MEHOC 2017 features over 50 prominent industry speakers and representatives from the regional and international heavy oil community, providing a unique opportunity to gain further industry insights, and to engage with peers from the heavy oil industry.

### Conference Session Preview

#### DAY 1
**Tuesday 11 April 2017**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00 – 09:20</td>
<td>OPENING KEYNOTE ADDRESS&lt;br&gt;The Future of Heavy Oil: Obtaining Maximum Value on Investment in a Volatile Market</td>
</tr>
<tr>
<td>10:30 – 12:00</td>
<td>SESSION 1&lt;br&gt;Technologies and Strategies for Effective Extraction of Heavy Oil</td>
</tr>
<tr>
<td>12:00 – 12:30</td>
<td>SESSION 2&lt;br&gt;Dissecting the Future of Refining &amp; Storage of Heavy Oil</td>
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<tr>
<td>13:30 – 15:20</td>
<td>SESSION 3&lt;br&gt;Optimising Exploration &amp; Production of Heavy Oil in Existing Fields</td>
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<tr>
<td>15:20 – 16:50</td>
<td>SESSION 3&lt;br&gt;Enhancing Heavy Oil Refining Processes</td>
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#### DAY 2
**Wednesday 12 April 2017**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>09:00 – 09:20</td>
<td>SESSION 1&lt;br&gt;Economics of Solar Co-Generation for the Oilfield</td>
</tr>
<tr>
<td>09:20 – 10:50</td>
<td>SESSION 2&lt;br&gt;Upgrading Existing Refineries Within the Middle East to Refine Heavy Crude Oil Effectively</td>
</tr>
<tr>
<td>10:50 – 11:30</td>
<td>SESSION 3&lt;br&gt;Future Investments &amp; Need for Innovation in the Heavy Oil Sector</td>
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<tr>
<td>11:30 – 13:00</td>
<td>SESSION 4&lt;br&gt;Dissecting Advancements &amp; Improvisations in Heavy Oil Technologies</td>
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<tr>
<td>14:00 – 14:30</td>
<td>SESSION 5&lt;br&gt;EAdvancements, Opportunities &amp; Challenges in Heavy Oil Research</td>
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<tr>
<td>14:30 – 16:20</td>
<td>SESSION 6&lt;br&gt;Comprehending Diverse EOR Methods for Heavy Oil Extraction Across the World</td>
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09:00 OPENING KEYNOTE ADDRESS
THE FUTURE OF HEAVY OIL: OBTAINING MAXIMUM VALUE ON INVESTMENT IN A VOLATILE MARKET
• His Excellency Shaikh Mohammed Bin Khalifa Bin Ahmed Al Khalifa, MINISTER OF OIL

09:20 GLOBAL LEADERS PLENARY DISCUSSION
DISSECTING THE PILLARS OF THE HEAVY OIL INDUSTRY: INNOVATION, TECHNOLOGY, STRATEGY

The oil and gas industry continues to evolve in multiple ways battling every challenge that is thrown its way with low, and fluctuating, price cycles. Examining three vital pillars of the industry, we bring together a panel of leaders to review:

• **Innovation:** Should heavy oil producing companies continue to innovate in a low price environment? How can companies achieve maximum return on investment in research and development projects? Since heavy oil is often expensive to extract, should the focus be on exploration rather than on innovation?

• **Strategy:** What new heavy oil project announcements can we expect in the coming years? How are NOCs and IOCs planning to optimise production in brownfields? Are there investments or announcements expected in emerging markets? Are there enough investments in refining projects? How can governments drive international dialogue across the oil industry for sustainable development of heavy oil?

• **Technology:** Do we need new technology to optimise heavy oil production? How do renewables focused technology solutions fit within this mix? Are the refineries equipped with up-to-date technologies to process heavy oil, particularly the Arab mix? Is there scope for new technologies in the processing of heavy oil?

10:00 COFFEE AND OFFICIAL EXHIBITION INAUGURATION AND MINISTERIAL TOUR

10:30 TECHNICAL CASE STUDY PRESENTATIONS
TECHNOLOGIES AND STRATEGIES FOR EFFECTIVE EXTRACTION OF HEAVY OIL

<table>
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<tr>
<th>TIMING</th>
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<th>PRESENTATION TITLE AND SPEAKER</th>
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<tbody>
<tr>
<td>10:30-10:50</td>
<td>178</td>
<td>High Sulfur Oils in the Middle East: Distribution, Origin, Development</td>
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<tr>
<td></td>
<td></td>
<td>Leonid Anisimov, Chief Researcher, <strong>LUKOIL ENGINEERING</strong></td>
</tr>
<tr>
<td>10:50-11:10</td>
<td>236</td>
<td>A novel approach to reduce prospects uncertainty using integrated reservoir characterisation process, Bourarhet, Algeria</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mohamed Shehata, Senior Reservoir Geophysicist <strong>SCHLUMBERGER</strong></td>
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<tr>
<td>11:10-11:30</td>
<td>277</td>
<td>Automatic Detection and Segmentation of Oil Leak in Ocean Environment</td>
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<td></td>
<td>Dr. Vijay Asari, Director – University of Dayton Vision Lab, <strong>UNIVERSITY OF DAYTON</strong></td>
</tr>
<tr>
<td>11:30-11:50</td>
<td>248</td>
<td>Modeling hydrodyanmic roughness in the water-assisted pipeline transportation of heavy oil</td>
</tr>
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<td>Sayeed Rushd, Postdoctoral Research Associate, <strong>TEXAS A&amp;M UNIVERSITY, QATAR</strong></td>
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<tr>
<td>11:50-12:00</td>
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<td>Panel Q&amp;A</td>
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**12:00** PANEL DISCUSSION
**DISSECTING THE FUTURE OF REFINING & STORAGE OF HEAVY OIL**

It is common knowledge that exploration and production of heavy oil is an expensive and tedious process. It is, however, equally challenging to process and store heavy oil particularly the Arab heavy mix that is found in the Middle East. In this panel discussion, we explore:

- An insight into existing heavy oil refineries within Middle East and across the globe
- Identifying innovative trends and transformations that will define the future of heavy oil conversion. How will technologies evolving today underpin products and profitability for refineries tomorrow?
- Are there enough investments in building modern refineries? Will refining of heavy oil be more economic if done in emerging markets rather than within the region?

**12:30** LUNCH AND TOUR OF EXHIBITION

**13:30** TECHNICAL CASE STUDY PRESENTATIONS
**OPTIMISING EXPLORATION & PRODUCTION OF HEAVY OIL IN EXISTING FIELDS**

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<tr>
<th>TIMING</th>
<th>ID</th>
<th>PRESENTATION TITLE AND SPEAKER</th>
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</table>
| 13:30–13:50  | 211 | Optimizing field depletion plan in heavy oil reservoirs using numerical simulation: Case Study
Mahmoud Fayed, Senior Reservoir Engineer, **GULF OF SUEZ PETROLEUM COMPANY (GUPCO)** |
| 13:50-14:10  | 215 | The sustainable way to produce heavy oil
Olivier Garnier, Heavy Oil R&D Manager, **TOTAL S.A.** |
| 14:10-14:30  | 292 | The effect of kaolinite on water-in-oil emulsion formed by steam injection during tertiary oil recovery
Ibrahim Al Hadabi, **KYUSHU UNIVERSITY** |
| 14:30-14:50  | 332 | Reservoir characterisation and development of the Tayarat heavy oil reservoir in West Kuwait
Girish Warrier, Senior Petroleum Engineer, **KUWAIT OIL COMPANY** |
| 14:50-15:10  | 252 | Successful Application of Slotted Liners in Mukhaizna Heavy Oil Reservoir, Oman
Mohamed Kyanpour, Engineering and Business Development Manager (GCC), **RGL RESERVOIR MANAGEMENT LTD** |
| 15:10-15:20  |     | Panel Q&A |
15:20 TECHNICAL CASE STUDY PRESENTATIONS
ENHANCING HEAVY OIL REFINING PROCESSES

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| 15:20-15:40   | 331 | Troubleshooting the frequent foaming issue in the hydrogen feed gas treatment  
Balakrishnan Murali, Specialist, Kuwait National Petroleum Company – Mab Refinery |
| 15:40-16:00   | 335 | Modelling a unique mild hydrocracker unit producing ultra-low sulphur diesel  
Anood Taher, Process Simulation Engineer, Takreer Research Centre |
| 16:00-16:20   | 227 | Energy analysis and design improvements of an existing crude vacuum distillation unit  
Tarek Zeineldeen, Process Engineer, ENPPI, Cairo University |
| 16:20-16:40   | 241 | Improving heat exchanger performance by using on-line automatic tube cleaning system  
Tom Higley, Technical Sales Engineer, Calgavin Ltd |
| 16:40-16:50   |     | Panel Q&A                                                                                                                                                      |

16:50 CLOSE OF DAY 1 OF THE MIDDLE EAST HEAVY OIL CONGRESS
08:00  REGISTRATION & COFFEE

09:00  OPENING PRESENTATION
ECONOMICS OF SOLAR CO-GENERATION FOR THE OILFIELD

In many oilfields around the world, co-generation is used to supply both power and steam in an efficient manner. However, with the advent of new solar thermal technology and the constantly declining cost of solar power, it is time to re-evaluate the economics of co-generation.

In this presentation, we explore the economic value proposition of “solar co-generation”, where both thermal and electrical needs at the oilfield are supplied using solar technologies using examples from projects in the UAE, with the cost of generating power using a fuel-fired turbine on the oilfield.

09:20  TECHNICAL CASE STUDY PRESENTATIONS
UPGRADING EXISTING REFINERIES WITHIN THE MIDDLE EAST TO REFINE HEAVY CRUDE OIL EFFECTIVELY

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<tbody>
<tr>
<td>09:30-09:50</td>
<td>233</td>
<td>Maximise RFCCU profit through technology upgrades in hardware and catalyst</td>
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<td></td>
<td></td>
<td>Abdulla Al Meshal, Process Engineer – Technical Services Department, BAPCO</td>
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<tr>
<td>09:50-10:10</td>
<td>312</td>
<td>Performance improvements in delayed Coker of KNPC MAB Refinery</td>
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<td></td>
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<td>Faten Taqi, Process Engineer, KUWAIT NATIONAL PETROLEUM COMPANY</td>
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<td>10:10-10:30</td>
<td>187</td>
<td>Heavy crudes and solid load – a new challenge for middle east refineries</td>
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<td>Walter Militello, Refining &amp; Additives Technology Support, NALCO CHAMPION</td>
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<tr>
<td>10:30-10:50</td>
<td>302</td>
<td>Removal of naphthenic acids from Sudanese Crude oil by Zeolite and Clay</td>
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<td>Waleed Ibrahim, SUDANESE PETROLEUM CORPORATION</td>
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<tr>
<td>10:50-11:00</td>
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<td>Panel Q&amp;A</td>
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10:50  PANEL DISCUSSION
FUTURE INVESTMENTS & NEED FOR INNOVATION IN THE HEAVY OIL SECTOR

The Middle East and North Africa are growing hubs of heavy oil activity. Simultaneously, we see the hydrocarbons industry increasingly turning to the renewables sector to minimise environmental damage occurring from hydrocarbon exploration activity and thereby, adhering to the COP21 cause. In this panel discussion, we explore:

• Analysing investment opportunities in the evolving Middle East & North African markets
• Dissecting the impact of oil market fluctuations, forecasts and price volatility on the heavy oil sector
• Evaluating the need for the heavy oil sector to invest in renewables particularly for EOR activities
• Comprehending the urgency and need for diversifying investments into refining projects and better refining technologies

CONFERENCE REGISTRATION NOW OPEN
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11:30  TECHNICAL CASE STUDY PRESENTATIONS
DISSECTING ADVANCEMENTS & IMPROVISATIONS IN HEAVY OIL TECHNOLOGIES

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<tr>
<th>TIMING</th>
<th>ID</th>
<th>PRESENTATION TITLE AND SPEAKER</th>
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</table>
| 11:30-11:50  | 339  | Use of thermal expansion casing collars to mitigate thermal strain and reservoir compaction in steam flood wells
Ahmed Al Hadhrami, Completion New Technology Engineering Lead, OCCIDENTAL OF OMAN, INC. |
| 11:50-12:10  | 280  | Case Study "Carbonate reservoir field experiments in extreme steam conditions, Bahrain Field"
Mohamed Mansoor, Head of Bahrain Reservoir Management Team, TATWEER PETROLEUM     |
| 12:10-12:30  | 237  | Optimal settings of multiple multi-position inflow control devices in new wells and re-completions
Terry Stone, Advisor, SCHLUMBERGER                                              |
| 12:30-12:50  | 318  | Formation of crude oil - water emulsion for transportation of heavy crude in pipeline
Rohit Sharma, Research Scholar - Department of Petroleum Engineering, INDIAN INSTITUTE OF TECHNOLOGY INDIAN SCHOOL OF MINES |
| 12:50-13:00  | Panel Q&A |                                                                                              |

13:00  LUNCH AND TOUR OF EXHIBITION

14:00  PANEL DISCUSSION
ADVANCEMENTS, OPPORTUNITIES & CHALLENGES IN HEAVY OIL RESEARCH

Evolution of the oil and gas industry would be incomplete without investments and advancements in research. The heavy oil sector is no exception. In this session, we bring together scientists and researchers to share their insights and experiences on:

• Existing and planned research projects for heavy oil development
• Opportunities for STEM graduates in research and development
• Advancements in research for better and more environmentally-friendly EOR techniques
• Challenges in pursuing research in current $ per barrel price scenario particularly investments for research projects

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### TECHNICAL CASE STUDY PRESENTATIONS

**COMPREHENDING DIVERSE EOR METHODS FOR HEAVY OIL EXTRACTION ACROSS THE WORLD**

<table>
<thead>
<tr>
<th>Timing</th>
<th>ID</th>
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</thead>
<tbody>
<tr>
<td>14:30-14:50</td>
<td>269</td>
<td>Heavy oil production using its own energy</td>
</tr>
<tr>
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<td></td>
<td>Vedant Domkondekar, Graduate Teaching Assistant - Natural Gas Engineering, <strong>TEXAS A&amp;M UNIVERSITY</strong></td>
</tr>
<tr>
<td>14:50-15:10</td>
<td>247</td>
<td>Evaluation of the first cycle of steam stimulation in North Kuwait heavy oil thermal pilots</td>
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<td></td>
<td>Firdavs Aliev, Research Assistant, <strong>KAZAN FEDERAL UNIVERSITY</strong></td>
</tr>
<tr>
<td>15:10-15:30</td>
<td>246</td>
<td>Steam forced imbibition in the rubble heavy oil reservoir, Awali Field, Bahrain</td>
</tr>
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<td>Ali Mohamed, Acting Head for the Heavy Reservoir Management Team, <strong>TATWEER PETROLEUM</strong></td>
</tr>
<tr>
<td>15:30-15:50</td>
<td>338</td>
<td>Thermal evaluation, selection criteria and design wells, of the area subjected to thermal recovery process</td>
</tr>
<tr>
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<td></td>
<td>Jesus Rodriguez, Lead Reservoir Engineer – EOR, <strong>PDVSA</strong></td>
</tr>
<tr>
<td>15:50-16:10</td>
<td>285</td>
<td>Evaluation of The First Cycle of Steam Stimulation in North Kuwait Heavy Oil Thermal Pilots</td>
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<td>Yaqoup Fadhel Abdullah Al-Ali, Reservoir Engineer – Heavy Oil Development (NK) Group, <strong>KUWAIT OIL COMPANY</strong></td>
</tr>
<tr>
<td>16:10-16:20</td>
<td>Panel Q&amp;A</td>
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</tbody>
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**16:30 CLOSING REMARKS AND CLOSE OF 2ND MIDDLE EAST HEAVY OIL CONGRESS**

[Image of attendees at the conference]

[Website: www.meheavyoil.com]
GROUP DISCOUNTS

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CONFERENCE DELEGATE BOOKING FORM

DELEGATE INFORMATION

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First Name:
Last Name:
Job Title:
Department:
Tel:
Fax:
Mobile:
Email:

Second delegate:
☐ Mr ☐ Mrs ☐ Miss ☐ Ms ☐ Dr ☐ Other
First Name:
Last Name:
Job Title:
Department:
Tel:
Fax:
Mobile:
Email:

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We recommend you check with your finance department that payment has been made before travelling.

IMPORTANT: Please ensure that the name of the meeting (MEHOC 2017 Conference) and of the participant (First Name, Last Name) is stated on the bank transfer. When processing bank transfer instructions please ensure that all bank charges are paid by you, the remitter, so that the amount we receive is the amount on the invoice.

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TEAM PACKAGE RATES: Bookings must be made at the same time and no merging of separate bookings is permitted. The team package promotion cannot be used in conjunction with any other dmg events promotional offer or discounted structure.

CANCELLATION POLICY: Made within 48 hours of receipt of the completed registration form will be eligible for a full refund. Received in writing more than one month prior to the start of the event will be refunded less a 50% cancellation fee. Received in writing within one month of the start date of the event will receive no refund and registrants will be liable for payment of 100% of the invoiced amount. Substitutes are accepted at any time.

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Payment is due 14 days from the invoice date, or immediately when the booking is made within one month of the event. If payment has not been received before the start of the event, delegates will be refused entry.

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DATA PROTECTION: By entering your details in the fields above, you agree to allow dmg events and companies associated with this event to contact you (by mail, email or fax) regarding their services. If you do not wish to receive such communications please contact us in writing.

REGISTRATION FEE: The registration fee covers attendance at all Conference and Plenary sessions, refreshments, lunches (except Student and Exhibitor registration fees), receptions and speaker presentations. Please note, it may be necessary to alter the content and timing of the programme on its speakers.

LANGUAGE: The official conference language is English.

CUSTOMER SERVICES: For questions concerning your registration, attendance, visa support and invoice payments, please contact mehoc@dmgeventsme.com

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ACCELERATING GROWTH IN THE HEAVY OIL VALUE CHAIN
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