WHAT TO EXPECT FROM THE AAPG EXPERIENCE

The American Association of Petroleum Geologists (AAPG) and our suppliers, venues and services partners are committed to providing a clean and safe environment and experience for all our event participants. We remain alert to COVID-19 risks and are closely following and adapting to all applicable health and safety guidelines. While conditions vary between countries, cities, municipalities, and facilities, safeguarding measures you may encounter at AAPG events include physical distancing and masking, readily available hand sanitizer, enhanced cleaning and disinfecting protocols, temperature health checks and screenings, minimized touchpoints and cashless payment options.

As personal safety is a shared responsibility, we ask that all participants ensure that they are feeling well and in good health, with no fever or other symptoms related to COVID-19, before showing up at an AAPG event. Any specific delegate obligations will be published in pre-event communications and clearly displayed on signage throughout our venues. Given the ever-changing nature of the pandemic recovery, registrants must receive regular updates and instructions concerning the latest health and safety requirements.

The workshop aims to provide a broad platform for presenting and discussing the understanding of the petroleum geology of Southern African Offshore Basins in Mozambique, Namibia, Tanzania, Angola and others, encompassing themes associated with its plays and reservoirs. The workshop will also provide an opportunity to integrate academic with industry players in Southern Africa to help establish Southern Africa as a vibrant and emerging prolific petroleum hub. This workshop is intended to bring those working or studying in the Southern Africa basins, geoscientists, engineers, and policymakers together for robust discussions.

TECHNICAL SESSIONS

SESSION 1: New Exploration Opportunities and Recent Advances in Southern African Offshore Basins

SESSION 2: Exploring New Plays in a Challenging Environment


SESSION 4: Infrastructure and Upstream Development Potential

SESSION 5: Legislative Challenges, Local Content and Capacity Development

WORKSHOP GUIDE-LINES

FORMAT

The workshop will be 3 days, consisting of oral presentations, poster presentations and breakout sessions where participants can discuss and investigate a specific theme that is of mutual interest. The first day will feature an inaugural keynote speech by a high-profile professional from the industry.

ATTENDANCE

Registrations are invited from all relevant disciplines with experience and/or knowledge of the subject areas being addressed in the workshop. Registrations will be accepted on a first-come, first-served basis.

CALL FOR POSTERS

You are invited to prepare a poster display for presentation. If you are interested in participating, please send a short abstract to cnavarro@aapg.org by January 5, 2022. All posters will be produced as pull-up banners and delivered by AAPG. There will not be any other format available for poster display.

REGISTRATION TYPES & FEES

Fees are inclusive of onsite documentation, coffee breaks and luncheons. To avail the Member/Committee/Speaker rate you must be an active member of AAPG or a committee/speaker at the event. To register as a Young Professional you must be under the age of 35 with less than 10 years of work experience.

CALL FOR ABSTRACTS

Abstracts will be accepted on a first-come, first-served basis. There will not be any other format available for poster display. You are invited to prepare a poster display for presentation. If you are interested in participating, please send a short abstract to cnavarro@aapg.org by January 5, 2022. All posters will be produced as pull-up banners and delivered by AAPG. There will not be any other format available for poster display.

CANCELLATION POLICY

AAPG will refund the tuition, less a $100 processing fee, if the request is received no later than 30 days prior to the workshop. Cancellations must be made in writing. The registrar will accept cancellation notices by telephone, but all such notices must be followed up by fax or e-mail. Written notice to be postmarked no later than 30 days prior to a workshop being given. No registration will be accepted unless the full tuition has been paid in advance. Cancellations received no later than 30 days prior to a workshop being given. No registration will be accepted unless the full tuition has been paid in advance. AAPG reserves the right to cancel a workshop if enrollment is insufficient to ensure proper effectiveness. Substitutions for individuals can be made at any time. A paid enrollment may be transferred one time to a future workshop if the request is received prior to the 30-day cut-off date.
Frontier offshore basins of Southern Africa have proven to be rich in hydrocarbon source rocks with some prolific basins already under exploration. The Mozambican deep-water gas fields in the Rovuma Basin have already shown results in plans for LNG projects with more potential in fairways that extend into Tanzania, the Zambezi Delta Basin, and further offshore. Off the coast of Namibia, exploration continues in the Orange Basin and deep water blocks offshore Angola have boasted significant discoveries, most recently being light oil in the Cuica exploration prospect. New exploration ventures in South Africa have reawakened interest for further exploration with the significant gas condensate discoveries in the Otuniqua Basin, which highlights the petroleum potential up to 20,000 km² of Early to Mid-Cretaceous rift and drift basins. Renewed interest in the extension of the Orange Basin off the west coast of South Africa and its potential for Mid-Cretaceous oil plays, has operators planning to drill key wells in the coming years. On the east coast of South Africa, the Natal and Zululand Basins too have good potential for an Aptian source rock. Southern Africa countries have only scratched the surface of what hydrocarbon potential the offshore basins may hold, which promises exciting years of exploration to come. As the legislative routes begin to open up, investment opportunities for the offshore oil and gas market will grow along with an abundance of opportunities. This session theme aims to draw attention to Southern Africa’s vast hydrocarbon potential and to discuss the various active, innovative, and upcoming avenues for exploration to be found offshore.

### Session 1: New Exploration Opportunities and Recent Advances in Southern African Offshore Basins

Few people realize that the search for oil and gas in South Africa goes back more than 125 years to 1873 when a letter to the Cape Argus referred to the discovery of black earth at the foot of Table Mountain. It is said to have been “proved” (South Africa’s oil search down the years – Eric Rosenthal). Since that time, petroleum geologists have been actively searching for oil and gas plays in South Africa. First onshore in challenging environments, then offshore in deep waters, new discoveries have expanded from South Africa to the neighboring countries. Recent discoveries in new plays in Mozambique and Tanzania have encouraged further exploration in Southern Africa. The industry has always been on the forefront of technology and geoscience in order to find new hydrocarbon plays and solutions to the ever more challenging environments. In the 60’s, offshore drilling in Mozambique resulted in 409 day breakthrough in the Panda field which had to be extinguished with 4 relief wells. In the early 1980’s, Soekor attempted to drill the F1-4 well close to the shelf edge and encountered challenging metocean conditions after which the attempt had to be abandoned until today. TotalEnergies attempted to drill the Brulpadda prospect prosing a new hydrocarbon play in 2016 and were only successful in 2019 with special designed drilling equipment. New plays in ultra deep water are being tested in Namibia. The processes and technologies to explore for new plays have changed tremendously in the last decade. From the integration and interpretation of data using Artificial Intelligence, Blockchain technology for securing the data management processes and providing added efficiency. Southern Africa has benefitted from the growth in new technologies and these developments continue to grow as can be witnessed with the Mozambique LNG development, the most deep new fields offshore Angola and Namibia. South Africa is not far behind with the hype of activity in its deep and ultradeep water channels of TotalEnergies. This session focuses on what is needed to identify new hydrocarbon plays and which technology could be employed to prove new plays in challenging environments and which technology should be improved to achieve this.

### Session 2: Exploring New Plays in a Challenging Environment

In E&P industry the most cost intensive projects are exploring in Deep waters. In recent years many discoveries are being made across Southern African deep water Petroleum systems, especially in Mozambique, Tanzania, and recently in Southern Africa. Each discovery presents a new challenge, starting from data acquisition, processing, mapping (API) and finally to drilling, production and development. We have to learn from these discoveries to mitigate risk and minimize cost of production to make it profitable. Global analogues are widely used across the Exploration and Production (E&P) lifecycle to meet these challenges. Analogues, used in conjunction with primary data, expand the knowledge of both the individual team and team and develop insights that are not possible from using either local data or individual experience in isolation. Difficulties in the application of analogues arise when the analogues are not selected consistently, are too specific, or are in conflict with empirical local data. Most of these difficulties arise from the lack of a proper definition of analogues, absence of a systematic method of analogue selection, and poorly defined objectives for the use of analogues. Analogues are herein defined as comparable fields and reservoirs relevant to a specific question or set of questions. To select appropriate analogues, Explorationist should focus on specific individual question(s) instead of “look-alike” fields, as each field has its unique adversity. Papers and speakers in this section are invited to present case studies for Proved, probable and possible petroleum systems in deep water and their appropriate application of global analogues to local situation, as this will not only foster creative thinking but also provides a way to quickly learn, increase confidence, and efficiently reduce the risk for E&P decision-making.

### Session 3: Worldwide Analogues to Better Understand the Deep Water of Southern African Basins

The development phase of an oil field life cycle follows a successful appraisal phase and is commonly the most investment intensive phase of a project which focuses on economical and technical objectives. The decisions made need consideration of a number of physical and practical factors such as, existing infrastructure in place offshore Southern Africa and at the nearest port, facility requirements based on hydrocarbon composition and flow profiles, and the production planning schedule for each project. In addition to these considerations, operators are required to work within the legal, environmental and economic frameworks of the Production Sharing Agreements with local government. Final development plans may be a combination of; conventional platforms, tension leg platforms (TLPs), floating production system (FPS), floating production storage and offloading systems (FPSOs), floating liquefied natural gas (FLNG), subsea structures (flowlines, wellheads etc.) and more. This session will discuss planning, optimization, and challenges related to infrastructure and field development offshore Southern Africa.