

PETROLEUM GEOLOGISCHE KRING



KONINKLIJK NEDERLANDS GEOLOGISCH MIJNBOUWKUNDIG GENOOTSCHAP **PGK**

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Venue:	PGK's monthly meetings are held at the KIVI building, Prinsessegracht 23, Den Haag. Drinks are served from 17:00 hrs; the lecture starts at 18:00 hrs.	www.pgknet.nl	
Membership:	Apply for membership by contacting the secretariat. The annual fee is €15.- (student fee €10,-)		
Accounts:	Fortis Bank: 88.65.82.733 (PGK, Den Haag)		

MARCH 2005 NEWSLETTER

16 MARCH: MONTHLY MEETING

The next PGK meeting will be on **Wednesday, March 16th, 2005**. As usual, social hour (free drinks) will be from 17:00 to 18:00 hrs. The lecture will be given by **Evert Breman (Fugro-Robertson)** on:

“Petroleum Geology of the East Mediterranean”

Please see other side of this newsletter for the lecture abstract.

APRIL MEETING:

On April 20, 2005 **Rob van Eijs** (TNO-NITG) will give a lecture on with the title **“Barradeel, a mega laboratory on Zechstein salt mechanics”**.

NEW MEMBERS:

Applications for memberships have been received from Rob Lengkeek (ARGO Geological Consultants) and Lars Bellmann (GDF Production Nederland). If no objections are received prior to or during the next meeting, they are automatically admitted as members of our society.

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Monthly meeting: Wednesday 16 March 2005
Address: KIVI building, Prinsessegracht 23, Den Haag
Social hour: (free drinks) between 17:00 and 18:00 hrs
Lecture: at 18:00 hrs

“Petroleum Geology of the East Mediterranean”

Evert Breman (Fugro-Robertson B.V.)

ABSTRACT – In total 20 tcf of gas and about half a billion barrels of condensate have been found in the Nile Delta, mostly in the last two or three years. Another 4 tcf of gas were found in the same period off Gaza and the adjacent Israeli waters. Exploration has been rather intense in the onshore and offshore Nile Delta and onshore Egypt. Other areas such as the offshore North Sinai and onshore and offshore northern Israel and onshore Lebanon have been explored only lightly. No wells have been drilled in the deep offshore of Israel, and all of the offshore Lebanon, Syria and Cyprus.

An assessment is made of the exploration potential of the East Mediterranean on the basis of new 2D seismic and public domain data. For the Mesozoic the area can be divided in a southern sandstone and carbonate province and a central-northern carbonate province. The Tertiary includes Oligo-Miocene continental and turbidite sandstones on the continental margins and on the flanks of the northern thrust belts (in analogy with the Kyrenia Range of Cyprus). Late Messinian fluvial and Pliocene submarine fan sand plays are present in the south and along the nearshore areas of the Levant. The three main source intervals are in the Jurassic, Campanian and Oligo-Miocene. The following play types are present or predicted in the East Mediterranean:

- Karstified Jurassic and Triassic reefal or oolitic carbonates on palaeo-highs, sourced by the Middle Jurassic in the oil window or early gas window on the flanks.
- Jurassic reservoirs in Syrian Arc asymmetric anticlines, formed by inversion of half-grabens along the Sinai-Levant coasts, fractured and karstified, charged by the same source rocks as above.
- Drape of Lower Cretaceous sands and Cenomanian dolomites over palaeo-highs and in Syrian Arc anticlines, charged by Jurassic source rocks.
- Oligocene-Miocene sands in Syrian Arc structures as above or on the flanks or crests of the thrust belts in the north, sealed by Messinian salt or interbedded clays. Source rocks are age-equivalent in the north but there is some contribution from Senonian sources further south.
- Oligocene and Miocene turbidites in the Nile Delta in growth fault structures (rollover structures, tilted fault blocks, slumps and/or basin floor fans, stratigraphic traps, etc.). Oligo-Miocene, Senonian or even Jurassic rocks have generated the gas-condensates and oils.
- Post-salt Late Messinian and Pliocene fluvial palaeo-valley and submarine fan sands in growth fault structures and as stratigraphic traps in the Nile Delta area and offshore Gaza-SW Israel. The sources are as above. This play is limited to the areas with thin or absent Messinian salt. Thick salt forms a major barrier for upward migration. This play is of interest in the south and on the continental slope of the Levant, where the Pliocene-Quaternary overburden is thick.

Please post this page your company's notice board. Members may be accompanied by guests!

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