Forum Overview

Significant oil discoveries onshore in Uganda and Kenya, and world-class gas discoveries offshore in Tanzania and Mozambique have propelled East Africa from the minor league to a global leader in hydrocarbon discoveries for two years running. Continental rifts and rifted passive margins are once again at the centre of attention of the geoscience and geo-engineering communities. But how can we better predict the occurrence of robust hydrocarbon systems, and in particular the distribution of effective oil-generating source rocks, often localized in deep early rift basins? And how can we improve our ability to predict the distribution and quality of potential reservoirs, for instance using better source-to-sink models?

Following recent acreage awards in Mozambique, and with plans for further license rounds in the near future across the Eastern Africa region, the scene is set for a new wave of exploration activity. In today’s low oil-price environment and uncertain global outlook, the economic challenge for success is greater. To thrive in such a market, we need to reduce risk and increase efficiency. Governments, academia, service industry and energy companies will need to work together to meet the challenge to deliver further, commercially viable reserves.

Forum Objectives

To discuss and progress these issues, and building on the successful meetings in Dar es Salaam (2015) and Kampala (2016), EAGE announces the Third Eastern African Petroleum Geoscience Forum, to be held on 6-9 November 2017. The theme of the Forum is ‘Managing Subsurface Risk in Finding and Developing Hydrocarbons’. The forum objective is to provide a platform for geoscientists and engineers to share knowledge and identify appropriate technologies to fill gaps and reduce uncertainties.

The EAGE forum serves as a catalyst bringing academia, government and industry together with a shared goal. We anticipate a blend of local expertise and international geoscientists and engineers. At this forum, delegates can expect an interactive environment with presentations, guest speakers, discussion sessions and an opportunity to appreciate the rich culture that is to be found in Eastern Africa.

Local content and technology transfer are strategic aspects of the oil and gas industry, presenting both challenges and opportunities – particularly in Eastern Africa. Understanding these challenges and opportunities is an important first step towards developing local capacity and finding collaborative solutions. Today’s students represent future capacity, and are encouraged to attend, build links and have their voices heard at the forum. Mozambique is a warm country, rich with a diversity of wildlife, natural habitats and a magnificent cultural mosaic; a truly special location for us to be able to host this Forum. Maputo, known as the ‘City of Acacias’, is a true cosmopolitan city that offers rich cultural experiences and excellent hotels and restaurants. We look forward to welcoming you to this event.
Technical Programme

Oral Presentations - Monday 6 November 2017

Zambezi Ballroom

08:00 Registration & Coffee
08:20 Welcome & Aims (HSSE)

SHORT COURSE: INTEGRATED STATIGRAPHIC APPROACHES
Dr. S. Houben and Dr R. Bouroullec (TNO Energy)
08:30 Start of the Short Course
10:30 Coffee Break
11:00 Short Course (continued)
12:30 Lunch
13:30 Short Course (continued)
15:00 Coffee Break
15:30 Short Course (continued)
17:00 End of Day One
18:00 - 20:00 Icebreaker Reception - Radisson Blu Pool Bar

Oral Presentations - Tuesday 7 November 2017

Zambezi Ballroom

08:00 Registration & Coffee
08:45 Welcome & Aims - M. Francis (Schlumberger) & A. Macuvele (INP)
09:00 Welcome - EAGE President Jean Jacques Biteau (Total)
09:15 Opening Address: TBC
10:05 EA - Offshore East Africa Exploration Overview - M. Zine* (IHS Markit)
10:30 Coffee Break

REGIONAL HYDROCARBON SYSTEMS
C. Line (ExxonMobil International Ltd.) & G. Bertotti (Delft University of Technology)
10:55 EA1 - Prospective and Resource Assessment of the Unlicensed Angoche Basin - D.J. Barlass* (Schlumberger), M. Zibane (Instituto Nacional de Petróleo (INP)), C. Samuel (Instituto Nacional de Petróleo (INP)), A. Keji (Instituto Nacional de Petróleo (INP)), & M. Bhattacharya (CGG), A. Coventry (University of Leeds), G. Duval (CGG), N. Hodgson (Spectrum) & K. Rodriguez (Spectrum)

11:20 EA2 - Tectonic History and Structural Evolution of the East Africa Margin - S.T. Sutton* (ExxonMobil International Ltd), M. Lawson (ExxonMobil International Ltd) & A. Pierce (ExxonMobil International Ltd)
11:45 EA3 - New starting Point for Indian Ocean: The Integration of Seismic and Multibeam Echo-sounder Data in the Hunt for Active Hydrocarbon Seepage in Offshore Kenya - F. Clive* (Shell), J. Gharib (Fugro)
12:10 EA4 - East Africa Oil Province Indications from Conjugate Margin Evaluation - K. Rodriguez* (Spectrum Geo Ltd), N. Hodgson (Spectrum Geo) & A. Intawong (Spectrum Geo)
12:35 Lunch

13:25 EA5 - East Africa Gas: Source Type or Maturity? - M.A. Sullivan (ExxonMobil International Ltd), M. Lawson (ExxonMobil International Ltd) & A. Pierce (ExxonMobil International Ltd)
13:50 EA6 - Oil? Or, is it just Gas in Mozambique Offshore Basins? It Depends on Where You Are Hunting! - Kornpihl* (Schlumberger), D. Rathee (Schlumberger) & D. Barlass (Schlumberger)
14:15 Student Poster Session / extended coffee break
15:00 Coffee Break

REGIONAL HYDROCARBON SYSTEMS
15:45 EA8 - Not All Seismic Anomalies Are Seeps: The Integration of Seismic and Multibeam Echo-sounder Data in the Hunt for Active Hydrocarbon Seepage in Offshore Kenya - F. Clive* (Shell), J. Gharib (Fugro)
16:05 EA9 - The Use of Fieldwork to Constrain the Petroleum System in Mozambique and Madagascar - G. Firpo* (ERCL), D. Johnstone (ERCL) & M. Oxford (ERCL)
16:30 Poster Session
17:30 End of Day Two
19:30 - 10:00 Workshop Dinner - Zambi Restaurant
### Poster Presentations - Tuesday 7 November

**Zambezi Foyer**

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
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<tbody>
<tr>
<td>14:15</td>
<td>SP1 - Analysis of Porosity Versus Vertical Effective Stress Functions, for example Exploration Wells in the Rovuma Basin Offshore Mozambique - O. Nhabanga* (NTNU) &amp; P.S. Ringrose (NTNU)</td>
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<td>SP2 - Comparison of Different Gas Condensate Reservoir Recovery Methods - A. Nobre* (Universidade Eduardo Mondlane)</td>
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<td>SP3 - Material Balance Analysis in Water Drive Gas Reservoirs with Water Influx - A. Mahanjane* (Universidade Eduardo Mondlane)</td>
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<td>SP4 - Specialized Well Completions to Reduce Sand Production in Deepwater Gas Reservoirs – Rovuma Basin - B. Amade* (Universidade Eduardo Mondlane)</td>
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<td>SP5 - Production-based Reservoir Characterization of the Temane Gas Field (in Mozambique) - C. Macie* (Universidade Eduardo Mondlane)</td>
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<td>SP6 - Geological Conditions Survey for Prediction of the Tight Gas Sand Reservoir ‘Sweet Spots’ - M. Cossa* (Universidade Eduardo Mondlane)</td>
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<td>SP7 - Developing the Concept of Capillary Pressure for Gas-Water and Oil-water Relative Permeability for High Permeability Reservoirs - W. Gujamo* (Universidade Eduardo Mondlane)</td>
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<td>SP8 - A Comparative Analysis of Available Erosion Velocity Equations - P. Maputere* (Universidade Eduardo Mondlane)</td>
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<td>SP9 - Hydrocarbon Reservoir Quality Assessment of Sandstone from the Karoo Rift Basin of Southern Zambia - E. Banda (University of Zambia, School of Mines) &amp; C. Phiri* (Jilin University)</td>
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<td>SP10 - Karoo Basins and their Hydrocarbon Source Potential: Case Study of Mid-zambezi Valley Basin, Southern Zambia - J. Lumamba (University of Zambia, School of Mines) &amp; C. Phiri* (Jilin University)</td>
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<td>SP11 - Drift Influence on Deep Marine Channel/Lobe Transition: A Case Study of Well X, Offshore Tanzania, Block 2 - A. Fuhrmann* (University of Manchester), J.A. Kane (University of Manchester), E.R. Schomacker (Statoil), R.A. Ferguson (University of Manchester), M. Janocks (Statoil), M. Warchol (Statoil) &amp; R.L. Brut (University of Manchester)</td>
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<td>SP12 - Geophysical Investigation of the Subsurface Structures of the Usangan Basin Based on Gravity and Aeromagnetic Data - E. Pastory* (University of Dar es Salaam)</td>
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**16:30**

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<tr>
<td>P01 - The Zambezi Sedimentary System (Coastal Plain - Deep Sea Fan): A Source to Sink Approach - J.P. Ponte* (University of Rennes 1), C. Robin (University of Rennes 1), F. Guillocheau (University of Rennes 1), M. Dall’Asta (TOTAL), S. Davison (CGG), C. Jones (CGG), A. Mann (CGG)</td>
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<td>P02 - Southern Natal Valley Basin – Integrating Gravity with Seismic for Basin Location and Prediction of Petroleum Systems - J.A. Malan* (Getech Group plc, UK) &amp; E. Sutcliffe (Getech Group plc, UK)</td>
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<td>P03 - The Application of Sequence Stratigraphic Techniques in the Zambezi Delta Area, South Mozambique: Providing New Insights into Prospectivity and Basin Evolution - N. Eland* (ERCL), D. Johnstone (ERCL) &amp; T. Ferriday (ERCL)</td>
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Oral Presentations - Wednesday 8 November 2017

Zambezi Ballroom

**CORES DISPLAY SESSION @ INP CORES FACILITY - ZIMPETO**
A. Thierry (Anadarko Petroleum), J. Nicholson (Osokey Ltd) & C. Siversen (Statoil ASA)

07:45 Departure from hotel 07:45 hrs
09:00 Arrival and Start of Core Display Session
11:30 Return from Zimpeto & Lunch
13:30 Keynote Speaker

**INDUSTRY-Academia-Government Collaboration**
M. Zine (IHS Markit) & F. Veenstra (TNO Energy)

14:00 EA10 - A Working Model for Building Equitable Relationships in International Academic Partnerships - A. Hurst* (University of Aberdeen)
14:25 EA11 - Strengthening Capacity Building: Lessons from the Tanzanian Experience - G. Bertotti** (Delft University of Technology), N. Boniface (University of Dar Es Salaam), J.H.P. de Bresser (University of Utrecht), R. Hack (ITC-University of Twente), L. Maat (Hanse University Applied Sciences), F. van de Meer (ITC-University of Twente) & E. Mshiu (University of Dar Es Salaam)
15:15 Coffee Break

**Regional Sedimentary Systems**
D. Johnstone (ERCL) & C. Malaver (Sasol)

15:55 EA14 - Cretaceous to Palaeogene Deep Water Depositional Systems, Block 2, Offshore Tanzania - C. Siversen* (Statoil ASA), E. Schomaker (Statoil ASA) & T. Coffey (Statoil ASA)
16:20 EA15 - Earliest Cretaceous-late Jurassic of Southern Rovuma Basin - B. Pilskog* (Statoil ASA), C. Siversen (Statoil ASA), H. Emami (Statoil ASA)
16:45 EA16 - Contourites as a Primary Regional Control on Deep-water Sediment Deposition: Examples from the Mozambique Basin - A. Diaz-Esteve* (Exxonmobil International Ltd) & A. Pierce (Exxonmobil International Ltd)
17:10 End of Day Three

Oral Presentations - Thursday 9 November 2017

Zambezi Ballroom

08:30 Keynote Speaker

**Source to Sink: From Regional Knowledge to Field/Reservoir Properties**
A. Marante (Total) & C. Siversen (Statoil ASA)

09:00 EA17 - Tectono-stratigraphic Evolution of the Western Somali Basin: Sediment Dynamics, Margin Instability and the Legacy of the East African Rift System - V. Maselli* (University of Aberdeen), S. Tewari (WesternGeco), A. Mrutu (Tanzania Petroleum Development Corporation), E. Mshiu (University of Dar Es Salaam), D. Kroon (University of Edinburgh), D. Iacopini (University of Aberdeen), A. Kwarega (Tanzania Petroleum Development Corporation), H. de Haas (Royal Netherlands of Sea Research), F. Francis (WesternGeco) & G. Milne (WesternGeco)
09:25 EA18 - Austral and East African Uplifts and Relief Growth, Paleoclimate Changes: A Tool for Predicting Offshore Sediments Location and Nature - F. Guillocheau* (Rennes 1 University–Géosciences Rennes), C. Robin (Rennes 1 University–Géosciences Rennes), G. Baby (Rennes 1 University–Géosciences Rennes), A. Dolaunay (Rennes 1 University–Géosciences Rennes), J. Ponte (Rennes 1 University–Géosciences Rennes), M. Dall’Asta (Total), N. Buratti (Total) & D. Michoux (Total)
10:30 Coffee Break

11:20 EA21 - Jurassic to Palaeogene Sandstones in the Mandawa Basin, Source to Sink Relations - K. Fossum* (University of Oslo), A. Morton (HM Research Associates), H. Dyvik (University of Oslo) & W. Hudson (TPDC)

**East Africa Reservoir Analogues**
O. Chocoroua (ENH) & V. Maselli (University of Aberdeen)

11:45 EA22 - Properties of the Potential Basement Play for Lake Albert Hydrocarbon Resources from Surface Analogy Studies - B. Walter* (University of Lorraine, GeoRessources), Y. Géraud (University of Lorraine), M. Diraison (University of Strasbourg, IPGS) & F. Raisson (Total)
12:35 Lunch

**Learnings from the Past**
A. Tsamba (University Eduardo Mondlane) & S. Gemelli (Eni SpA)

13:25 EA24 - A Systematic Review of Released Exploration Wells In Mozambique - D.J. Johnstone* (ERCL)
14:05 EA26 - The Value of Core: Petrographic and Petrophysical Integration. A Case Study from the Onshore Southern Mozambique Basin - O. Komist* (Sasol E&P International), R. Kimber (Sasol E&P International), R. Gilham (Sasol E&P International), R. Harris (Sasol E&P International) & N. Sohan (Sasol E&P International)
Poster Presentations - Thursday 9 November 2017

Zambezi Foyer


PO14 - First Onshore 3D Seismic Survey in Mozambique – Overcoming Acquisition and Processing Challenges - D.C. Barkwith* (Sasol Exploration and Production International) & C.H. Malaver (Sasol Exploration and Production International)

PO15 - Reservoir Characterization and Delineation using Extended Elastic Impedance, Rovuma Basin, Offshore Mozambique - A.R.C. Chibielo (Instituto Nacional de Petróleo (INP) & A. Chibielo* (Instituto Nacional de Petroleo (INP)

PO16 - Gravity Modelling of the Southern Madagascar Plateau - B. Razafindrakoto (Ecole Supérieur Polytechnique d’Antananarivo), C. Raharimanarina (Office des Mines Nationales et des Industries Stratégiques, Madagascar (OMNIS)), L. Pastor (Université Pierre et Marie Curie), H. Rakotondramanana (Laboratoire de Géophysique Appliquée, Institut et Observatoire de Géophysique Appliquée (IOGAI)) & T. Randriamantsoa* (Office des Mines Nationales et des Industries Stratégiques, Madagascar (OMNIS)

Short Course

Integrated Stratigraphic Approaches
Dr S. Houben and Dr R. Bouroullec

East Africa provides a frontier for hydrocarbon, mineral resource and geothermal exploration. Successful ventures require detailed and consistent stratigraphic understanding, allowing depositional patterns to be placed in tectonic, paleogeographic and paleoclimatic context. This one-day short course covers various bio-, chemo-, seismo- and sequence stratigraphic methods. In the second part, we will discuss a number of multidisciplinary case-studies. Specific attention will be paid to visualization techniques and practices.

Social Programme

Ice breaker reception
Monday 6 November, 18:00 – 20:00 hrs
Radisson Blu Pool Bar

Forum Dinner
Tuesday 7 November, 19:30 – 22:00 hrs
Zambi Restaurant (Av. 10 de Novembro, Maputo, Mozambique)

Registration

Overview of registration fee
N.B. Registration for the short course is included in the overall Forum fee.

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<td>€ 795</td>
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<tr>
<td>Non-member1</td>
<td>€ 895</td>
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<tr>
<td>EAGE student member2</td>
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<td>Full-time student non-member1,2</td>
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Please note: to qualify for the member registration fee, your EAGE membership dues for 2017 must have been paid and confirmed. The processing time for membership applications or renewals is 10 working days.
1. The non-member fee includes EAGE membership for 2018.
2. To qualify for the reduced student registration fee:
   • Students must be enrolled in a full time study programme at a recognized university or institute
   • The registration must be accompanied by a copy of a student ID card and/or official proof of enrolment.
   • Please note: Student non-members can't be older than 34 years of age (when registering)
3. Please note that EAGE reserves the right to cancel the workshop due to low participation. In this case, payment will be refunded in full.

How to register

We recommend that you register via the online registration form on the EAGE event website (www.eage.org/event/eastern-africa-workshop-2017). However, a downloadable registration form, which should be completed and returned to the EAGE Head Office is also available on the event page.
Visa Requirements

All visitors travelling to Mozambique must obtain a visa prior to their arrival from one of the Mozambican diplomatic missions in their home country or country of residence. Please check with your nearest embassy/consulate for up to date information on the application process.

Venue

EAGE has negotiated room rates for delegates attending the Third EAGE Eastern Africa Petroleum Geoscience Forum. To make your reservation at the Forum’s venue hotel, all delegates should book online using the below website link and code: EAGE17

<table>
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<tr>
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<th>USD195 per room per night incl. breakfast</th>
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<td>Single Occupancy</td>
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<td>Double Occupancy</td>
<td>USD225 per room per night incl. breakfast</td>
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Radisson Blu Hotel & Residence Maputo
141 Av. Marginal
Maputo 1100, Mozambique
Tel.: +258 21 242 400
E-mail: info.maputo@radissonblue.com
Website: https://www.radissonblue.com/en/hotel-maputo

Sponsorship

We would like to give a special thank you to our Platinum sponsors and Lunch sponsor:

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Short Course:

Sponsorship opportunities are available to suit all budgets. Please visit our website for further details. To request a copy of the sponsor brochure, please contact us via africa@eage.org.

Contact

For more information on the forum, please visit the event’s website via www.eage.org or contact the EAGE Middle East / Africa office via africa@eage.org or +971 4 369 3897.

We look forward to seeing you in Maputo!
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<tr>
<th>Office</th>
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