

PRE-CONFERENCE WORKSHOP AFRICA'S THERMAL REGIME AND ITS IMPACT ON PETROLEUM SYSTEMS

Monday 30 September | Hilton London Olympia

COURSE SPONSOR



There has been increased attention in recent years to Africa's past and present thermal regime, as recent discoveries (particularly those of gas and continuing into 2019) have frequently demonstrated the influence of high heat flow events. This workshop has the objective of improving our knowledge of Africa's thermal history to enable improved predictability of source rock maturity and hydrocarbon phase, particularly by enabling analogue constrained input to basin modelling. There will be four sessions with two speakers each, looking at the themes of the Present Day thermal regime (including presentation of a database with over 2000 points), analysing the Past, hydrothermal events and specifics of deep water West Africa. Each of these will include a discussion session where the limited audience of 40 will be encouraged to share their own experiences.

AGENDA

9.00 - 10.30

What we know/the Present Day. Source rocks of Africa. Present Day thermal regime of Africa and its controls.

Duncan Macgregor (MacGeology) & Christine Yallup (Halliburton)

10.30 - 10.45 | BREAK

10.45 - 12.30

Modelling the Past. Approaches and Pitfalls. High heat flow events on extended and transform margins

Helen Doran (Ola Geoscience) & Tiago Cunha (Integrated Geochemical Interpretation)

12.30-13.30 | LUNCH

13.30 - 15.00

Hydrothermal and Extreme Events. Hot fluids in Kwanza/Senegal Basins. Multiple hot events in Algeria/NW Africa.

Nick Cameron (Geolnsight Ltd) & Duncan Macgregor (MacGeology)

15.00-15.15 | BREAK

15.15 - 16.30

Contrasting Thermal Histories in Angola and Gabon

Roger Baudino (Repsol) & Helen Doran (Ola Geoscience)

Register at www.pesgb.org.uk/africa-2019

PESGB Members | £290.00 + VAT

Non-members | £330.00 + VAT

Please note you can also purchase the workshop as an add-on to your Africa E&P Conference 2019 Ticket

SOCIAL EVENTS

SPEED NETWORKING AFRICA CONNECT

Monday 30 September,
17.30 – 18.30
Kensington Suite,
Hilton London Olympia

NEW
FOR
2019

Start networking early and join us for our inaugural Africa Connect event, taking place ahead the Africa E&P Conference Icebreaker

Looking for a way to meet people outside of your network and establish new relationships with like-minded professionals?

Speed networking is quick, efficient and fun! Particularly designed to facilitate networking between participants with fewer years' experience and seasoned conference attendees, this is a great opportunity to make new contacts through one-on-one focused conversations, each lasting just a few minutes.

Taking place immediately prior to the Icebreaker Reception and open exclusively to participants of the Africa E&P Conference 2019, this is a great opportunity to begin networking early!

Register to attend this free event at
www.pesgb.org.uk/africa-2019

ICE BREAKER

Monday 30 September,
18.30 - 20.30
Westminster Suite,
Hilton London Olympia

NETWORKING RECEPTION

Tuesday 1 October,
17.30 - 19.30
Exhibition Floor, Conference Centre,
Olympia London

MAIN AUDITORIUM

08.30

REGISTRATION & COFFEE

SESSION 1: OVERVIEW & INSIGHT FOR AFRICA

09.20

Welcome & Introduction

09.30

Reserve growth: the impact on exploration performances assessment, and the Africa case
Lorenzo Meciani, Eni SpA

09.55

MSGBC : an integrated approach to accelerate exploration
V.Curinier, TOTAL

10.20

Bringing North Sea Technology to the Ultra Deep Waters Offshore Ghana
Ståle Monstad, Aker Energy

10.45

Controls on Lateral Seal Development in DW Stratigraphic Traps of the Atlantic Basin
Colin Grant, Shell International E&P

11.10

COFFEE & POSTERS

SESSION 2: HYDROCARBON HABITAT OF DEEP WATER AFRICA

11.40

East Africa Gas: Source type or maturity?
Michael Sullivan, ExxonMobil International Limited

12.05

Oil along the East African margin: a regional 3D integrated charge modelling approach
Jimmy Van Itterbeek, Shell International E&P

12.30

Application of "Ranking Biogenic Gas _RGB" tool for evaluating Eastern Mediterranean Biogenic Potential
Sara Camici, Eni SpA

12.55

4D Temperature Modelling of Potential Biogenic Gas Fairways in the Eastern Mediterranean
Thomas Butt, Halliburton

13.20

LUNCH & POSTERS

SESSION 3: ONSHORE AFRICA: UNLOCKING THE POTENTIAL

15.00

Structure and Tectonic Evolution of the Intracratonic Congo Basin – an update
Damien Delvaux, Journal of African Earth Sciences

15.25

Delivering 100% exploration drilling success in Niger: Geological fundamentals and future potential
Bill Wilks, Merlin Energy Resources Ltd

15.50

COFFEE & POSTERS

16.20

Rejuvenating Exploration in the under-explored Southern Termit Basin, Block H, Chad
Lorna Blaisse, Delonex Energy

16.45

Opening new plays in Onshore Côte d'Ivoire. What's the big idea? Lessons learned from East African Rifts
Keryn Simpson, Tullow South Africa Pty Ltd

17.10

EVENING RECEPTION

ORAL PROGRAMME | TUESDAY 1 OCTOBER

CONFERENCE ROOM ONE

08.30

REGISTRATION & COFFEE

INTERACTIVE SESSION: SEISMIC WORKSHOP

09.20

Overflow from Main Auditorium

11.10

Chairman's Welcome

11.20

Hunting micro-continents offshore East Africa and in the West Indian Ocean
Gregor Duval, CGG

11.55

Deepwater Nigeria: de-risking plays through new maturation and charge scenarios
Felicia Winter, AME, TGS

12.30

Insights into the development of the Ghana Transform Margin and its future play potential from newly acquired long-offset seismic reflection data
Neil Hurst, ION

13.05

LUNCH & POSTERS

13.50

Interpreting the 4D seismic response using a patchy cement workflow: application to the Jubilee oil field, Ghana
Jeremy Neep, Ikon Science Ltd

14.15

Role of 2D Seismic Data in Giant Discoveries – Brulpadda and other Atlantic Margin Case Studies
Karyna Rodriguez, Spectrum Geo

14.50

The Republic of Guinea: Shelf Edge Plays meet Syn-Transform Structures
Pierre Le Barbanchon, PGS

15.25

COFFEE & POSTERS

THE E&P ACCESS FORUM

16.00

What next for E&P in Sub-Saharan Africa?
Emma Woodward, Drillinginfo

16.25

From Resource to Revenue: Turning Discoveries into Commercial Success in an New Industry Landscape
Will Scargill, GlobalData

16.50

New insights into the geological understanding and prospectivity of the Orange Basin, offshore Namibia
Simon Tobias, NAMCOR

17.15

EGRonda2019
Roberto Blanco, MMH

17.40

EVENING RECEPTION

MAIN AUDITORIUM

SESSION 4: FRONTIER & EMERGING EXPLORATION

09.00

Frontier and Emerging play exploration in Africa since 2007
Keith Myers, Westwood Energy Group

09.25

Egypt's Red Sea: Overlooked Potential in a Young Rift Basin?
Sigrún Stanton, Halliburton

09.50

Magnetic isochrons, provenance history and process sedimentology: using integrated regional geoscience to aid understanding of source and reservoir distribution, offshore South Africa
Clare Glover, ExxonMobil

10.15

COFFEE & POSTERS

10.45

Long-lived episodic magmatism on the North Gabon margin – does this explain the observed elevated heatflows?
Mike Norton, Greenwich Tectonics Limited

11.10

Reviving the Cretaceous clastic plays in southern Namibia
Jochem Bijkerk, Shell International E&P

11.35

Unlocking the potential of Africa's Forgotten Transform Margin; the Outeniqua Basin, South Africa
Gavin Elliott, New Age (African Global Energy)

12.00

LUNCH & POSTERS

SESSION 5: THE CENTRAL ATLANTIC MARGINS

13.00

Late Cretaceous/Early-Mid Tertiary crustal deformation and uplift history of the NW African passive margin (Morocco) and implications for deep-water exploration.
Richard Bray, Subsurface Resource Consulting

13.25

The interplay of carbonate platforms and siliciclastic influx during the Jurassic along the Moroccan Atlantic Margin: Controls and impact on reservoir distribution.
Aude Duval-Arnould, University of Manchester

13.50

The Cretaceous deep-water carbonate to siliciclastic transition in the Senegal Basin – insights into provenance, sediment routing and depositional mechanisms from outcrop and core
Colm Pierce, CASP

14.15

COFFEE & POSTERS

SESSION 6: UNLOCKING THE POTENTIAL OF AFRICA'S TRANSFORM MARGINS

15.00

Structure and hydrocarbon prospectivity of the Lower Cretaceous offshore Dahomey Basin, West Africa: A new syn-rift half-graben play opener in the West African Transform Margin
Babangida Jibrin, Lekoil

15.25

Why do turbidite reservoirs offshore Ghana stack to the west, and what impact does this have on reservoir heterogeneity, connected volumes, well placement and exploration?
Bryan Cronin, Tullow Ghana Ltd

15.50

South Africa: South Outeniqua and Mallory Basins, structural complexity of a new petroleum province
P Chaffel, TOTAL

16.15

AWARDS CEREMONY PRESENTED BY PROF. IAIN STEWART

16.30

CLOSING ADDRESS & INVITATION TO HOUSTON 2020

ORAL PROGRAMME | WEDNESDAY 2 OCTOBER

CONFERENCE ROOM ONE

THE E&P ACCESS FORUM

09.00

Exploration play types of Madagascar: an overview
Hoby Raharisolofo, OMNIS

09.25

Lower Congo to Namibe – A regional assessment of remaining exploration potential offshore Angola
David Barlass, Schlumberger

09.50

Reserved for international speaker

10.15

Reserved for international speaker

10.40

COFFEE & POSTERS

INTERACTIVE SESSION: GEOLOGICAL WORKSHOP

11.00

The creation of the African margins and the Mesozoic demise of Gondwana
Colin Reeves, Earthworks

11.35

The Structural And Tectonic Evolution Of The West And Equatorial African Margins: A Key To Understanding Hydrocarbon Accumulations
Jon Teasdale, Geognostics International Limited

12.10

Comparative Geothermal Gradients and Heat Flows between African Basins
Duncan Macgregor, MacGeology Ltd

12.45

LUNCH & POSTERS

13.15

De-risking hydrocarbon charge in the Namibe Basin (southern Angola) using combined 2-D and 3-D petroleum systems modelling techniques
Tiago Cunha, Integrated Geochemical Interpretation Ltd

13.50

Evolution of sandstone composition through the Cretaceous and its impact on reservoir quality along the West African Transform Margin
Simon Greenfield, Core Laboratories UK

14.25

Robust Facies Modelling: Improving Geopressure Assessment
Sam Green, Ikon Science Ltd.

15.00

Where are the Mesozoic paleo-shelf plays in the West Africa Salt Basins of Gabon, Congo and Angola; undeveloped or overlooked?
Matt Tyrrell, PGS AMME

15.35

Defining the tectonostratigraphic framework and new play potential of offshore West Africa (Gabon to Angola) within a regional South Atlantic context using mega-regional seismic data
Lisa Fullarton, ION Geophysical

16.15

AWARDS CEREMONY IN MAIN AUDITORIUM

SESSION 1: WEST AFRICA

Halokinesis and sedimentary patterns in carbonate platforms and siliciclastic deltaic systems: 3D seismic examples offshore Gabon

Paolo Esestime, Spectrum Geo Ltd

The Effect of Deghosting on the 4D Response: Usan field, Nigeria

Philip Smith, ION

Reservoir distribution in the Niger Delta. The key for unlocking commercial success

Syed Dabeer, PetroVision Energy Services

The results of recent fieldwork and oil sampling from onshore Benin; strong evidence for oil resources in this high impact, low cost frontier.

Matt Lofgran, Elephant Oil

A Review of Thin Bedded Pay including Determination and Produceability within the Elon field, Equatorial Guinea

Benjamin Panting, Royal Holloway, University of London

Structural Controls on Reservoir Presence along the West African Equatorial Transform Margin: Key Rock-Based Observations

Anne McAfee, Core Lab

Deepwater Hydrocarbon System, North and South Atlantic Rift Interaction, Equatorial Margins, West Africa and South America

Ken Nibbelink, JHI Associates (BVI); Atlantic Basin Consultants LLC

Micro-seepage mapping using satellite imagery: Examples from N. Africa

Mark Broadley, NPA-CGG

Structural history of the Jeffara Fault System, NW Libya

Giuma Reeh, Target Exploration

Analysis of the pre- and post-Variscan unconformity deformations: new insights for the characterization of the Ordovician and Triassic reservoirs in the southern Chotts Basin, Tunisia

Pierre-Olivier Bruna, Mazarine-Energy B.V.

Unlocking unconventional resources in Libya

Cristina Tomé, IHS Markit

Contribution of volcanics to hydrocarbon production of fractured reservoirs of Libya: A review

Muhammad W Ibrahim, Target Exploration Consultants Ltd

Volcanically Driven Fluid Flow and Hydrocarbon Charge in the Pre-Salt of the Namibe Basin, Angola

Nathan Rochelle-Bates, University of Manchester

Sedimentological analysis of pre-salt lacustrine pools in the onshore Namibe Basin, Southern Angola

Gustavo do Couto Ramos Pereira, University of Manchester

Understanding the petroleum system evolution in the Namibe Basin (Angola): the importance of characterising burial vs local source rock thermal maturation in volcanic margins

Edoardo Fiordalisi, University of Manchester

An insight into complex charge history and hydrocarbon distribution in Kwanza Basin, Angola

Sugandha Tewari, WesternGeco

The impact of New Licensing Rounds in Angola and why they may absorb a decade of West African exploration budgets

Gayle Miekle, Frontier

Using a Source to Sink Study to De-Risk Reservoirs in the Algoa and Gamtoos Sub-Basins, South Africa

Inga Sevastjanova, Getech Group plc

The present day shelf of the Kwanza Basin; an underexplored link between onshore and deepwater discoveries

Matt Tyrrell, PGS AMME

Underplating and contourites: controlling the distribution of source and reservoir rocks in the northern Walvis Basin, Namibia

Paul Howlett, Royal Holloway University

SESSION 2: NORTH AFRICA

SESSION 3: SOUTHERN AFRICA

SESSION 4: NORTH WEST AFRICA

Using 2D seismic for Oil Charge risk reduction in the deepwater plays of NW Africa Neil Hodgson, Spectrum Geo Ltd
New constraints on source to sink systems of NW Africa: provenance analysis of the Mesozoic post-rift clastics in the Essaouira-Agadir Basin (Morocco) Emmanuel Roquette, North Africa Research Group - University of Manchester
The enigmatic post-rift and pre-Alpine inversion tectono-sedimentary evolution of the NW rifted continent margin: surprises continue Giovanni Bertotti, Delft University of Technology
Dynamic Subsidence, Continental Uplift and Sedimentary Deposition to West Africa's Passive Margin Bhavik Harish Lodhia, Imperial College London
Quantitative seismic geomorphology of The Gambia Mesozoic margin, canyon incision and slope processes Max Casson, University of Manchester
Source to sink analysis of Cretaceous sediments along the Central Atlantic passive margin, Senegal Ian Mounteney, University of Manchester; British Geological Survey
Senonian unconformity (SNE-like) play in the MSGBC Basin – more to come? Gil Machado, Chronosurveys; Instituto Dom Luiz
New Plays in an Exploration Hotspot: AGC Profond, Senegal & Guinea Bissau Michael Bourne, CNOOC International
Establishing a high resolution integrated stratigraphic framework for the Berriasian to early Barremian of the Morocco Atlantic Margin Orrin Bryers, University of Manchester
Modelling Depositional Systems across Morocco – the limitations of using detrital zircons in understanding source to sink systems James Lovell-Kennedy, University of Manchester

SESSION 4: EAST AFRICA

Exciting insights from fieldwork in the Ile Sainte Marie Basin, Madagascar Meghan Davies, Robertson, CGG Services (UK) Limited
Opening New Plays in East Africa: Predicting the Presence and Nature of Play Elements, offshore Madagascar Matthew Watkinson, EPI Group; University of Plymouth
Using basin modelling to examine the origin of the hydrocarbons within the deepwater Rovuma Basin of Tanzania, Mozambique and the Comoros Michael C. P. Rego, Rego Exploration Ltd.; Triton Petroleum Pte. Ltd.
Offshore Somalia: Frontier Margin Oil Resource Evaluation Karyna Rodriguez, Spectrum Geo Ltd
Morondava Basin, Offshore Madagascar: a summary of its hydrocarbon plays and its prospectivity – a promising future awaits Glyn Roberts, Spec Partners Ltd
Linking Fieldwork to Regional Seismic: Exploration in an Untested Frontier Province Gillian Barber, BP
Influence of contourite activity on Mozambique turbidite systems David Barlass, Schlumberger
Exploration potential of a frontier hydrocarbon province - The Angoche basin, Offshore Mozambique Deepak Rathee, WesternGeco
A Modern Reworking of the Cabora Bassa Basin, Zimbabwe Casey Edwards, Source Geoscience Pty Ltd
Intelligent Geological Target (Basin) Identification (IGTI) – Mpulungu, Zambia Deepti Bisht, Cambridge Geoconsultants Limited
Mantle convection and Africa's Rift architecture: A General Model Neil Hodgson, Spectrum Geo Ltd