20-23 May 2012
EAGE/SPE • EAGE/SPE Tar Mats & Heavy Oil Workshop
Muscat, Oman | www.eage.org

June 2012

4-7 June 2012
EAGE • Copenhagen 2012 - 74th EAGE Conference & Exhibition incorporating SPE EUROPEC 2012
Copenhagen, Denmark | www.eage.org



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