2nd EAGE Workshop on New Discoveries in Mature Basins 2026

Kuala Lumpur, Malaysia
28 - 29 April 2026

ISBN: 979-8-3313-4035-3

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2026) by the European Association of Geoscientists & Engineers (EAGE)
All rights reserved.

Printed with permission by Curran Associates, Inc. (2026)

For permission requests, please contact by the European Association of Geoscientists & Engineers (EAGE) at the address below.

European Association of Geoscientists & Engineers (EAGE)
PO Box 59
3990 DB Houten
The Netherlands

Phone: +31 88 995 5055
Fax: +31 30 634 3524

eage@eage.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

AM BREAK & E-POSTER PRESENTATIONS (DAY 1) | SPONSORED BY ELIIS SAS AND ENEOS XPLORA

Unlocking Fault Seal Analysis by Using AI/ML - Supervised Analysis in Reservoir Characterisation 1
A.A.S. Shamsuddin

Unlocking New Reservoir Exploration Potential in Stepped Slope Environment. 4
N.D. Adi Asokan, Y. Iijima, S. Nagase, M.A. Khamis, S. Yamazaki, H. Kobayashi

Successes and Challenges in Exploration Below Producing Fields in the Malay Basin 7
J. Zhou, M. Rahadian, N. Mohd Yasin

AM BREAK & E-POSTER PRESENTATIONS (DAY 2) | SPONSORED BY ENEOS XPLORA

One Field, Multiple Opportunities: Integrating Gas Development and Near-Field Exploration in Balingian Cycle I 11
T. Kiatrabile, N. Phonphetrassameekul, D.G. Leong, N. Hushin, N.Z. Zamri

From “Stranded” to Connected in Balingian Province 15
N.S. Mohammad Jamaal, S.N. Jahaya, S.S. Che M Sukri, J. Mishan

The Syn-Rift Play Opportunity in the Abu-Simpur Sub-Basin of Malay Basin 18
J. Zhou, A. Fazil, H.A.B. Nawawi

PM BREAK & E-POSTER PRESENTATIONS (DAY 1) | SPONSORED BY ELIIS SAS AND ENEOS XPLORA

Integrated Rock Physics, AVO, and Seismic Conditioning for Reservoir Prediction in West Luconia 22
K. Siva Kumar, M.N. Zubir, A. Amdan, G.C. Tay, T. Dylan

Maximizing Near Field Exploration Upside by Challenging and Reinterpreting Legacy Data with 3D Visualization Tools 25
N. Zulkifli, J.G. Zunino, A.S. Arshad, G. B Malo Paul

SESSION 1: REGIONAL PLAY STRATEGIES & BASIN INSIGHTS

From Decline to Resilience: Unlocking Value in Southeast Asia’s Mature Basins 30
C. Barker-White, E. Intrieri, A. Dimabuyu

Expanding South Sarawak’s Hydrocarbon Future: New Insights into the Cycle I Play 33
N.L. Mahmud, A.N. Anuar

Exploration Portfolio Rejuvenation by Delineating Cenozoic Carbonate Plays in Deepwater, off the Coast of Sabah, Malaysia 36
A.K. Upadhyay, C. Seon Teng, A. Hakimi Wong Abdullah, R. Ridhuan B Khalid, M. Alyssa Kamalul Ariffin

Cenozoic Uplift Study in the Malay Basin: Insights into Stress Partitioning and Lithological Controls 39
S.D. Prabal, L. Chong, D. Ranajit, B.M. M. Haniff, S.J. Jyoti

Linking Elastic Properties to Depositional Processes: A Case Study from the North Malay Basin, Peninsular Malaysia..... 43
M.H. Moh'd Rafi', A. Chuang, S. Osman, M.N.A. M Rosselly, M.A. M Arus

SESSION 2: ADVANCED STRUCTURAL MODELING & IMAGING

Unravelling Deeper Play Opportunities in Kinabalu Basin of Sabah, Case Study from Recent Well B Results. 46
A.F. Ab Ghani, J.S. Bhag Singh, S. Jamil, Y. Bazleigh, M.H.H. M Rasid, N.C.D. M Noor, M.A. M Nasir

Integrated Interpretation to Unlock High Risk Hydrocarbon Potential in Matindok Area - Central Sulawesi 49
R.P. Atria, K.A.A. Permana, F. Herawan, N.A. Guneanto, R. Fikri, M. Fajar

Complex Traps - Are We Predicting Reasonable Risk and Volumes? 52
M. Neumaier, N. Tessen

New Play Insights in a Mature Basin: Lessons from Well X and Well Y 57
J. Chen, S.S. Che M Sukri, J. Mishan

SESSION 3: UNLOCKING POTENTIAL THROUGH VALUATION & ANALYTICS

Turbidite Architecture of Ngrayong Formation - North East Java: Enhancing Understanding for Potential Further Exploration 60
K.A.A. Permana, M.T. Parsaoran, R.E. Prinscillia, R. Armanda, C. Casdira

“Exploration Beyond Seismic Resolution: The Complexities of Thin Bedded Reservoirs in Promising Play, Malay Basin..... 63
S.S. Manmohan Singh, J.G. Zunino, A.S. Fuad

Minding the Gap – Pursuing Missed Opportunities in Tenggol Arch, Peninsular Malaysia 68
B.H. Tan, P. Eliet, M. Choo

A Case Study of Advanced Imaging and Reprocessing Using Q-FWI in the Sarawak Basin Offshore Malaysia 71
J. Kumar, J. Oukili, S. Naumann, S. Mohammed

Navigating Technical and Commercial Challenges to Unlock NFE: Case Studies from a Brownfield in Brunei Darussalam 74
M. Smaili

SESSION 4: GEOCHEMICAL & TECTONIC EVOLUTION

Faster En Echelon Fault Interpretation by Integrating Automated Fault Extraction and AI Fault..... 77
Irfan Jusmila, Faris Amani Abu Bakar, Azwa Jannah Abu Bakar, Megat Iskandar Megat Ismail, Noor Muhammad Ridzuan, Shahrul Azani M. Amin, A. Aiman Johaidi, Sapinah Saleh, Atif Rifqy

Mechanisms of H2S Formation and Souring Prediction in the Central Luconia Province 80
P. Paing Soe, N.Z.S.B. M Zainal, N.N.S.B. Suhaimi, T. Sing Ling, I.T. Zhi Mian, S. Seng Hui

New Perspectives on the Hotspot-Driven Intra-Continental Rifting Evolution of the Sichuan Basin Craton 83
J. Bai, H. Liu

Sedimentary Filling and Evolutionary Laws of Supra-Salt Carbonates in the Fuman Area, Tarim Basin, China 86
D. Wang

SESSION 5: PROVEN ANALOGUES & NEW DISCOVERY FRONTIERS

Re-Imaging of the La Bella 3D Unlocks Exploration Success with New Discoveries - Otway Basin, Australia 89
J. Grahame

A New Fault-Bonded Structural Play in Malay Basin; Insights from Proven Analogues in Thailand 94
F. Latiff, J.G. Zunino, G. B Malo-Paul, H. Mohamad, N. Mohamed

Exploration Opportunities in Mature Basin of Eastern Edge of East Cepu High, North East Java Basin 99
R. Armanda

Unlocking the Oligocene Play in Offshore Sabah: New Insights from Layang Layang Basin Following Recent Discoveries 102
T. Choi, N. Hand

Author Index