



Technical Program

Monday Morning Oral

Plenary Session: Reunite Gondwana; Realize the Potential

Auditorium

Co-Chairs: I. Russell and J. Kaldi

- 08:15 Introductory Remarks
08:20 Peter Baillie and John Veevers: Gondwanaland Framework, Tectonics and Basins
08:45 TBA: Petroleum Systems and Resources of the West Gondwanaland Basins
09:10 Marita Bradshaw: Petroleum Systems and Resources of the East Gondwanaland Basins
09:35 Ian Longley and Kristan Reimann: Exploration Lessons and Trends of the Gondwanaland Basins: Plays that work (or Why Gondwana Produces Better Wines and Cricketers than Laurasia)

Petroleum Prospectivity of West Australian Basins I

Auditorium

Co-Chairs: J. D. Gorter, G. Ellis, and P. W. Baillie

- 10:25 Introductory Remarks
10:30 G. D. Karner: Structural and Depositional Style of the Syn-rift Systems of the Northwest Australian Margin: A Comparison with Atlantic Passive Margin Systems
10:50 L. L. Pryer, K. Romine: Basement Control on Basin Evolution in Northwestern Australia
11:10 C. Heine, R. D. Müller: Geodynamic Evolution of the Northwest Margin of Australia Since the Late Jurassic
11:30 M. Keep, M. Harrowfield, W. Crowe: The Neogene Tectonic History of the Northwest Shelf
11:50 D. S. Edwards, C. Boreham, J. E. Zumberge, J. Hope, J. Kennard, R. Summons: Hydrocarbon Families of the Australian Northwest Shelf: A Regional Synthesis of the Bulk, Molecular and Isotopic Composition of Oils and Gases

Prospect - Play - Portfolio Analysis

Meeting Room 1/2

Co-Chairs: R. S. Heath, H. Doust, D. R. Johns, S. McIntyre, and B. Edwards

- 10:25 Introductory Remarks
10:30 P. R. Rose: Risk Analysis of Exploration Plays: Retrospective and Prospective

- 10:50 K. C. Hood, C. Stabell: Integrated Play and Prospect Assessment – Maximizing Regional Context and Local Detail
11:10 J. De Jager, S. Wright: Play-Based Exploration to Improve Performance
11:30 P. J. McCabe, D. L. Gautier: Rigorous Approach to Geological Analysis of Petroleum Potential in Frontier Basins: Dealing with Risk in Regions of Great Uncertainty
11:50 J. Gouveia: A Statistical Type Well Approach for the Effective Economic Modeling and Portfolio Selection of Unconventional Resource Plays

Regional and Local Tectonic Influence on Carbonate Platform Architecture, Palaeo-Tethys to the Present Indo-Pacific

Meeting Room 3

Co-Chairs: A. George, R. Sarg, and W. A. Morgan

- 10:25 Introductory Remarks
10:30 M. E. J. Wilson: Tectonic Influence on Southeast Asian Carbonate Development during the Cenozoic
10:50 T. M. Hughes, J. V. White*, C. Liu: Structural Controls and Resulting Variations in Oligo-Miocene Carbonates of the East Java Basin, Indonesia: Examples from the Cepu and North Madura Areas
11:10 T. Simo, E. Sharaf, A. Carroll, M. Shields, M. M. Tang, J. Naranjo, E. Drajan: Stratigraphic Evolution of Oligocene–Miocene Carbonates and Siliciclastics of East Java Basin, Indonesia
11:30 S. L. Dorobek: Tectonic Controls on Carbonate Platform Evolution in Extensional Settings
11:50 A. D. George, M. C. Dentith, N. Chow, K. M. Trinajstić: Tectonic Control on Late Devonian Reef Complex Evolution, Lennard Shelf, Northern Canning Basin, Australia

Gondwana: Geology of the Break-up

Meeting Room 4

Co-Chairs: G. D. Karner, B. West, and D. Macdonald

- 10:25 Introductory Remarks
10:30 I. Norton, S. May: Implications of Models for Opening of the South Atlantic on Geometry and Timing of Salt Deposition
10:50 A. M. Shamsuddin, J. Coleman: Breakup of Eastern Gondwanaland: Genesis of Bangladesh's Petroleum System

*denotes speakers other than first author

- 1 Successful Management and Decision Making**
- 2A Petroleum Systems Elements and Evaluation Techniques: Clastic and Carbonate Reservoir Systems**
- 2B Petroleum Systems Elements and Evaluation Techniques: Hydrocarbon Generation, Fluid Flow, Structural Controls and Seal Character and Quality**
- 3 Gondwana Evolution and Petroleum Systems Elements**
- 4A Exploring and Developing Southeast Asia's Petroleum Provinces**
- 4B Exploring and Developing Gondwana's Petroleum Provinces—South Atlantic/Africa/Middle East/North America**
- 5 PESA Special Session—West Australian Basins**
- 6 Southeast Asia Pacific LNG Resources and Development plans**
- 7 Maximizing Value From Mature Petroleum Assests**
- 8 Integrating New and Emerging Technologies—Seismic Innovation**
- 9 Integrating Petroleum Development With Environmental Issues**
- 10 Non-Conventional Hydrocarbon/Energy Resources**

- 11:10 M. Bradshaw, K. Czarnota, C. Boreham: Oil from the South: Mesozoic Petroleum Systems, Proven and Potential, in Mid to High Southerly Latitudes
- 11:30 R. A. Glen, A. M. Mantaring: Eastern Gondwana – Tasmanides Petroleum Systems
- 11:50 D.I.M. Macdonald: The Petroleum Potential of Antarctica

Seismic Applications to New Play Identification

Meeting Room 5

Co-Chairs: D. M. Maughan and R. J. Peake

- 10:25 **Introductory Remarks**
- 10:30 E. D. Scott, H. Salem: Using Spectral Decomposition to Define Deepwater Depositional Systems, Offshore Nile Delta
- 10:50 P. Abram, R. Gaupp: Relations Between Seismic Signals and Reservoir Properties of Tight Gas Sandstones in North Germany (Permian Rotliegend)
- 11:10 M. Campbell, S. Smith, D. Corcoran*: Focused Seismic Processing Via Pre-Stack Migration – the Key to Structural Imaging of the Triassic Play in the Slyne-Erris Basin, Offshore Ireland
- 11:30 N. Van de Coevering, M. Fauzi, R. Sigit, R. Lasman: Prospect Identification using AVO Fluid Prediction, Relative and Field-Based Elastic Inversion in Sarawak, Malaysia
- 11:50 H. Zeng: Seismic Sedimentology for High-Resolution Reservoir Imaging

Petroleum Provinces of China I

Meeting Room 6

Co-Chairs: C. Jia, W. Zhao, X. Sun, and K. Liu

- 10:25 **Introductory Remarks**
- 10:30 C. Z. Jia, W. Z. Zhao, G. Y. Zhang: Petroleum Geological Features in Major Onshore Sedimentary Basins of China
- 10:50 G. H. Zhang: Perspectives of Hydrocarbon Exploration and Development in China's Offshore Basins
- 11:10 Z. Qiu, H. Fang: Assessment of the Sustainable Development of Petroleum Resources in China
- 11:30 J. Li, G. Wei, D. Li, G. Jiao: Current Status and Future Projection of China Natural Gas Industry
- 11:50 S. Zhang, Y. Sun, Z. Wang: Palaeozoic Petroleum Systems in Tarim Basin, Northwest China: A Geochemical Overview and Perspective

Monday Afternoon Oral

Management Forum: Changing Roles and Relationships in the Industry of the Future

Auditorium • 13:45 – 17:40

Chairs: P. O. Yilmaz and J. R. Bedingfield

This session will address long-term relationships, collaborative partnerships and the role of gas in meeting global energy demands, in the future with emphasizing on the SE Asia and Pacific regions. More than ever, collaborative strategies between sectors are required to achieve success. Innovative management of business, technology and people can provide a competitive advantage in industry. The winners will be those companies that use appropriate technology and experience to transform their data and information to knowledge and wisdom.

Natural gas is assuming a prominent role in our industry, and projections indicate the role is increasing with the growing demand for energy. Advances in technology have increased the development and transport of this resource globally for more efficient energy at lower costs. The interrelations of national oil companies, large international integrated energy companies, and independent operators contribute to the complexity of the gas business.

These invited speakers will provide their company perspectives on these key issues:

Mr. Abdullah Karim, vice president exploration and production, Petronas; **Mr. Ali Huawaj**, exploration manager, Saudi Aramco; **Mr. Don Voelte**, chief executive officer, Woodside Energy Ltd.; **Dr. Anne Reeckmann**, vice president geoscience, ExxonMobil Upstream Research Company; **Wouter Hoogeveen**, regional exploration vice president for the Far East, Shell; **Mr. Colin Beckett**, general manager, Greater Gorgon Area, Chevron Australia Pty Ltd.; **Mr. Rocky Becker**, vice president, ExxonMobil Production Company; and **Menahi Al-Anzi**, exploration manager, Kuwait Oil Company. Invitations have also been extended to Total, BP, and Qatar Petroleum executives.

Permo-Carboniferous (Classic Gondwana) Basins and Reservoirs

Meeting Room 1/2

Co-Chairs: C. J. Heine and P. M. Harris

- 13:45 **Introductory Remarks**
13:50 **D. I. M. Macdonald, B. Kneller:** Topographic and Tectonic Controls on Late Palaeozoic Deglaciation of Gondwana
14:10 **O. R. Lopez-Gamundi:** The Late Palaeozoic Gondwanan Postglacial Transgressions: Mechanisms and Source Rock Potential
14:30 **M. Dykstra, B. Kneller, J. P. Milana:** Deglacial and Postglacial Sedimentary Architecture in a Deeply Incised Palaeovalley: The Late Carboniferous (Pennsylvanian) Jejenes Formation, San Juan, Argentina
14:50 **A. B. França:** Glacial-Related Sandstones of the Gondwanan Itararé Group (C-P), and the Barra Bonita Gas Field, Paraná Basin, Brazil
15:10 **A. Bell, P. Spaak:** Gondwanan Glacial Events and Their Influence on Petroleum Systems in Arabia
15:30 **Break**
16:00 **J. R. Martin, J. Redfern, B. P. J. Williams:** Ice-Sheet Dynamics of the Late Palaeozoic Glaciation in West Australia and Oman: Constraining Palaeogeographic and Sedimentological Models with Provenance Analysis
16:20 **J. Melvin, R. A. Sprague:** The Glacial and Post-Glacial Character of the Lower Unayzah Formation in the Subsurface of East-Central Saudi Arabia
16:40 **A. K. Norton, A. Neville:** Unayzah-C Reservoir: A Late Carboniferous to Early Permian Periglacial Sandstone Filling Hercynian Palaeotopography
17:00 **C. J. Heine:** Post Glacial Sealevel Rise Captures a Record of the Northward Movement of the Arabian Plate through an Early Permian, Mid-Latitude, Southern Hemisphere Desert
17:20 **D. J. Cook, A. K. Norton, A. S. Neville:** Petroleum Systems and Recent Exploration of the Permo-Carboniferous Unayzah and Devonian Jauf Reservoirs in Eastern Saudi Arabia

Palaeoclimates: Is the Past the Key to the Future?

Meeting Room 3

Co-Chairs: B. P. West and P. J. Markwick

- 13:45 **Introductory Remarks**
13:50 **D. Muller, M. Sdrolias, J. You:** Constraining Eustatic Sealevel Variations and Paleoclimate through Reconstructions of Palaeobathymetry and Continental Topography
14:10 **S. Floegel, W. W. Hay:** Hydrological Fluxes during Past and Future Greenhouse Climates
14:30 **P. J. Markwick, R. Proctor, P. J. Valdes, J. Wolf, J. M. Jacques:** Predicting Large-Scale Clastic Depositional Systems Using Global Ocean-Atmosphere, Tide and Wave Models: Modern and Maastrichtian Compared

- 14:50 **M. Perlmutter, T. Moore:** High Frequency Palaeoclimate Analysis: Impact on Climate Research and Exploration Strategy
15:10 **J. Harris, R. Crossley, F. Richards, N. Stronach, T. Hudson, D. Burggraf, J. Suter, B. Huizinga, S. Ghazi, P. Markwick, P. Valdes, R. Proctor:** Palaeogeographic and Geological Constraints on Coupled Ocean-Atmosphere Palaeo-Earth Systems Modeling for Source Rock Prediction in Frontier Basins

Fractured Reservoir Controls

Meeting Room 3

Co-Chairs: R. A. Nelson and W. Narr

- 15:55 **Introductory Remarks**
16:00 **L. Moen-Maurel, A. Toubanc, F. Gouth:** Integrated Modeling Workflow for an Explicit Representation of the Fracture Network: Present Limitations and Perspectives
16:20 **K. C. Richards:** Production Heterogeneity in Naturally Fractured Reservoirs: Data from Fort Liard
16:40 **E. Kosa, D. Hunt:** Distribution and Properties of Syndepositional Faults and Fractures in the Compaction-Modified Capitan Carbonate Platform, Texas and New Mexico, U.S.A.
17:00 **S. E. Laubach, J. E. Olson:** Verifiable Predictions of Fractured Reservoir Attributes
17:20 **T. Flottmann, D. Gillam:** Influence of Regional Strain Variations on Fracture Development in Reservoir Rocks, Amadeus Basin, Central Australia

Reservoir Characterization and Management

Meeting Room 4

Co-Chairs: N. B. Thompson and S. Moss

- 13:45 **Introductory Remarks**
13:50 **R. J. Seggie, D. B. Alsop, C. Cubitt, R. Kirk, S. Lang, N. Marshall, S. Twardt:** Integrated Multidisciplinary Analysis of the Rankin Trend Gas Reservoirs Northwest Shelf, Australia
14:10 **B. Katz, B. Mee, S. S. Lang:** Subsurface Architecture of the Late Triassic Brigadier Formation in the Goodwyn Field Area, Northwest Shelf, Australia
14:30 **A. Moscariello, Y. Dexcote, C. Beaudelot, I. Cojan, J. Rivoirard, X. Le Varlet, J. Pugh, R. C. Remondot:** Advances on 3-D Characterization of Fluvial Reservoirs Using a Process-Based Modeling Approach: Examples from the Permo-Carboniferous Gharif Formation, Oman
14:50 **E. Tuitjer, J. Glass, B. Markitell:** Extorting the Subsurface: Development Planning in Vertically-Heterogeneous, Shallow-Marine Reservoirs Using an Multi-Point Geostatistical Simulation (MPS) Defofacies-Based Geostatistical Simulation Model
15:10 **H. J. Marquez, L. Guaiquirian, J. Bayless:** Stochastic 3D Modeling for Supporting The Santa Barbara – Pirital Full Field Compositional Simulation, Eastern Venezuelan Basin
15:30 **Break**

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- 16:00 M. Levy, P. Harris, S. Strebelle: Multiple-Point Statistics (MPS)/Facies Distribution Modeling (FDM) of Carbonates – an Isolated Platform Example
- 16:20 J. Byers, A. Domingos, R. Van-Deste: Map-Based Versus Grid-Based Calculation of NRV and OOIP: Methods, Comparisons, and Recommendations in Turbiditic Depositional Environments, Block 14, Angola
- 16:40 B. R. James, T. Meckel, A. Murray, B. Davis: Compositional Grading: Its Causes and Use in Subsurface Characterization
- 17:00 A. V. Milkov, L. I. Dzou, E. M. Goebel, A. Kutch, D. A. Fisher: Application of Time-Lapse Geochemistry (TLG) for Reservoir Surveillance at the Horn Mountain Field in the Deepwater Gulf of Mexico
- 17:20 K. S. Hoffman, J. W. Neave, E. H. Nilsen: Using the Fused Fault Block Technique to Model Low Angle and Thrust Faults

Exploration Potential of Africa and Its Margins

Meeting Room 5

Co-Chairs: K. Skipper, G. Freer, G. W. Woodhouse, and K. Schofield

- 13:45 **Introductory Remarks**
- 13:50 P. Fish, H. Obee: Recent Seismic Results and Exploration of a Deepwater Foldbelt, South Falkland Basin, South Atlantic
- 14:10 E. J. Milani, A. B. França: From Play to Prospect: Petrobras Exploratory Effort in a Huge and Complex Gondwanan Province, the Paraná Basin of Southern Brazil
- 14:30 P. H. Stark: Gondwana's Enigmatic Atlantic Twins – Africa and Latin America: Challenges in Realizing their Potential
- 14:50 M. A. Battrick: Offshore Lamu Basin, Kenya: Comparison with Northwest Shelf Australia
- 15:10 G. Freer: Offshore Lamu Basin, Kenya: Deepwater Fold Belt

Coalbed Methane Technology and Developments (EMD)

Meeting Room 5

Co-Chairs: L. Stalker and M. Bocking

- 15:55 **Introductory Remarks**
- 16:00 M. M. Faiz, N. Sherwood: The Effects of Maceral Composition on Coalbed Methane Reservoir Properties: Differences between Australian and Northern Hemisphere Coals

- 16:20 N. P. Davies, D. R. W. Day: Replicating the United States Coal Seam Gas Success in Queensland, Australia
- 16:40 K. Pinetown, A. Saghafi, P. Grobler: Occurrence of Coal Seam Methane in South African Coal Seams and Igneous Intrusions in Karoo Basin
- 17:00 A. Sansome, P. Tingate: Coal Bed Methane Potential of South Australia
- 17:20 P. G. Gagnon, B. McKinstry, J. Lee, R. Wade, K. Young, R. J. Jackson: Latest Learnings from the World's Largest "Dry" Coalbed Methane Play: Horseshoe Canyon Coal and Rock Package, Southern Alberta, Canada

Petroleum Provinces of China II

Meeting Room 6

Co-Chairs: W. Zhao, C. Jia, X. Sun, and K. Liu

- 13:45 **Introductory Remarks**
- 13:50 S. Li, X. Pang, K. Liu, Z. Jiang, G. Qiu, Y. Gao: Formation and Accumulation of Subtle Oil Pools in the Dongying Depression, Bohai Bay Basin, China
- 14:10 L. Zhang, G. Bai, X. Luo, X. Ma, M. Chen: Diagenetic History and Gas Entrapment of the Yulin Gas Field in the Basin-Center Area of the Ordos Basin, Central China
- 14:30 D. He, S. Guan, G. Yang, C. Zhang: Tectonic Characteristics of Foreland Fold-and-Thrust Belts in the Southern Junggar Basin, West China
- 14:50 Y. Ma, T. Guo, X. Cai: Petroleum Geology of the Northeastern Sichuan Basin and the Characteristics of Puguang Gas Field, China
- 15:10 X. Pang, C. Chen, M. Zhu, Y. Shu, M. He, J. Shen, S. Lian: Sequence Stratigraphy of the Pearl River Deepwater Fan Systems, South China Sea

Petroleum E&P: India

Meeting Room 6

Co-Chairs: J. Peters and R. Bastia

- 15:55 **Introductory Remarks**
- 16:00 T. Mitra, J. Baral, S. Pahari, A. Ghosh: An Integrated Evaluation of Geoscientific Data to Bring out Hydrocarbon Entrapment Model of South Nagapattinam Sub-Basin, Cauvery Basin, India
- 16:20 R. Bastia, P. Nayak, P. Singh: Shelf Delta to Deepwater Basin: A Depositional Model for Krishna-Godavari Basin

- 16:40 R. Bastia: Indian East Coast Basins and Hydrocarbon Play Types
- 17:00 D. K. Mukhopadhyay, P. Mishra: Himalayan Frontal Fold-Thrust Belt, Northwest India: Geometry, Structural Evolution and Hydrocarbon Prospects
- 17:20 T. Klimentos, K. Seth, K. M. Sundaram, P. P. Singh: Integrated Formation Evaluation of a Deepwater Exploration Well on the East Coast of India

Monday Morning Poster

Geothermal and Alternative Energy Technology (EMD)

Exhibition Pavilion • 09:00 – 13:00

Chair: P. R. Barnett

- A. Saghafi, I. B. Sosrowidjojo: Coalbed Methane Exploration in Sumatra, Indonesia

Outcrop Analogues in Reservoir Characterization I

Exhibition Pavilion • 09:00 – 13:00

Co-Chairs: T. Payenberg and J. Bhattacharya

- M. Szuman, B. Kneller, M. Huuse, V. Kertznus, P. Thompson, M. Molinaro, M. Dykstra: Forward Modeling of Outcrop Data – a Tool for Improving Hydrocarbon Reservoir Prediction in Deepwater Architectural Elements
- P. Thompson, B. Kneller, M. Dykstra, K. Garyfalou, V. Kertznus, M. Szuman: Architecture and Reservoir Properties of Submarine Channels: Outcrop Analogues from the Upper Cretaceous Rosario Formation of Canyon San Fernando, Baja California, Mexico
- A. P. Gartrell, B. Evans, D. Woodward, G. Browne: Multidisciplinary Examination of a Deepwater Turbidite Reservoir Outcrop Analogue, Taranaki Basin, New Zealand
- M. Dykstra, B. Kneller: Channel Architectural Element Analysis of Deep Marine Channels: Examples from Outcrop and Implications for the Predictability of Channel Systems
- T. H. Nilsen, R. D. Shew*, G. S. Steffens, J. J. R. Studlick: Characteristics of Deepwater Deposits from Outcrops: Depositional Models and Processes, Architectural Elements, and Statistics
- T. H. D. Payenberg, S. C. Lang, M. R. W. Reilly, B. Fernandes, C. Krapf, N. Ceglar: The Donkey Bore Syncline, South Australia – an Outcrop Analogue of a Deepwater Sediment-Filled Salt-Withdraw Mini-Basin
- B. Fernandes, T. H. D. Payenberg, C. Krapf: Lateral Variations in Diapir-Constrained Deepwater Sediments of the Donkey Bore Syncline, Flinders Ranges, South Australia
- T. Meckel: Observations and Thoughts on Sands Associated with Mass Transport Deposits
- K. A. A. van Noord: Can Mass Transport Complexes Form Viable Hydrocarbon Reservoirs: Examples from the Silverwood Group, Southeast Queensland, Australia

Outcrop Analogues in Reservoir Characterization II

Exhibition Pavilion • 09:00 – 13:00

Co-Chairs: J. Bhattacharya and T. Payenberg

- C. B. E. Krapf, T. Payenberg, S. Lang: The Lake Eyre Basin: A Modern Outcrop Reservoir Analogue of a Dryland Continental Interior Basin
- B. Field, G. Browne, R. Marrett: Fractures in Formation MicroImager (FMI) Log Versus Outcrop Data: Reservoir Character of a Thick-Bedded Deepwater Miocene Sandstone, New Zealand
- A. Dubois: Comparison of Modeled Fracture Sets from Structure Analysis with Field Data from Oman
- C. B. E. Krapf, H. Stollhofen, M. Werner, I. G. Stanistreet: Contrasting Styles of Fluvio-Aeolian Interaction: The Skeleton Coast Erg – a Modern-Day Dryland Reservoir Analogue
- R. Evans, A. J. Mory, A. M. Tait: Outcrop Gamma Ray and Rock Properties of the Tumblagooda Sandstone, Western Australia – a Fluvio-Deltaic Reservoir Analogue
- K. G. Taylor, R. Gawthorpe: Extensive Carbonate Cementation of Outcropping Fluvial Successions, Upper Cretaceous, Book Cliffs, Utah: Implications for Prediction of Subsurface Cement Distribution
- J. A. M. Kenter, P. Harris: WODAD – a Web-Based Outcrop Digital Analogue Database of Carbonate Platform Margins
- E. J. Hill, C. M. Griffiths: Geosyntax: Formal Language for Analogue Models

Geochemical Processes I

Exhibition Pavilion • 09:00 – 13:00

Co-Chairs: S. C. George, D. M. McKirdy, B. J. Katz, and C. E. Barker

- L. Dou, M. Li, D. Cheng, D. Hou, S. Achal, X. Ye: Geological and Geochemical Controls on Crude Oil Acidity
- O. J. Samuel, G. D. Abbott, C. Cornford: Intra-Delta Versus Sub-Delta Sourcing of Petroleum - a Global Review
- A. Geng, Y. Liao: Isotopic Fractionation Effect of Primary Migration in Simulation Experiment of Selected Terrestrial Source Rocks
- H. Zwingmann, R. Gaupp: Diagenesis and Reservoir Quality Evaluation Using Combined Petrographic, Isotopic and Geochemical Records
- M. F. Middleton, C. E. Barker, J. Heugh: Source Rock Studies of the Pedirka Basin, Australia
- P. G. Lillis, L. B. Magoon, K. E. Peters: Identification and Characterization of Oil Types in the San Joaquin Basin, California
- G. Levresse, J. Bourdet, J. Tritlla, J. Pironon, A. Carrillo-Chavez*, J. Patiño, M. Varela, L. Clara: Brine and Hydrocarbon Evolution in a Salt Diapir-Oil Field Environment, Southeast Mexico
- J. Tritlla, G. Levresse, J. Pironon, A. Carrillo-Chavez*, E. Gonzalez Partida, S. Teinturier, H. Martinez Kemp, F. Gonzalez, M. Varela, L. Clara: P-T Conditions during Methanogenesis and Oil Filling in Mesozoic Dolostones from the Saramako Oil Field, Southeast Mexico

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- 9 Integrating Petroleum Development With Environmental Issues
- 10 Non-Conventional Hydrocarbon/Energy Resources

- C. E. Snape, W. Meredith, C. Ugama, A. D. Carr, I. C. Scotchman, G. D. Love: The Use of Hydrolysis of Oil Asphaltenes to Characterize Mixed Oils from the Clair Field

Fractured Reservoir Controls

Exhibition Pavilion • 09:00 – 13:00

Co-Chairs: R. A. Nelson and W. Narr

- N. Frost, D. Carpenter, C. Kerans: Platform-Margin Trajectory as a Control on Neptunian Dike Distributions, Devonian Reef Complexes, Canning Basin, Western Australia
- P. G. Resor, E. A. Flodin*: Testing Geomechanical Models of Deformation Associated with an Evolving Reef Margin, Capitan System (Permian), Guadalupe Mountains, Texas and New Mexico, U.S.A.
- W. Narr, U. Singh, A. Vahedi: Fracture Characterization of Malampaya Field, Offshore Northwest Philippines
- P. Hennings, B. Pujasmadi, H. Alley, C. Zahm, R. Ray, M. Enderlin, B. Lee, R. Kirschner: Relationship between Active Deformation, Stress Heterogeneity, and Fracture Permeability in the Suban Gas Field of South Sumatra, Indonesia
- J. V. A. Keller, S. Rejeki, C. Harrison: Fracture Characterization and Geological Modeling of the Darajat Geothermal Field, West Java, Indonesia
- M. M. Bahar, R. Rajeswaran: Variation of Three Phase Relative Permeability in Fractured Reservoirs in Relation with Time
- M. S. Ameen, E. A. Hailwood: A New Technology for the Characterization of Microfractured Reservoirs (Test Case: Unayzah Reservoir, Wudayhi Field, Saudi Arabia)
- G. A. Logan, G. J. Brunskill, E. Grosjean, K. A. Burns, N. Rollet, A. T. Jones, J. M. Kennard, B. Opdyke: Active Seepage Detection, Identification and Correlation Using Geophysical and Geochemical Methods, Yampi Shelf, Australia
- A. T. Jones, J. M. Kennard, G. A. Logan: Identifying False Positives in Synthetic Aperture Radar (SAR) Data Over the Southern Timor Sea, Northwest Australia: Implications for Remote Sensing and Acoustic Seepage Studies
- I. L. Ferriday, M. BJORØY: A Surface Geochemical Survey from Deepwater Offshore Brunei
- A. P. Radlinski: Spectral Detection of Oil and Gas Seeps on the Ocean Using Airborne and Satellite Sensors
- M. A. Abrams, E. Francu, N. Dahdah: Development of Methods to Collect and Analyze Gasoline Range (C5 to C10) Hydrocarbons from Seabed Sediments
- D. Schumacher, L. Clavareau, D. Hitzman: Geochemical Exploration in Deserts: Strategies for Success
- L. Zhang: New Methods for Data Processing in Geochemical Hydrocarbon Exploration and Their Application in Chinese Continent
- D. Duranti: Diagenetic History of a Hydrocarbon-Bearing Large-Scale Sand Injectite (Santa Cruz, California)
- F. F. Krause, S. G. Sayegh, R. J. Perez, J. Clark: Seepage and Leakage Next to Modern and Ancient Methane Clathrate Hydrate Accumulations: Comparative Sedimentology of the Pierre Shale Formation (Upper Cretaceous), Western Interior Foreland Basin of North America
- S. Li, Z. Zhang, H. Dong, F. Xiao: Petroleum Seeps and Their Structural Control in North China Yellow Sea

Exploration Potential of Africa and Its Margins

Exhibition Pavilion • 09:00 – 13:00

Co-Chairs: K. Skipper, G. Freer, G. W. Woodhouse, and K. Schofield

Seepage and Leakage

Exhibition Pavilion • 09:00 – 13:00

Co-Chairs: M. Abrams and G. Logan

- D. Schumacher, R. S. Foote: Seepage-Induced Magnetic Anomalies Associated with Oil and Gas Fields: Onshore and Offshore Examples
- M. A. Abrams: Empirical Observations from Global Surface and Subsurface Calibration Geochemical Database
- J. Schoenherr, J. L. Urai, R. Littke, P. Kukla, J. M. Larroque, M. Newall, N. Al-Abry, Z. Rawahi: Leakage Conditions of Rock Salt: Solid Bitumen-Impregnated Rock Salt from the South Oman Salt Basin
- T. Piperi, D. Arbouille: The Majunga Basin of Madagascar – Review of Petroleum Systems and Exploration Potential
- J. M. Jacques, K. L. Wilson, P. J. Markwick, D. G. Wright: The Importance of the 'Davie Transcurrent Deformation Zone' on Hydrocarbon Prospectivity of the Offshore Blocks of the Rovuma and Tanzanian Coastal Basins, East Africa
- J. Roth, N. Pacavira, P. Joao: Using Planned Sidetracks to Efficiently Explore Lower Congo Basin Deepwater Miocene Play: Reducing Exploration Risk and Appraisal Uncertainty, Angola's Block 14
- I. A. Mohamed: Tectono-Structural of the Main Sudanese Interior Basin

- B. Cassie, C. Sheen, J. Wood: Exploration of the East African Rift System in the Lake Albert Area, Uganda
- S. L. Nimmagadda, R. Kashambuzi, E. Rubondo, R. Kasande: Application of Integrated Geophysical Strategies in the Albertine Graben and Its Petroleum Potentiality
- M. C. Pereira-Rego: New Exploration Understanding from the Ruvuma Block (Tanzania), and Its Regional Significance
- M. Schnabel, D. Franke, S. Grassmann, S. Neben, V. Damm, H. Pelliza, P. R. Dos Santos: Deep Structure of the Argentine and Conjugated South African Continental Margins
- C. Matchette-Downes, E. Belle: Seychelles and the Western Indian Ocean Palaeo-Reconstruction by Recourse to Biomarker Assemblages from Significant Oil Accumulations and Shows in the Present Day Indian Ocean Margin

Reservoir Characterization and Management

Exhibition Pavilion • 09:00 – 13:00

Co-Chairs: N. B. Thompson and S. Moss

- R. C. Shoup: The Relationship between Recovery Efficiency and Depositional Setting in a Deltaic Plain Environment
- F. Benitez, H. Marquez, Sr, J. Castillo, J. Bayless, J. Pérez, C. Vera, T. Eschner, A. Rondon, R. Perez: Integrated Geostatistical and Simulation Model for Optimizing the Oil Recovery Factor in the U1-3 Sands, Melones Field, Eastern Venezuelan Basin
- L. Velasquez, B. Isaac, J. Fleitas, Sr, Z. Perfecto, H. Figueroa, M. Herrera: 3-D Modeling Study for Supporting Further Development of the M-19 Block, Carabobo Field, Orinoco Heavy Oil Belt, Venezuela
- I. S. Espejo, M. Kittridge: Facies-Based Rock Physics in the Nelson Field, United Kingdom Central North Sea – Part I: Petrofacies Characterization
- M. G. Kittridge, I. S. Espejo: Facies-Based Rock Physics in the Nelson Field, United Kingdom Central North Sea – Part II: Rock Properties
- R. R. R. Barkah, G. W. Jacobs, J. H. H. Sitorus, S. M. Sutanto: Reservoir Characterization and Modeling of Bekasap Formation for Waterflood Optimization and Field Development, Case Study Pungut Field, Central Sumatra
- Z. Changmin, Y. Taiju, Z. Shangfeng, W. Zhenqi: Remaining Oil Prediction Based on Geological Methods
- U. Singh, P. Montgomery, A. Vahedi, A. Castellini: Static and Dynamic Modeling of the Malampaya-Camago Gas-Condensate Field, Offshore Northwest Palawan, Philippines, Utilizing an Experimental Design Methodology
- T. Murray, N. Turner, G. Christie, G. Kovack: Application of Probabilistic Fault Seal Analysis in the Estimation of Reserves of the South Furious Field, Sarawak, Malaysia
- A. Clare, P. T. S. Rose, A. Gray, A. Jagger, D. Keir, O. Vaughan, R. Jones: Integrated Modeling for Brown Field Reservoir Management, Forties Field, North Sea

Monday Afternoon Poster

Prospect – Play – Portfolio Analysis

Exhibition Pavilion • 14:30 – 18:30

Co-Chairs: R. S. Heath, H. Doust, D. R. Johns, S. McIntyre, and B. Edwards

- M. A. Sykes, S. N. Salzman, K.D. Withers*, K.C. Hood, P.D. Snavey, III: Capturing the Full Range of Uncertainty – an Overview of One Company's Integrated Prospect Assessment Practices
- D. E. Sanders, C. Cheatwood: Integrating Peer Review and Lookbacks into Risk Analysis and Decision Making
- D. C. Lowry, A. Constantine: Risking Prospects with a Direct Hydrocarbon Indicator (DHI): An Example from the Otway Basin, Australia
- P. R. Rose: Measuring What We Think We'll Find: A 20-Year Perspective on E&P Risk Analysis
- A. O. Ramirez, E. Kvasdheim, P. Blystad, G. Soiland: Undiscovered Resources and Play Analysis in the Norwegian Barents Sea
- K. C. Hood, B. C. South, C. Stabell: Optimizing Play Assessment Data and Work Processes Using GIS
- C. N. Wold, J. E. Leonard, R. J. Coskey, P. J. Brown: Geologic Chance Assessment for Resource Plays
- T. S. Loutit, J. Blevin: Rapid Basin Evaluation Across Large Regions as a Basis for Play Analysis
- E. Kvasdheim, A. O. Ramirez, P. Blystad, G. Soiland: Play Analysis as a Tool in the Petroleum Resource Management in Norway
- D. Schumacher: Managing Exploration Risk: Lessons Learned from Surface Geochemical Surveys and Post-Survey Drilling Results
- J. M. Armentrout: Distribution of Petroleum Source Rocks in Time and Space
- K. E. Mabe, L. Fernandes: Probabilistic OOIP Assessment and Reservoir Characterization Workflow Used for Lianzi Development, Angola/Congo 14 / K A IMI Unit
- E. Kvasdheim, P. Blystad, S. Heiberg, T. S. Ahlbrandt, T. R. Klett, J. E. Ritter: The United Nations Framework Classification for Fossil Energy and Mineral Resources (UNFC)

Carbonate Reservoirs: Depositional Systems and Reservoirs

Exhibition Pavilion • 14:30 – 18:30

Co-Chairs: W. A. Morgan, R. Park, and M. Wilson

- S. Uppal, R. R. Sharma: Facies Analysis and Reservoir Characterization of Eocene Carbonates East of Daman, Mumbai Offshore Basin, India
- M. Wilson: Reservoir Development of Cenozoic Carbonates in Southeast Asia
- S. Coca: Carbonate Sequence Stratigraphy of Central Luconia Build-Ups – New Thinking Needed
- S. L. Dorobek: Neogene Carbonate Platforms in the South China Sea and Indonesian Backarc Region as Recorders of the Evolving East Asian Monsoon
- V. Zampetti, W. Schlager, J. H. Van Konijnenburg, A. J. Everts: Architecture and Growth History of a Miocene Carbonate Platform, Luconia Province, Malaysia

*denotes speakers other than first author

- 1 Successful Management and Decision Making
- 2A Petroleum Systems Elements and Evaluation Techniques: Clastic and Carbonate Reservoir Systems
- 2B Petroleum Systems Elements and Evaluation Techniques: Hydrocarbon Generation, Fluid Flow, Structural Controls and Seal Character and Quality
- 3 Gondwana Evolution and Petroleum Systems Elements
- 4A Exploring and Developing Southeast Asia's Petroleum Provinces
- 4B Exploring and Developing Gondwana's Petroleum Provinces—South Atlantic/Africa/Middle East/North America
- 5 PESA Special Session—West Australian Basins
- 6 Southeast Asia Pacific LNG Resources and Development plans
- 7 Maximizing Value From Mature Petroleum Assests
- 8 Integrating New and Emerging Technologies—Seismic Innovation
- 9 Integrating Petroleum Development With Environmental Issues
- 10 Non-Conventional Hydrocarbon/Energy Resources

- M. Wahyudin, S. Sardjono, I. Setiawan, A. Mt. Ibrahim, .. Prihadi SA: Integrated Reservoir Characterization for Evaluating Development Opportunities in Mature Oil and Gas Reservoirs (Miocene Kais Carbonates), Salawati Island, Papua, Indonesia
- B. Vlaswinkel, P. M. Harris, E. Rankey: Input for Carbonate Reservoir Models: Trend Metrics of Modern Platforms and Reef Systems
- J. H. Moreland, D. J. Birnie: Prospecting for Giants in the Cuban Sector of the Deepwater Southeastern Gulf of Mexico
- F. E. Cruz, G. P. Eberli, E. C. Rankey: Cat Cay Shoals Revisited: Contrasting Morphologies in A Bank Margin System, Bahamas
- S. Coca, N. Hadfield: Architecture of Recent Reefs in the South China and Celebes Seas - the Perfect Analogue
- A. Mueller, H. McGregor, M. K. Gagan, J. M. Lough: Stable Isotope Signatures in Carbonates as a Tool for Hydrocarbon Exploration

Regional and Local Tectonic Influence on Carbonate Platform Architecture, Palaeo-Tethys to the Present Indo-Pacific

Exhibition Pavilion • 14:30 – 18:30

Co-Chairs: A. George, R. Sarg, and W. A. Morgan

- M. Zizi, M. Nahim: The Tectono-Sedimentary Framework of the Jurassic Carbonate Platform in Atlantic Passive Margin of Morocco
- L. Collins: Coral Reef Morphology and Growth History, Northwest Shelf, Australia
- K. Pigott, M. Engel, R. P. Philp, J. D. Pigott: Carbon Isotope Proxy for the Discrimination of Eustatic from Transgressive-Regressive Changes in Accommodation Space for Carbonate Ramps: Oxfordian Smackover of Alabama, U.S.A. Example

Geochemical Processes II

Exhibition Pavilion • 14:30 – 18:30

Co-Chairs: D. M. McKirdy, S. C. George, B. J. Katz, and C. E. Barker

- D. M. McKirdy, K. R. Arouri, L. Schwark, P. J. Boulton: Residual Oil Analysis Reveals Complex Filling History of Multi-Reservoir Fields in the Southwestern Cooper Basin, South Australia
- L. M. Cathles, M. Schoell*: Formation of CO₂ In Sedimentary Basins and Assessment of CO₂ Risk in Gas Prospects

- T. C. O. Fonseca, C. Duyck, N. Miekeley, H. Fontenelle, C. L. P. D. Silveira, P. Szatmari: Elemental Fingerprinting of Brazilian Petroleum: A Linkage to Gondwana?
- L. Stalker, C. Barber, J. Van Holst, B. Hartung-Kagi: Geochemistry of Western Australian Crude Oils: Use of Carbon Isotope Models to Delineate Active Petroleum Systems
- I. Al-Aasm, J. Packard: Divergent Fluid Regimes and the Formation of Hydrothermal Dolomite: Examples from Devonian Reservoirs in the Western Canada Sedimentary Basin
- S. Zhang, G. Zhu, M. Li, J. Dai, Y. Liang, H. Liang: Geochemical Processes Responsible for the Sour Gas Accumulation in the Bohai Bay Basin: A Case Study from the Northern Jinxian Sag
- R. Hill, J. Zumberge, D. Jarvie, J. Williams: An Investigation of Petroleum Systems of the Permian Basin, U.S.A.
- D. Dawson, K. Grice, D. E. Edwards, R. Alexander: New Insights into Source and Maturity of Sedimentary Organic Matter from the Vulcan Sub-Basin (Timor Sea) Using Stable Isotope Ratios of Individual Hydrocarbons
- S. E. Ohm, D. A. Karlsen: Isotopically Light Methane Expelled from Thermogenic Mature Coal! What Is Going on?

Petroleum Geomechanics and Pore Pressure Prediction

Exhibition Pavilion • 14:30 – 18:30

Co-Chairs: R. Hillis and R. E. Swarbrick

- M. Tingay, B. Müller, J. Reinecker: Present-Day Stress in Sedimentary Basins: Insights from 20 Years of the World Stress Map Project
- E. Fjær, A. E. Lothe, Ø. Sylta: Porosity Versus Depth Relationship Derived from Rock Mechanical Arguments
- E. M. Llanos, R. Jeffrey, R. Hillis, X. Zhang: Factors Influencing Whether Induced Hydraulic Fractures Cross Pre-Existing Discontinuities
- C. Rogers, M. N. Watson, P. J. Van Ruth, R. R. Hillis: Soil Gas Sampling to Verify Geomechanical Probability of Fault Reactivation
- A. Khaksar, C. McPhee: Rock Strength Determination from Well Logs: A Review
- E. M. E. M. Shokir, A. A. Al-Quraishi*: Effect of Pore Pressure on Laminated and Homogenous Rocks Permeability under Hydrostatic and Triaxial Loading
- P. J. Van Ruth, R. Hillis, P. Tingate: The Origin of Overpressure in the Carnarvon Basin, Western Australia from Porosity-Effective Stress Analysis

- J. Coker, M. D. Matthews: Predicting and Updating Geopressure 1000 Feet Ahead of the Bit at the Wellsite

Middle East Petroleum Developments

Exhibition Pavilion • 14:30 – 18:30

Co-Chairs: J. Scott and P. Bassant

- W. S. Meddaugh, S. Griest*, D. W. Dull, R. A. Garber, A. J. Contreras, R. Sablock, W. W. Todd: The Wafra Maastrichtian Reservoir, Partitioned Neutral Zone (Saudi Arabia and Kuwait) – Reservoir Description, Stochastic Modeling, and Dynamic Simulation
- M. Mouty: The Triassic in Syria – an Overview: Lithostratigraphic and Biostratigraphic Correlations with Adjacent Areas
- R. B. Davies, P. R. Sharland, M. Simmons, D. Casey, F. Schulze, M. Oxford: Sequence Stratigraphy and Chronostratigraphy in the Middle East – Potential Global Consequences
- S. R. Taheri, A. Tait: Remote Sensing, Fuzzy Logic and GIS in Petroleum Exploration
- P. D. Rafferty: Midriqah Field: An Example of a Combined Structural and Stratigraphic Trap in Saudi Arabia
- O. Rahmani, H. Mohseni*, H. Rahimpour Bonab, J. Aali: Hydrocarbon Potential of Kazhdumi Formation in South Pars Field (Zagros Basin, Iran)
- P. Allman-Ward, W. Voggenreiter: Exploring the “Empty Quarter” in Saudi Arabia – the Application of a Play Based Exploration Strategy to Overcome the Challenges of a New Upstream Venture

Petroleum Prospectivity of West Australian Basins I

Exhibition Pavilion • 14:30 – 18:30

Co-Chairs: M. Bradshaw, O. P. Gross, J. D. Gorter, G. Ellis, and P. W. Baillie

- D. Barr, T. Kennaird: The Role of Sedimentology in Accurately Characterizing Newly Discovered Reservoirs
- D. Dharmayanti, A. Tait, R. Evans: The Angel Formation: A Classic Example of a Sheet Turbidite Reservoir from the Northwest Shelf, Australia
- G. K. Ellis: Late Authigenic Pyrite as an Indicator of Oil Entrapment: Case Histories from the Northwest Shelf, Australia
- B. M. Kinna, M. W. Wallace, S. J. Gallagher: Stratigraphic Framework of the Cenozoic Carbonates of the Northern Carnarvon Basin, Northwest Shelf, Western Australia
- S. J. Gallagher, M. W. Wallace, B. Kinna, C. Leong Li, G. R. Holdgate: Plio-Pleistocene Shelf Evolution and the Origin of the Reefs in the Northwest Shelf
- E. D. Monteil, A. A. Krassay, I. Borissova, C. Nicholson, M. MacPhail, C. J. Boreham: New Biostratigraphic and Seismic Correlations for the Vlaming Sub-Basin, Offshore Perth Basin, Western Australia
- J. O. Ugbo: Geostatistical Simulation of Electrical Double-Layer Properties of Clay Minerals in Shaly Sand Reservoirs (Cliff Heads Oil Field, Perth Basin, Western Australia)

*denotes speakers other than first author

- M. Lisk, A. Gartrell, W. Bailey, M. Brincat: A Holistic Model to Describe Charge and Retention History of the Northern Bonaparte Basin, Australia
- M. Keep, D. Haig, E. McCartain: East Timor: Structural and Tectonic History of Deformed Passive Margin Sequences
- I. Borissova, A. A. Krassay, C. Nicholson, E. D. Monteil, C. Boreham, B. Bradshaw: The Mentelle Basin - a Deepwater, Frontier Gondwanan Basin
- H. Young: Chronostratigraphy of the Late Permian Dongara Sandstone, Northern Perth Basin
- A. Goncharov, I. Deighton, S. McLaren: Basement and Crustal Controls on Hydrocarbons Maturation on the Exmouth Plateau, Northwest Australian Margin

Seismic Applications to New Play Identification

Exhibition Pavilion • 14:30 – 18:30

Co-Chairs: D. M. Maughan and R. J. Peake

- S. L. Nimmagadda, K. Chakraborty, M. Al-Hajeri, J. Ray: Exploration Data Integration: An Effective Data Re-engineering Process for New Petroleum Plays in Gulf Offshore Basins
- K. Azem, M. Humanyon: Artificial Neural Networks Based Seismic Facies Classification and Reservoir Property Mapping for Prospect Generation and Development: Lower Indus Basin, South Pakistan
- Y. Yamada, K. Shiraishi, T. Matsuoka: 3-D Analogue Experiment and Its Synthetic Seismic Profiles of An Accretionary Prism

Seismic Applications to Field Developments

Exhibition Pavilion • 14:30 – 18:30

Co-Chairs: A. W. Djakic and M. A. V. Moore

- R. Raguwanti, R. A. Wisnu, Z. Abubakar, M. O. Iriana, O. Sadjati, S. Riadhy: New Approach Using Acoustic Impedance Modeling for Reservoir Sand Identification in Brown Field Area: A Case Study for Besitang Field, North Sumatra Basin, Indonesia
- D. Prijambodo, R. Mulyawan, Sr: Innovation without Limits – Minas Infill Stratigraphy Project Development
- N. Van de Coevering, R. Sigit, R. Lasman, A. Bisset, G. Soosai, M. Newman, A. Mahargono: Improving Seismic Interpretability by Integrating Well Seismic Data into Processing
- A. Widyantoro: Heuristic Validation of Probabilistic Neural Network in Reservoir Property Estimation from Seismic
- A. Folkers, K. D. Jarvis: Direct Hydrocarbon Indicators (DHIs) Derived from Analysis of Simultaneous Seismic Inversion Significantly Reduces Exploration Risk