Dear colleagues,

Asia remains the top destination for mega and major downstream refinery and petrochemical projects: Our recent industry research suggests $100 billion worth of projects are in the pipeline for the region and almost all of them are to be developed by National Oil Companies (NOCs) and their joint ventures.

Furthermore, when we asked what are the key challenges facing the existing Asian refineries, improving margin and productivity was indicated as the number one challenges for the industry.

This first hand market information has led us to develop this year’s Downstream & Petrochemical Asia programme, with a strong focus on key projects in the pipeline and pressing challenges facing Asian’s operators. Content has been created to suit strategic and technical attendees to ensure valuable learning for each attendee.

Please feel free to browse through the brochure and find the suitable stream and sessions for you to attend.

I look forward to meeting you in October.

Sincerely,

Cathy Gu
Project Director
Downstream & Petrochemical Asia

Ps. Book your seat before 4 September to get up to $350 discount.
WHY ATTEND?

WHAT’S NEW IN 2014?

**PROJECT INTENSIVE:** Featuring Asia’s top mega refinery and petrochemical projects

**OPERATOR PERSPECTIVE:** An NOC and operator-oriented programme highlighting critical industry challenges

**C-LEVEL PARTICIPATION:** Closed-door VIP Breakfast with 30+ C-level downstream executives

**STRATEGY VS. TECHNOLOGY STREAMS:** One programme, multiple learning opportunities!

**MAXIMISED REFINERY & PETROCHEMICAL ATTENDANCE:** 60% of audience will be from refinery and petrochemical organisations

**ENGAGED LEARNING:** Multiple roundtable and panel discussions ensure maximised engagement and interaction

What’s in it for YOU? ARE YOU?

**A C-LEVEL EXECUTIVE IN CHARGE OF DOWNSTREAM STRATEGIES?**

- A 90 minutes closed door VIP Breakfast is all you need to shake hands and discuss potential collaboration opportunities with your peer C-level decision makers
- Identifying the next investment opportunities by listening to international and regional experts on current market dynamics
- Avoiding mega project development pitfalls by learning current project updates, collaboration details, financing specifics and existing challenges

**AN ENGINEERING AND TECHNOLOGY MANAGER IN CHARGE OF REFINERY AND PETROCHEMICAL OPERATIONS?**

- Uncover the latest market developments and cutting edge technologies to optimise your operations
- Learning and evaluating technologies that could help you improve margin and efficiency
- Benchmarking against best practices from the region’s leading refining and petrochemical operators who are facing similar challenges and constraints

**A SOLUTION PROVIDER FOR ASIA’S DOWNSTREAM REFINERIES AND PETROCHEMICAL OPERATORS?**

- Establish valuable connections with 500 key industry professionals who are from key engineering and technical positions with great influence on technology adoption and equipment purchasing during the two short days
- Networking and interacting with the region’s C-level downstream executives in a closed door meeting
- Bring your solutions in front of the major project developers who are actively looking for partners like yourself
A special thank you to the 2014 Advisory Board Members who have dedicated their time and effort helping us develop a cutting edge programme to benefit the industry:

**Anil Chandramani**
Chief Investment Officer & Global Sector Lead, Chemicals & Fertilizers
International Finance Corporation, USA

**Il Seok Choi**
Director
Innoserv International Co, South Korea

**H.B. Kim**
Vice President, Head of Process Innovation Refinery Upgrading Division; Vice Project Manager - RUC Project
S-Oil, South Korea

**Bhawana Suphavilai**
President
PTTES, Thailand

**Werawat Permsantithum**
Principal Engineer
PTTES, Thailand

**Helmilus Moesa**
Technology General Manager
PT Chandra Asri Petrochemical, Indonesia

**Robby Kambey**
General Manager, Asset Management
PT Kreasindo Resources Indonesia

**Ahmad Khairuddin**
Technical Advisor,
Innovation & Technology Dept
PTRONAS Chemicals Group Berhad, Malaysia

**Sharul b A Rashid**
Principal Engineer,
Instrument & Control
Petronas Penapisan Terengganu, Malaysia

**Viktor Terbrant**
Regional Business Manager for Refinery and Petrochemical
Alfa Laval, Malaysia

**Selva Guru**
Principal Engineer
Singapore Refining Company, Singapore

**Shyamal Kumar Sarkar**
Manager, Process & Operation Technology (Olefins), Technology & Optimization
Petrochemical Corporation of Singapore

**Steven McMurray**
Senior Technical Advisor
PTT Global Chemical, Thailand

**Yeoh Soon Teong**
Vice President, Measurement Product
ABB, Singapore

**Dr. Nurallah Jivraj**
Group Manager and Principal Consultant, Oil, Gas and Petrochemicals
Jacobs Consultancy, UK

**Dr. Xu Youming**
Regional Representative, Technology and Marketing
SINOPEC, Hong Kong

**Dr. Le Xuan Huyen**
Deputy General Manager, Petroleum Processing Division; Executive Committee’s Member of Nghi Son Refinery & Petrochemical Ltd
PETROVIETNAM, Vietnam

**Dr. Nguyen Huu Luong**
Director
PETROVIETNAM Research & Development Centre for Petroleum Processing (PVPro), Vietnam

“Downstream Asia is the place where people gather and open the future of the oil industry!”

Chong Dong Gun, Manager, S-Oil, South Korea
# PROGRAMME AT A GLANCE

## DAY ONE: 29 OCTOBER 2014, WEDNESDAY

**BY INVITATION ONLY**

**VIP BREAKFAST: DOWNSTREAM INVESTMENT, PROJECT DEVELOPMENT, COLLABORATION & PARTNERSHIP**
Closed door meeting with 30+ C-level guests

**KEYNOTE:** Dr. Ross Gilmour, Chief Innovation and Technology Officer, PETRONAS Chemicals Group Berhad, Malaysia

**PLENARY: ASIAN COMPETITIVENESS AND SUSTAINABILITY**
- Feedstock supply
- Keynote panel with refinery directors

### LUNCH

<table>
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<tr>
<th>TRACK 1: STRATEGY</th>
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<td>MEGA PROJECT DEVELOPMENT (PART 1)</td>
<td>IMPROVING MARGIN AND PROFITABILITY</td>
</tr>
<tr>
<td>- Nghi Son Refining &amp; Petrochemical Complex (NSRP)</td>
<td>- Residue upgrading</td>
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<tr>
<td>- Indonesia greenfield refinery projects</td>
<td>- Refinery Alkylation Units optimisation</td>
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<td>- 5-Oil upgrading programme</td>
<td>- CBL stream cracking technology</td>
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<td>- Successfully deliver mega projects</td>
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### AFTERNOON COFFEE BREAK

<table>
<thead>
<tr>
<th>MOVING UP THE VALUE CHAIN</th>
<th>HEAVY CRUDE REFINING OPTIMISATION</th>
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<tr>
<td>- Refineries value creating opportunities</td>
<td>- Global fuel standard impact on Asia operations</td>
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<tr>
<td>- Strategies to move up the value chain</td>
<td>- FCC technology</td>
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<tr>
<td>- Winning talent</td>
<td>- Dynamic catalyst strategy</td>
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</tbody>
</table>

### ROUNDTABLE DISCUSSIONS

**CLOSE OF DAY ONE AND DRINKS RECEPTION**

## DAY TWO: 30 OCTOBER 2014, THURSDAY

**KEYNOTE & PLENARY: REFINERY AND PETROCHEMICAL INTEGRATION**
- Keynote from integrated complex operator
- Panel discussion moderated by vendor
- Case study from integrated complex operator

### MORNING COFFEE BREAK

### TRACK 1: STRATEGY | TRACK 2: OPERATIONS & TECHNOLOGY
<table>
<thead>
<tr>
<th>MEGA PROJECT DEVELOPMENT (PART 2)</th>
<th>PLANT OPTIMISATION &amp; ENERGY EFFICIENCY</th>
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<tr>
<td>- Kochi refinery upgrading project</td>
<td>- Energy integration</td>
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<tr>
<td>- Pulau Muara Besar Brunei Refinery project</td>
<td>- Case study: Crude Distillation Unit retrofitting</td>
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<tr>
<td>- Project finance and legal perspective</td>
<td>- Realising workforce mobility and cost-saving</td>
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</table>

### LUNCH

### FEEDSTOCK MANAGEMENT
- Fuelling the increasing demand in China
- Analysing shale impact
- LNG development
- Changing feedstock dynamics

### AFTERNOON COFFEE BREAK

### RELIABILITY & MAINTENANCE EXCELLENCE
- Optimising site personnel
- Chevron case study
- Binh Son Refining and Petrochemical case study
- PETRONAS case study

### CONCLUDING PLENARY: ALTERNATIVE FUTURE FEEDSTOCKS
- Coal utilisation
- Biofeedstock

**CLOSE OF DOWNSTREAM & PETROCHEMICAL ASIA 2014**
## SPEAKERS

### KEYNOTE, PLENARY AND STRATEGY SPEAKERS:

<table>
<thead>
<tr>
<th>Name</th>
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<tr>
<td>Dr. Ross Gilmour</td>
<td>Chief Innovation and Technology Officer</td>
<td>PETRONAS Chemicals Group Berhad, Malaysia</td>
</tr>
<tr>
<td>Saad Al Kuwari</td>
<td>CEO</td>
<td>Tasweeq, Qatar</td>
</tr>
<tr>
<td>Rachmad Hardadi</td>
<td>President Director and CEO</td>
<td>PT Badak NGL, Indonesia</td>
</tr>
<tr>
<td>Martin Hawkins</td>
<td>COO</td>
<td>HPCL-Mittal Energy Limited (HMEL), India</td>
</tr>
<tr>
<td>Yamin Yosfiah</td>
<td>COO</td>
<td>PT Tuban Petrochemical Industries (TPPI), Indonesia</td>
</tr>
<tr>
<td>Abdul Malik Tahir</td>
<td>Former CEO</td>
<td>Kemaman Bitumen Company, Malaysia</td>
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### DOWNSTREAM MEGA PROJECT SPEAKERS:

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Dr. Le Xuan Huyen</td>
<td>Deputy General Manager, Petroleum Processing Division; Executive Committee’s Member of Nghi Son Refinery &amp; Petrochemical Ltd.</td>
<td>PETROVIETNAM, Vietnam</td>
</tr>
<tr>
<td>Neeraj Shukla</td>
<td>Chief Manager – Executive Assistant to Director (Refineries)</td>
<td>Bharat Petroleum Corporate Limited (BPCL), India</td>
</tr>
<tr>
<td>PC Huang</td>
<td>CEO, Hengyi Brunei Project</td>
<td>Hengyi Industries Sdn Bhd, Brunei</td>
</tr>
<tr>
<td>H.B. Kim</td>
<td>Vice President, Head of Process Innovation Refinery Upgrading Division; Vice Project Manager - RUC Project S-Oil, South Korea</td>
<td>S-Oil, South Korea</td>
</tr>
<tr>
<td>Rudy Radjab</td>
<td>President Director</td>
<td>PT. Kreasindo Resources Indonesia</td>
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### REFINERY AND PETROCHEMICAL CASE STUDY SPEAKERS:

<table>
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<tr>
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<tbody>
<tr>
<td>Peeyush Nigam</td>
<td>Vice President, Naphtha Cracker Plant</td>
<td>JG Summit Petrochemical Corporation, Philippines</td>
</tr>
<tr>
<td>Manoj Singh</td>
<td>Reliability Specialist</td>
<td>Chevron Manufacturing, Singapore</td>
</tr>
<tr>
<td>Mai Tuan Dat</td>
<td>Maintenance Manager</td>
<td>Binh Son Refining and Petrochemical Co Ltd, Vietnam</td>
</tr>
<tr>
<td>Sharul b A Rashid</td>
<td>Principal Engineer; Instrument &amp; Control</td>
<td>Petronas Penapisan (Terengganu) Sdn. Bhd, Malaysia</td>
</tr>
<tr>
<td>Chandra Segaran</td>
<td>Staff Engineer</td>
<td>PETRONAS Penapisan (Terengganu) Sdn. Bhd., Malaysia</td>
</tr>
<tr>
<td>TJ Song</td>
<td>Technical Service Manager</td>
<td>Jurong Aromatics Corporation (JAC), Singapore</td>
</tr>
</tbody>
</table>
SPEAKERS

INTERNATIONAL AND REGIONAL MARKET EXPERTS:

Toril Bosoni
Senior Oil Market Analyst (Refining), Oil Market Report International Energy Agency (IEA), France

Pang Guanglian
Director of International Affairs China Petroleum and Chemical Industry Federation (CPCIF), China

Marat Zapparov
Director, Infrastructure Clifford Capital Pte Ltd, Singapore

Professor Margaret Cording
Regional Director Southeast Asia and Oceania IMD, Singapore

Bashar Jazmati
Director, Natural Resources Group ANZ, Singapore

Mark Eggleston
Director Phillip Townsend Associates, Belgium

Regan Hartnell
Petrochemical and Energy Analyst ICIS, UK

Jim Nicholson
Senior Vice President Asia Argus Media, Singapore

Marat Zapparov
Director, Infrastructure Clifford Capital Pte Ltd, Singapore

Cutting Edge Technology Speakers:

Steve Beeston
Vice President – Technology Foster Wheeler USA Corporation, USA

Dr. Michael B Simpson
Industry Manager, Process FTIR for Refining and Petrochemicals ABB Analytical, Canada

Kumail Rashid
Area Sales Manager ABB Control Technologies, Singapore

Dr. Xu Youming
Regional Representative, Technology and Marketing SINOPEC, Hong Kong

Mike Buettner
Business Development Manager, Petrochemicals Alfa Laval, Malaysia

Ray Fletcher
Senior Technologist Johnson Matthey Process Technology, USA

“Interesting topics presented and good opportunity for networking.”

Ahmad Ramzi Adam, Head of Operational Excellence and Improvement, Petronas Chemical Group, Malaysia
08:30-10:15 VIP BREAKFAST (BY INVITATION ONLY)

C-level VIPs from Asian focused IOCs, NOCs, refinery and petrochemical operators will attend this closed door meeting to brainstorm and share their experiences in key opportunities and challenges within the region’s downstream sector. Different topics will be assigned to different tables and the VIPs will rotate between the various tables. Mega project development, investment and collaboration, feedstock security, integration and margin improvement are some of the issues that will be discussed.

DISCUSSION TOPICS:
Table 1: Feedstock security
Table 2: Investment and collaboration
Table 3: Mega project development
Table 4: Refinery and petrochemical integration
Table 5: Margin improvement

Confirmed VIP Guests from: Shell Eastern Petroleum, Shell Chemicals, Neste Oil, Hengyi Brunei, S-Oil, PetroVietnam, PT. Kreasingo Resources Indonesia, PT Badak NGL, HMEL, and many more.

KEYNOTE & PLENARY SESSIONS: ASIAN COMPETITIVENESS AND SUSTAINABILITY

08:30  Registration and welcome coffee
10:15  Welcome from the Chairperson
10:25  Leading through innovation to deliver petrochemical industry opportunities
Dr. Ross Gilmour, Chief Innovation and Technology Officer, PETRONAS Chemicals Group Berhad, Malaysia
10:50  Supplying Asia’s growing refining & petrochemical industry: quality, inventory and logistics for feedstock from Qatar
• How to assess availability and opportunities for the main feedstocks: Naphtha, condensates and LPG
• What are the other alternative feedstocks available that can benefit your operations
• What are the quality and logistical opportunities for Asian operators
• Strengthening a long-standing strategic relationship for mutual benefits
Saad Al Kuwari, CEO, Tasweeq, Qatar
11:15  Morning coffee break & visiting the exhibition

12:00  Keynote panel: Reinforce the competitiveness of refining business in Asia: Surviving the competition
• What are the opportunities for Asian operators from refinery closings in Australia and Japan
• How to improve overall competitiveness from organisational and operational levels
• How to achieve better refining margins through scale and technology
• How to developing bottom-of-the-barrel strategies
• How to reduce operational costs to improve efficiency
Panellists include:
H.B. Kim, Vice President, Head of Process Innovation Refinery Upgrading Division, S-Oil, South Korea
Neeraj Shukla, Chief Manager – Executive Assistant to Director (Refineries), Bharat Petroleum Corporate Limited (BPCL), India
Martin Hawkins, COO, HPCL-Mittal Energy Limited (HMEL), India
12:30  Lunch
### TRACK 1: STRATEGY
#### MEGA PROJECT DEVELOPMENT (PART 1)

14:00  **Nghi Son Refinery and Petrochemical Complex (NSRP) project**  
Dr. Le Xuan Huyen, Deputy General Manager, Petroleum Processing Division, Executive Committee’s Member of Nghi Son Refinery & Petrochemical Ltd., PETROVIETNAM

14:00  **S-Oil upgrading programme of existing refinery**  
H.B. Kim, Vice President, Head of Process Innovation Refinery Upgrading Division, **S-Oil, South Korea**

14:00  **Greenfield refinery development (via private sector) in Indonesia**  
Rudy Radjab, President Director, **PT. Kreasindo Resources Indonesia**

14:50  **Panel discussion: Successfully deliver mega downstream projects**
- What are the drivers and opportunities for developing mega downstream projects?
- What needs to be done before feasibility study?
- What challenges and risks are associated with mega downstream projects?
- How to identify and develop great partnership for your project?
- How to manage a joint venture project?

Dr. Le Xuan Huyen, Deputy General Manager, Petroleum Processing Division, Executive Committee’s Member of Nghi Son Refinery & Petrochemical Ltd., PETROVIETNAM

H.B. Kim, Vice President, Head of Process Innovation Refinery Upgrading Division, **S-Oil, South Korea**

Rudy Radjab, President Director, **PT. Kreasindo Resources Indonesia**

15:15  **Afternoon Coffee Break & visiting the exhibition**

### TRACK 2: OPERATIONS & TECHNOLOGY
#### IMPROVING MARGIN AND PROFITABILITY

14:00  **A multi-technology approach for residue upgrading to optimising refinery performance and improving refining economics**
- Examine technologies available to refiners for cost-effective residue upgrading
- Demonstrate a multi-technology approach that can add additional economic advantages over a single technology approach
- How the on-site utilization of petroleum coke can provide additional flexibility and margin, especially in high gas cost locations

Steve Beeston, Vice President – Technology, Foster Wheeler USA Corporation

14:25  **Improve safe operation and optimisation of refinery Alkylation Units using process FTIR**
- Examine inherent difficulties related to the corrosivity and toxicity of the main fluid catalyst for both HF acid and Sulphuric Acid Alkylation Units
- Challenges in achieving good unit control and to minimize unexpected corrosion close management of the recycle catalyst acid strength and impurity content is required
- Outline a successful approach to the problem using on-line spectroscopy for complete catalyst composition monitoring with examples of such applications from real-life installations

Dr. Michael B Simpson, Industry Manager, Process FTIR for Refining and Petrochemicals, **ABB Analytical, Quebec, Canada**

14:50  **Sinopec CBL stream cracking technology for ethylene/propylene production**
- Introducing the state-of-art technology of CBL stream cracking that requires low investment cost
- Feedstock flexibility with ethane, light hydrocarbons, NGL, naphtha, light gasoline oil and HVGO
- Swirling Element Radiant Tube (SERT) technology extends the furnace run length
- Achieving lower energy consumption, high ethylene/propylene yields, higher on-line percentage (>98%) and long run length (50~70 d)

Dr. Xu Youming, Regional Representative, Technology and Marketing, **SINOPEC, Hong Kong**

15:15  **Afternoon Coffee Break & visiting the exhibition**

### MOVING UP THE VALUE CHAIN

16:00  **How can refineries capture value-creating opportunities**
- How are the external market landscape and internal business objectives driving your value creation strategies?
- How is your level of feed flexibility and operational flexibility affecting your throughput and bottom line?
- Looking through your conversion technologies and product slate to identify opportunities to improve high-value product yield

Anil Chandramani, Chief Investment Officer & Global Sector Lead, Chemicals & Fertilizers, **International Finance Corporation, USA**
### TRACK 1: STRATEGY

**MOVING UP THE VALUE CHAIN**

**16:25** Moving up the value chain: drivers and strategies
- What are the drivers for petrochemical companies to move up the value chain?
- What is required to produce more specialised chemicals up the value chain?
- Switching your portfolio management towards more valuable and specialised products

Yamin Yosfiah, COO, **PT Tuban Petrochemical (TPPI), Indonesia**

**16:50** Special perspective: How do we win in the global talent competition?
- What are the global workforce challenges in oil and gas industry?
- Analysis of talent movement in the oil and gas industry in the past decades
- Are we losing talents to the other regions and how much it’s costing us?
- How do we stop losing talents?
- What does Asia’s oil and gas industry have to offer to the global talents?

Professor Margaret Cording, Regional Director Southeast Asia and Oceania, **IMD**

### TRACK 2: OPERATIONS & TECHNOLOGY

**REFINING OPTIMISATION WITH HEAVY CRUDES**

**16:00** How does the updated global fuel standards impact your Asian operations
- How is global short and medium term oil market outlook affecting refining landscape?
- How are global fuel standards and regulations evolving in different markets?
- What do these changes and dynamics mean to Asian producers and operators?

Toril Bosoni, Senior Oil Market Analyst (Refining), Oil Market Report, **International Energy Agency (IEA)**

**16:25** Controlling & reversing the effect of iron poisoning in the FCC unit
- Analysing FCC catalyst in FCC units
- Discussing the benefits achieved using Cat-Aid in three FCC units
- Revealing the newly understood mechanisms by which Cat-aid cures iron poisoning through recent case studies

Ray Fletcher, Senior Technologist, **Johnson Matthey Process Technologies**

**16:50** Refining optimising technologies with heavier crude
- Effects of feed quality on RFCC operation
- Residue hydrotreating for RFCC Pretreatment
- Desulphurisation and Denitrogenation technologies

### ROUNDTABLE DISCUSSIONS

**17:15** Roundtable Discussions: All the attendees will re-join each other at the plenary room and choose to attend one of the six roundtables according to the topics assigned to each table. Each roundtable discussion will have 1 moderator from the refinery/petrochemical operator and 1 co-moderator from technology/industry partners.

**DISCUSSION TOPICS:**

**Table 1: Overcoming feedstock challenges**
Moderator:
Abdul Malik Tahir, Former CEO, **Kemaman Bitumen Company, Malaysia**

**Table 2: Drivers, strategies and best practices for downstream integration**
Moderator:
Mark Eggleston, Director, **Phillip Townsend Associates, Belgium**

**Table 3: Heavy crude refining optimisation**

**Table 4: Applying new methods and standards in downstream asset management**
Moderator:
Robby Kambey, General Manager, Asset Management, **PT Kreasindo Resources, Indonesia**

**Table 5: Project risk management**

**Table 6: Innovations in reducing carbon footprint**

**17:45** Close of day one and cocktail reception
KEYNOTE & PLENARY SESSIONS: REFINERY AND PETROCHEMICAL INTEGRATION

09:00 Opening remarks from the Chairperson
Jim Nicholson, Senior Vice President Asia, Argus Media, Singapore

09:10 Keynote: Value creation through refinery and petrochemical integration
Sanjiv Singh, Director of Refineries, Indian Oil Corporation, India (Invited)

09:35 Panel Discussion: Refinery & petrochemical integration: Drivers, opportunities and strategies
- How are the drivers of integration changing?
- Technology advancement enabling refinery and petrochemical integration
- What are the potential challenges and risks for integration
- Selecting correct technologies for the integration project
Panellists:
TJ Song, Technical Services Manager, Jurong Aromatics Corporation (JAC), Singapore
Peeyush Nigam, Vice President, Naphtha Cracker Plant, JG Summit Petrochemicals Corporation, Philippines

10:00 Case study: Optimising integrated olefins crackers
- Mapping out integration processes and technologies
- How to assess feed options and their yields
- Case study: best practice on maximising economic outcome
Peeyush Nigam, Vice President, Naphtha Cracker Plant, JG Summit Petrochemicals Corporation, Philippines

10:25 Morning coffee break & visiting the exhibition

TRACK 1: STRATEGY
MEGA PROJECT DEVELOPMENT (PART 2)

11:10 Mega downstream project updates – Part 2
Kochi refinery expansion project
Neeraj Shukla, Chief Manager – Executive Assistant to Director (Refineries), Bharat Petroleum Corporate Limited (BPCL), India

Pulau Muara Besar Brunei Refinery
PC Huang, CEO, Hengyi Brunei Project at Hengyi Industries Sdn Bhd, Brunei

Jamnagar refinery expansion project
Tony Fountain, CEO Refining & Marketing, Reliance Industries, India (Invited)

Group Q&A with project development presenters

“It was great to meet other refinery / ECC operators and learn more about emerging scenarios / technologies that will affect future operations.”

Tom Chupick, Principal Energy Consultant, Shell Global Solutions, Singapore/India

TRACK 2: OPERATIONS & TECHNOLOGY
PLANT OPTIMISATION & IMPROVING ENERGY EFFICIENCY

11:10 Energy integration & optimisation in aromatics production
- Why is energy integration more important in today's petrochemical production plants?
- Discuss the applications where the latent heat rejected in the condensers is recovered and reused
- What are the challenges in capturing the energy?
- Sharing the benefits of the applications in select case studies
Mike Buettner, Business Development Manager, Petrochemicals, Alfa Laval, Malaysia

11:35 Case study: Successful retrofit of a Crude Distillation Unit (CDU) preheat train
- Project background: studying options to improve the plant run length
- Project objective: enable on stream cleaning with isolation facilities and parallel exchangers, while improving the crude preheat temperature
- Process optimisation and engineering challenges
Chandra Segaran Govindasamy, Staff Engineer, PETRONAS Penapisan (Terengganu) Sdn. Bhd, Malaysia
Track 1: Strategy

Megaproject Development (Part 2)

12:00 Panel Discussion: Downstream project financing and legal challenges
- What are the current trends in downstream project development?
- Bankable structures, risks and mitigants, key due diligence items
- Alternative financing sources for projects (non-bank FIs/ institutional money/ project bonds)
- Comparing different project financing structures and legal frameworks

Panellists:
Marat Zapparov, Director, Infrastructure, Clifford Capital Pte Ltd, Singapore
Bashar Jazmati, Director, Natural Resources Group, ANZ

12:25 Lunch

Feedstock Management

14:00 How to fuel the increasing refining and petrochemical demand and developments in China?
- How is China’s refining and petrochemical capacity growing?
- What are the obstacles?
- Where to find the feedstock for China’s growing developments and mega projects

Panellists:
Pang Guanglian, Director of International Affairs, China Petroleum and Chemical Industry Federation (CPCIF), China

14:25 How to capitalise on the North America shale opportunities
- An introduction of US shale gas production & the world shale gas map
- Examining the shale gas impact on Asian plants
- Will Asian countries develop their own large scale shale projects?

Laique Rehman, CEO, US Petrochemical

14:50 Feedstock flexibility in the age of LNG boom: opportunities and challenges
- Analysing LNG development and downstream dynamics in Asia and Indonesia
- LPG as a feedstock: opportunities and challenges
- Application case studies

Rachmad Hardadi, President Director/CEO, PT Badak NGL, Indonesia

Track 2: Operations & Technology

Plant Optimisation & Improving Energy Efficiency

12:00 Realizing workforce mobility and cost-savings through Wireless solution
- Challenges from the industry and types of Wireless solutions needed
- How Wireless IP networks fulfil the requirements of critical applications
- How to tackle the emerging threats of industrial network security
- Rules of Thumb for network design
- The Integrated Wireless HART solution
- Improve workforce mobility while reducing installation costs and engineering time

Kumail Rashid, Area Manager, ABB Control Technologies

12:25 Lunch

Reliability & Maintenance Excellence

14:00 Operational excellence in staffing: Optimising site personnel
- Provides rational, quantitative approach to optimising plant staffing
- Specific guidance on skills shortages or overages for 22 plant disciplines
- Methodology proven in over 30 years’ experience for all types of international process plants

Mark Eggleston, Director, Phillip Townsend Associates, Belgium

14:25 Case study: Delivering constant asset integrity through an integrated reliability programme
- This presentation describes a reliability programme comprising several integrated processes & tools based on a lifecycle approach
- The adoption of these key processes can help consistently deliver on an organization’s asset integrity & reliability expectations

Manoj Singh, Reliability Specialist, Chevron Manufacturing, Singapore

14:50 Overcoming critical challenges in refinery maintenance to secure operational excellence
- An introduction on Binh Son Refinery
- Challenges in operation & maintenance
- Developing suitable strategies and solutions to achieve operational excellence

Mai Tuan Dat, Maintenance Manager, Binhson Refining and Petrochemical Co Ltd
TRACK 1: STRATEGY
FEEDSTOCK MANAGEMENT

15:15  A changing petrochemical industry with changing feedstocks
- What are the drivers and developments for feedstock management for refineries and petrochemical operators in Asia?
- Which feedstocks will be available and from where?
- How the emerging feedstocks impacting petrochemical landscape

Dr. Nurallah Jivraj, Group Manager and Principal Consultant, Oil, Gas and Petrochemicals, Jacobs Consultancy, UK

15:40  Afternoon coffee break

TRACK 2: OPERATIONS & TECHNOLOGY
RELIABILITY & MAINTENANCE EXCELLENCE

15:15  Towards plant instrumentation asset management excellence: A PETRONAS approach
- Challenges encountered while handling instrumentation under various complex with the ageing plant and non-robust design
- Providing a clear planning, scheduling and prioritisation with a Five-Year Road-Map
- Sharing the results: 50% reduction in instrument related plant trip
- Entering sustainable period from 2013 onwards

Sharul b A Rashid, Principal Engineer, Instrument & Control, Petronas Penapisan (Terengganu) Sdn. Bhd., Malaysia

15:40  Afternoon coffee break

CONCLUDING PLENARY: ALTERNATIVE FUTURE FEEDSTOCKS

16:10  Discussing coal utilisation in downstream and petrochemical industries
- Will emerging coal as alternative feedstock become the next game changer?
- How coal as alternative feedstock impact global and Asia’s Olefin feedstock profile
- Discussing available technologies and applications for Coal to Liquids (CTL) and Coal to Chemicals (CTC) option
- Current projects and challenges ahead

Regan Hartnell, Petrochemical and Energy Analyst, ICIS, UK

16:35  Bio feedstock: opportunities and challenges
- Biofuel regulations in different regions
- Understanding the advantages and availability of bio feedstocks
- Introducing types and sources including Southeast Asian bio-based feedstocks
- Bio-based product markets and technologies

Yong An Shin, Team Leader, Bio Fuel and Chemical, GS Caltex, Korea (Invited)

17:00  Close of Downstream & Petrochemical Asia 2014
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“Good opportunity to meet vendors for equipment, technology and services!”

Suchart Supapakdee, Refinery Operation Manager, PTTGC, Thailand

Cutting-edge on floor technology showcase
“It was great to meet other refinery/ECC operators and learn more about emerging scenarios/technologies that will affect future operations.”

Tom Chupick, Principal Energy Consultant, Shell Global Solutions, Singapore/India
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Qatar International Petroleum Marketing Company Ltd. (Tasweeq) Q.J.S.C. was incorporated in July 2007 by Emiri Decree Law No. 15 of 2007, is wholly owned by the Government of the State of Qatar and operates independently from other oil and gas companies.

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**Promotional Code:** DA14-MM

### Operator/Government

| Early Bird Rate (Expires 4 Sep 2014) | SGD 2,690* |
| Regular Rate (After 4 Sep 2014)       | SGD 2,950* |

* Audio packs cannot be removed from these packages

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### All other companies

| Book on 3 delegates | SGD 8,225* |
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