

# PROGRAMME

## 22<sup>nd</sup> Refining & Petrochemicals Technology Meet

13-15 January, 2018

Mayfair Convention, Bhubaneswar, Odisha, India

### Emerging Trends in Downstream Hydrocarbon Sector



पेट्रोलियम एवं प्राकृतिक गैस मंत्रालय  
भारत सरकार

Ministry of Petroleum and Natural Gas  
Government of India

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## REGISTRATION/COLLECTION OF BADGES

### Mandap, Hotel Mayfair Lagoon, Bhubaneswar

12<sup>th</sup> January 2018 : 1700 hrs to 2000 hrs

### Mayfair Convention, Bhubaneswar

13<sup>th</sup> January, 2018 : 0730 hrs to 0900 hrs

1400 hrs to 1800 hrs

14<sup>th</sup> January, 2018 : 0800 hrs to 1200 hrs

15<sup>th</sup> January, 2018 : 0800 hrs to 1000 hrs

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13 January, 2018

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## Inaugural Session

0930 – 1200 hrs

Venue: Central Hall

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Tea

1200 – 1230 hrs

13 January, 2018

## Technical Session - 1

1230 – 1400 hrs

Venue : Central Hall

### Emerging Trends in Refining & Petrochemicals - I

#### Session Chairman

**Shri R. Ramachandran**

Director (Refineries)

Bharat Petroleum Corporation Ltd.

#### Technical Papers

- 1.1 **Global Refining Outlook**  
*N. Ravi Venkatesh, IHS Markit*
- 1.2 **Emerging Trends in Downstream Hydrocarbon Sector**  
*Dr Partha P. Maitra, RIL*
- 1.3 **Emerging Trends in Downstream Petroleum Research**  
*Dr S.S.V. Ramakumar, Indian Oil Research & Development Centre*

**Lunch**

**1400 – 1500 hrs**

13 January, 2018

## Technical Session – 2

1500 – 1630 hrs

Venue : Central Hall

### Emerging Trends in Refining & Petrochemicals - II

#### Session Chairman

**Shri B.V. Ramagopal**  
Director (Refineries) Designate  
Indian Oil Corporation Ltd.

#### Technical Papers

- 2.1 **Petrochemical Industry Trends and Opportunities – Focus on India**  
*Sanjay Sharma, IHS Markit*
- 2.2 **Emerging India in Petrochemicals**  
*Eshwar Yennigalla, S&P Global Platts*
- 2.3 **Hydrocarbon Sector - Challenges & Opportunities**  
*S.K. Handa, Engineers India Ltd.*
- 2.4 **Seven Ways in which Residue Gasification can Unlock Value Chain for Indian Refiners**  
*Robert Schouwenaar, Shell*

Tea

1630 – 1645 hrs

## Technical Session – 3

1645 – 1815 hrs

Venue : Central Hall

### Refining and Beyond

#### Session Chairman

**Shri Ajay N. Deshpande**  
Director (Technical)  
(Addl. Charge of Chairman & Managing Director)  
Engineers India Ltd.

#### Technical Papers

- 3.1 **Innovative Routes to Petrochemicals / Chemicals**  
*Morten Schaldemose, Haldor Topsoe*
- 3.2 **Emerging trends in Downstream Hydrocarbon Sector**  
*Sean Smyth, ExxonMobil*
- 3.3 **Electric Vehicles and the Impact on Refining Business in India and the World**  
*George Poppo, Stratas*
- 3.4 **Transforming Refining & Petrochemicals Sector - "Oil to Chemicals"**  
*Sourabh Mukherjee, JACOBS*

13 January, 2018

## Poster Session – 1

Time duration for display - 0930 to 1815 hrs

**1. Use of Plastic Waste in Road Construction**

*Nikhil Gupta*, Indian Oil Corporation Ltd., Bongaigaon Refinery

**2. Improve Energy Efficiency and Robustness of Refinery through Maximizing Heat Recovery at Crude Distillation Unit**

*Nur Suhaili*, PETRONAS

**3. Mild Hydrocracking of VGO – Clean Fuel Flexibility**

*Kevin D. Carlson*, CRI/Criterion Catalyst Company

**4. Commissioning of 60 KTA PP Plant (Novolen Technology) with Specific Focus on the Study on the Effect of CO-Catalyst, External Donor on Ziegler Natta Catalyst and Hydrogen Response**

*Mamta Lama*, Brahmaputra Cracker and Polymer Limited (BCPL)

**5. Low Cost Heater Revamp by Split Flow Technology**

*Gauri Pawar*, Hindustan Petroleum Corporation Ltd., Mumbai Refinery

**6. Enhancing Energy Efficiency in Petroleum Refinery Sector of India through Perform, Achieve & Trade (PAT) Scheme: Opportunities & Policy Solutions**

*S.S. Saini*, Bureau of Energy Efficiency

**7. Process Simulation and Techno-economic Analysis for Production of Propylene Oxide from Petro-FCC of BPCL Kochi Refinery**

*Pintu Maity*, Bharat Petroleum Corporation Ltd., Corporate R&D Centre

**8. Differentiated Solvent for Refinery Tail Gas Treating Performance Enhancement with Improved Emission Compliance**

*Ritesh Gulabani*, DOW

**9. UOP Solutions to Impact Hydrogen Management**

*Prateek Pachauri*, Honeywell UOP

**10. Multi-functional Additive for Polypropylene**

*Jatinder Singh Dhaliwal*, Indian Oil Research & Development Centre

**11. Leveraging Wireless Technology for Process Control**

*Shyamal Bibar*, ONGC Mangalore Petrochemicals Ltd.

- 12. Heat Transfer Enhanced Technologies for Energy Efficiency Improvement in a time of Environmental Challenges**

*Amrendra Bet, TechnipFMC*

- 13. Evaluating Revamp Configuration Using Catalytic Olefins Technology: A Case Study**

*Rajeev Singh, KBR Technology*

- 14. Increased Refinery and Petrochemicals Integration by Gasification – The Future**

*Bhatu Chaudhary, Linde Engineering*

- 15. Impact of Upstream Refinery Operations on Effluent Treatment Plant**

*J.K. Joshi, Engineers India Ltd.*

- 16. Topsoe's Scale Catcher Technology for Mitigating Pressure Drop in Hydroprocessing Units**

*Anuj Seth, Haldor Topsoe*

- 17. A Novel Bi-functional Catalyst for the Production of Middle Distillates from Naphtha**

*Dr. Rajaram Bal, CSIR, Indian Institute of Petroleum*

- 18. Flow Battery: An Efficient Hybrid Energy Storage and Conversion System for Reliable Stationary Power Application in Refineries**

*Malay Pramanik, HP Green R&D Centre, Hindustan Petroleum Corporation Ltd.*

- 19. Energy efficiency improvement in Reformer of Hydrogen Unit at Numaligarh Refinery**

*Geetali Kalita, Numaligarh Refinery Ltd.*

14 January, 2018

## Technical Session – 4

0830 – 1030 hrs

Venue : Central Hall

### Advances in Refining Technology

#### Session Chairman

: **Shri L.K. Vijn**  
Director (T) Designate, EIL  
**Shri S.M. Vaidya**  
Executive Director (Ops), RHQ, IOCL

#### Technical Papers

- 4.1 **MS quality Upgradation -Challenges & Approach for 95 RON beyond 2020**  
*Brij Behari, Indian Oil Corporation Ltd.*
- 4.2 **Produce High Octane Gasoline in a Sustainable Way**  
*Varun Ginotra and Francois Baron, Axens*
- 4.3 **WSA Technology - To Improve Reliability & Profitability of Refinery**  
*Jens Kristen Laursen, Haldor Topsoe*
- 4.4 **Options for Increasing Margins with Invista's DTL™ and Straight Run Upgrading Technologies**  
*Ian Woodcock, Invista*
- 4.5 **BHTS ThruPlus® Enhanced Double Fired Furnace Technology for Increased Coker Heater Run Lengths**  
*R.C. Kaarthik, Bechtel*

Tea

1030 – 1045 hrs

## Technical Session – 5

0830 – 1030 hrs

Venue : Crystal Hall

### Gasification

#### Session Chairpersons :

**Dr. Partha P. Maitra**

President, Reliance Industries Ltd

**Ms. Vartika Shukla**

Executive Director, EIL

#### Technical Papers

- 5.1 **Gasification Solutions for the Refinery and Petrochemical Industry**  
*Anil Sarin, CB&I*
- 5.2 **Syngas from Gasification of Low Value Fuels as a Feedstock for Petrochemicals**  
*Sunil Singhal, Fluor Daniel*
- 5.3 **Indigenous Gasifier Technology and Fabrication Capability for Long-Term Energy Security**  
*Murur Venkatesh Prabhu, Larsen & Toubro*
- 5.4 **Carbon Recycling : Clean Fuel and Clean air**  
*Prabhakar Nair, Lanzatech*
- 5.5 **Petcoke Gasification: A Better Option for Petcoke Utilisation in India**  
*Aakash Agarwal, Indian Oil Corporation Ltd., BD (Petrochemicals)*

Tea

1030 – 1045 hrs

14 January, 2018

## Technical Session – 6

1045 – 1300 hrs

Venue : Central Hall

### Innovations in Refining

**Session Chairman** : **Shri M. Venkatesh**  
Director (R), MRPL

#### Technical Papers

- 6.1 **Production of Petrochemical, Hexane, as a By-product from Isomerization Unit**  
*Shreya Kondapalli, Bharat Petroleum Corporation Ltd., Mumbai Refinery*
- 6.2 **Low Cost Anti-Coking & Sulfiding Additive for Gas/Naphtha Cracker & Hydrotreating Catalyst**  
*Biswajit Shown, Reliance Industries Ltd.*
- 6.3 **In-situ Solvent Purification Using Ion-Exchange Technology**  
*Rajeswari D., Bharat Petroleum Corporation Ltd., Kochi Refinery*
- 6.4 **Development and Commercialization of In-house Technology for Production of High Quality Low Benzene Gasoline by Novel Extractive Distillation of High Olefinic FCC Gasoline**  
*Abhishek Jha, Reliance Industries Ltd.*
- 6.5 **Innovative Solution to Meeting Today's Gasoline Specifications**  
*Matthew Clingerman, Dupont*
- 6.6 **Innovative Process and Catalytic Technologies from Chevron Lummus Global Opens up Newer Frontiers**  
*Subhasis Bhattacharya, Chevron Lummus Global*

**Lunch Break**

**1300 – 1400 hrs**

## Technical Session – 7

1045 – 1300 hrs

Venue : Crystal Hall

### PVC - Options

#### Session Chairpersons

**Shri K.K. Jain**

Executive Director, (BD-PC), IOCL

**Shri K. Ravi**

Executive Director, West Coast Refinery, BPCL

#### Technical Papers

- 7.1 **PVC: India Perspective**  
*Clement Choo, S&P Global Platts*
- 7.2 **PVC Production by Carbide route**  
*Naresh Jain and Shirish Puranik, DCM Shriram*
- 7.3 **Advanced PVC Process - Improving Product Quality and Lowering Capital Investment**  
*Sagar Nawander, KBR Technology*
- 7.4 **VCM / PVC Technology**  
*J.K. Joshi, Thyssenkrupp*
- 7.5 **Consideration on Development of PVC and Relevant Sector In India**  
*Zhao Minwei, TCC China*
- 7.6 **PVC - RIL Experience**  
*Rajesh Biyani, Reliance Industries Ltd.*

**Lunch Break**

**1300 – 1400 hrs**

14 January, 2018

## Technical Session – 8

1400 – 1600 hrs

Venue : Central Hall

### Energy Efficiency Improvement

#### Session Chairpersons

**Mr. Charles Reith**

CEO, Solomon Associates

**Shri K.K. Acharya**

Head of Central Technical Services, RIL

#### Technical Papers

- 8.1 **Innovative Ideas in Energy Conservation**  
*Vartika Shukla*, Engineers India Ltd., R&D
- 8.2 **Energy Cost Efficiency Index™- Insights into Changing Energy Mix Trends**  
*Kevin Henke*, Solomon Associates
- 8.3 **Energy Conservation by Waste Heat Recovery from Low Temperature Process Streams**  
*G.V. Sathish*, Indian Oil Corporation Ltd., Paradip Refinery
- 8.4 **Energy Efficiency Improvements at GSFC, Vadodara**  
*Utkarsh Yajnik*, Gujarat State Fertilizer Corporation Ltd.
- 8.5 **Organic Rankine Cycle-Prospects of Implementation in Refineries**  
*Piyush Kant and Alexey Shorokhov*, GCE Group

Tea Break

1600 – 1615 hrs

## Technical Session – 9

1400 – 1600 hrs

Venue : Crystal Hall

### Styrene and Derivatives

**Session Chairpersons** : **Shri M.V. Ravi Someswarudu**  
ED (PC-O&M) & OIC, GAIL  
**Shri S. Bharatan**  
CGM, HPCL – HQ

#### Technical Papers

- 9.1 **Derivatives of Styrene**  
*V.T. Nandakumar, Supreme Petrochem*
- 9.2 **Styrene Value Chain**  
*Malini Hariharan, ICIS*
- 9.3 **Styrene from Py Gas - Myths and Facts**  
*Sachin Joshi, GTC*
- 9.4 **UOP/Lummus Technology for Production of Ethylbenzene and Styrene Monomer**  
*Rakesh Kumar, CB&I*

Tea Break

1600 – 1615 hrs

14 January, 2018

## Technical Session – 10

1615 – 1815 hrs

Venue : Central Hall

### Advances in Catalyst Management

#### Session Chairpersons

**Dr M.O. Garg**

President (R&D), RIL

**Shri U. Venkataramana**

Director (Tech), CPCL

#### Technical Papers

- 10.1 **GRANITE™ sets the New Benchmark in FCC Technology**  
*Carel Pouwels, Albemarle*
- 10.2 **Catalyst Developments Enable Improved FCC Unit Profitability**  
*Bilge Yilmaz, BASF*
- 10.3 **FCCU Catalytic Solutions**  
*Dr Kryukov O. Viktorovich, KNT Group Russia*
- 10.4 **Innovative Catalyst & Adsorbents for Up-Gradation of Ethylene & Propylene Monomers to Polymer Grade**  
*Aravind Narayanam, Sudchemie*
- 10.5 **Precious Metal Management**  
*Shankhaneel Borah, MMTC - PAMP*

## Technical Session – 11

1615 – 1815 hrs

Venue : Crystal Hall

### Olefins

#### Session Chairpersons :

**Shri M.R. Meshram**

ED (PC and R&D), GAIL

**Shri T.D.V.S. Gopalakrishna**

CGM, IOCL-PDR

#### Technical Papers

- 11.1 **Linde Steam Cracker & UNIPOL™ PE Process Integration**  
*Franz Dalitz, Linde Engineering*
- 11.2 **High Value Petrochemical Intermediates**  
*Francois Baron, Axens*
- 11.3 **METEOR™ Ethylene Oxide/Ethylene Glycol Process Technology**  
*Mark Ballard, DOW*
- 11.4 **Sustainable Development in Polyolefin Industry**  
*Dr Shin-ichi Kojoh, Mitsui*
- 11.5 **UNIPOL® PP – Leading PP technology with broadest product capability**  
*Yogesh Mishra, W.R. GRACE*

14 January, 2018

## Poster Session – 2

Time duration for display - 0830 to 1300 hrs

1. **KF 780 STARS®: The New, Proven All-Round Catalyst for Distillates & VGO Hydrotreating**  
*Sudipto Chakraborty, Albemarle*
2. **Innovative method to treat fire water through ultrasonic systems**  
*Mahendra Singh Bhadauria, Bharat Oman Refinery Ltd.*
3. **Power savings by Provision of PM (Permanent Magnet) blower in ETP**  
*Narayan Salvi, Bharat Petroleum Corporation Ltd., Mumbai Refinery*
4. **Complete Conversion of High Sulfur Residual Fuel Oil to Petrochemicals**  
*Goutam Biswas, Chevron Lummus Global*
5. **Concept of Hydrogen flaring control in HGU - An Energy Efficiency Measure**  
*Manikandan Thannasi, Chennai Petroleum Corporation Ltd.*
6. **Development of Alternate Processes for Lower Olefins (C2-C4): Taking a Step Forward**  
*Indrajit K. Ghosh, CSIR, Indian Institute of Petroleum*
7. **Covalent Organic Framework (COF) Materials for Methane Storage**  
*Nandakumar T., GAIL (India) Ltd.*
8. **Optimise Furnace Performance & Productivity by Topsoe Digital Service Initiative (Topsoe Furnace Manager (TFM) and TrueTemp™)**  
*Sachin Panwar and Ronnie Dalsgaard, Haldor Topsoe*
9. **Energy Efficient Design with Light Desorbent Parex Aromatics Technology**  
*Anup Dhaigude, Honeywell UOP*
10. **Energy Efficiency & Reliability Improvements in Design of New Full Conversion Hydrocracker at HPCL Visakh Refinery**  
*Prasanth Gudavalli, Hindustan Petroleum Corporation Ltd., HQ*
11. **Improved Heat Integration by Introduction of Hot Separator Drum in Prime G+ Unit**  
*Rohit Sachan, Hindustan Petroleum Corporation Ltd., Mumbai Refinery*

- 12. Novel Design of Attrition Rig for FCC Catalyst Selection for Improved Reliability**  
*Somanath Kukade*, HP Green R&D Centre, Hindustan Petroleum Corporation Ltd.
- 13. A Cost Effective and Novel Dewaxing Aid Polymer for Lube Refinery: A Make in India Product Development**  
*CH Siva Kesava Raju*, HP Green R&D Centre, Hindustan Petroleum Corporation Ltd.
- 14. HPFurnOKare online heater cleaning chemical**  
*Sairam Madala*, HP Green R&D Centre, Hindustan Petroleum Corporation Ltd.
- 15. Innovative Way to Troubleshoot Polypropylene (PP) Resin Pneumatic Conveying System**  
*Mousom Some*, Indian Oil Corporation Ltd., Paradip Refinery
- 16. Refinery and Petrochemical Integration- Concept of Petrochemical Refinery**  
*Ritwik Kumar Hatia*, Mangalore Refinery and Petrochemicals Ltd.
- 17. Energy Management System implementation for cross country hydrocarbon pipelines, Opportunities & challenges : Experience sharing of PCRA**  
*Atul Vyawahare*, Petroleum Conservation & Research Association
- 18. Advances in Hydroprocessing Catalyst Technology**  
*Samarth Shah*, Porocel Industries
- 19. Premium FCC Catalysts and Additives for Today's Refining Challenges**  
*Mukund Balachandran*, W.R. GRACE
- 20. Molecule Based Naphtha Flow Sheet towards Optimization of Xylenes Recovery**  
*Bhoja Kandela*, Reliance Industries Ltd.

14 January, 2018

## Poster Session – 3

Time duration for display – 1400 to 1815 hrs

1. **Producing Superior Quality Plant Fuel from FCCU Clarified Oil Using Cold Filtration Technology**  
*Sasi I., Bharat Petroleum Corporation Ltd., Kochi Refinery*
2. **Foray of Advanced Process Control into CCR Regeneration Section**  
*Shreya Kondapalli, Bharat Petroleum Corporation Ltd., Mumbai Refinery*
3. **Innovative Approach by Carrying Out Online Sulphiding of Hydrogenator in Hydrogen Generation Unit to Reduce Turn-Around Days**  
*D.K. Zutshi, Bharat Petroleum Corporation Ltd., Mumbai Refinery*
4. **Hydrogen Recovery from Refinery off Gas Using Metal Membrane-Laboratory Development and Process Economics**  
*Rajesh Vankayala, Bharat Petroleum Corporation Ltd., Corporate R&D Centre*
5. **Reactive Adjunct Technology: Innovative Desalting Chemical Program**  
*Vivek Srinivasan, Dorf Ketal*
6. **EngHOG™ - An Optimized Process for Desulfurization of Very Low Pressure Off-Gases**  
*Alka Sharma, Engineers India Ltd.*
7. **Cryogenic Hydrogen Recovery: Technology for Efficient Refinery Hydrogen Management EngCryo™**  
*Ravi Kant Gupta, Engineers India Ltd.*
8. **Integrated Advanced Maintenance System improves the Reliability**  
*Tilak V. Patel, Essar Oil Ltd.*
9. **Improving SRU Reliability**  
*Dharmendra Pandey, Essar Oil Ltd.*
10. **Improve Process Design Accuracy Using Uncertainty Analysis**  
*Soumitro Nagpal, Fluor Daniel*
11. **IT-OT Integration for Enhancing Environmental Governance: A Case Study of HPCL - MR**  
*Harsh Kujur and Sukhwinder Singh, Hindustan Petroleum Corporation Ltd., Mumbai Refinery*

- 12. HPCoSoL - Novel process for selective aromatics extraction for enhancing lube oil yields**

*Srinivasa Rao Ganagalla*, HP Green R&D Centre, Hindustan Petroleum Corporation Ltd.

- 13. Sludge Volume Measurement in Refinery Oil Storage Tanks by Thermography Method**

*Krishna Sarkar*, Hindustan Petroleum Corporation Ltd., Visakh Refinery

- 14. Reliability Improvement with High TAN Crude: New Methodology for Determination of Total Naphthenic Acid (NAN) and TAN in Crude Oil by using Potentiometric Techniques**

*Dr Y.S. Jhala*, Indian Oil Corporation Ltd., Gujarat Refinery

- 15. A New Tool for unit Optimization and reliability improvement by Gas Chromatographic Simulated Distillation (HTSIMDIS) for the Determination of the Boiling Point Distributions of Crude Oils**

*Dr Y.S. Jhala*, Indian Oil Corporation Ltd., Gujarat Refinery

- 16. Energy Savings in GT Atomizing Air**

*V.K. Srivastava*, Indian Oil Corporation Ltd., Haldia Refinery

- 17. Emerging trends in automation for future refineries**

*Sudhanshu Shekhar*, Indian Oil Corporation Ltd., Paradip Refinery

- 18. Improved Delayed Coking Process through Use of Additive**

*Pradeep P.R.*, Indian Oil Research & Development Centre

- 19. Economic Analysis of Various Integration Models for Use of Pet Coke**

Mangalore Refinery and Petrochemicals Ltd.

- 20. Energy and Water conservation by Coagulant Change over from Aluminum Sulfate to Poly Aluminum Chloride (PAC) at a Conventional Water Treatment Plant**

*Manash Kamal Dutta*, Numaligarh Refinery Ltd.

15 January, 2018

## Technical Session – 12

0830– 1030 hrs

Venue : Central Hall

### Biomass Upgradation

#### Session Chairpersons :

**Shri L.K. Vijn**

Director (Technical) Designate, EIL

**Dr. S.K. Puri**

CGM, IOCL (R&D)

#### Technical Papers

- 12.1 **Production of High Quality Bio-Oil from Biomass Residues and Waste Plastics via Microwave Assisted Co-Pyrolysis and Catalytic Upgradation**  
*Vinu Ravikrishnan, Indian Institute of Technology, Madras*
- 12.2 **Low Temperature Catalytic Gasification of Biomass in to High Quality Syngas without Liquid Production**  
*Dr Sateesh Daggupati, Reliance Industries Ltd.*
- 12.3 **Conversion of Mixed Organic Residue Feedstocks to Drop-In Hydrocarbon Fuels via the IH2® Technology**  
*Vikrant Urade, Shell*
- 12.4 **Bio-Oil: An Introduction to the Next Opportunity Feedstock for FCC**  
*Dilip Dharia, Technip*

Tea Break

1030 – 1045 hrs

15 January, 2018

## Technical Session – 13

0830 – 1030 hrs

Venue : Crystal Hall

### Automation

#### Session Chairman

: **Shri S.S. Sunderajan**  
Managing Director, BOREL

#### Technical Papers

- 13.1 **Benefiting from Digital Transformation in Refining Today and Tomorrow**  
*Ron Beck, AspenTech*
- 13.2 **Industry 4.0 in Refinery & Petrochemical Industries**  
*Srivardhan Gandhi, Engineers India Ltd.*
- 13.3 **Connecting people and processes for smarter production**  
*Danielle Schindlbeck, Honeywell UOP*
- 13.4 **Reliable Power Solution for Petchem Complex- Grid Islanding**  
*Satyabrata Mishra, GAIL (India) Ltd.*

Tea Break

1030 – 1045 Hrs

15 January, 2018

## Technical Session – 14

1045 – 1245 hrs

Venue : Central Hall

### 2G Ethanol

**Session Chairpersons :** **Shri Gandham Sriganesh**  
ED, HPCL (R&D)  
**Shri M. Vinaykumar**  
CGM (I/C), MRPL

#### Technical Papers

- 14.1 **Axens' innovative solutions for processing multiple biomass-derived feedstocks**  
*Larissa Perotta, Axens*
- 14.2 **Praj's Integrated 2G Smart Bio-refinery**  
*Vasudeo Joshi, PRAJ Industries*
- 14.3 **The Future of Biofuels in India**  
*Shreerang Kardale, Stratas*
- 14.4 **BioRefinery from Bamboo Feedstock - A Game Changer**  
*Rupam Kumar Sarmah, Numaligarh Refinery Ltd.*

## Technical Session – 15

1045 – 1245 hrs

Venue : Crystal Hall

### Best Practices and Operational Excellence

#### Session Chairpersons

**Shri G.S. Singh**

Executive Director, Paradip Refinery, IOCL

**Shri S.N. Pandey**

ED (Optimisation), IOCL-CO

#### Technical Papers

- 15.1 **Best Practices to Meet the Challenge of Heavier Residue Processing**  
*Opinder K. Bhan, Shell*
- 15.2 **Best Practices on Corrosion Mitigation at Sulfolane Extraction Unit**  
*Azmad B.A. Ghani, PETRONAS*
- 15.3 **Technological solution for Enhancing safety and productivity of storage tanks and Terminals**  
*Prasad Thomas, Ecotech*
- 15.4 **Present, Future Scenario of Petrochemical Sector and role of Opal**  
*Rajeev Vijay, OPaL*
- 15.5 **Chloride Removal Best Practices For Reliable & Profitable Operations**  
*Himanshu Chauhan, Johnson Matthey*

15 January, 2018

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## Vote of Thanks

1245 – 1300 hrs  
Venue : Central Hall

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Lunch  
1300 – 1400 hrs

15 January, 2018

## Poster Session – 4

Time duration for display - 0830 to 1400 hrs

1. **Air Flow Improvement with Latest Technology Whizz Wheel Air Fin Cooler**  
*Nilesh Jadhao*, Bharat Oman Refinery Ltd.
2. **Innovative Steps carried out for Confirming Exchanger Leak While Unit in Operation**  
*S. Navinraj*, Bharat Petroleum Corporation Ltd., Kochi Refinery
3. **Crude and Vacuum Unit Furnace Skin Temperature Calculation through Online Simulation Using Aspen Online**  
*Priya Bhagwat*, Bharat Petroleum Corporation Ltd., Mumbai Refinery
4. **Reliability Improvement of Centrifugal Pumps in Hydrocarbon Service namely LGO, VD, LVGO and HVGO in CDU3 Unit**  
*Santosh Kale*, Bharat Petroleum Corporation Ltd., Mumbai Refinery
5. **Steam Saving by Installing Welded Plate Type Heat Exchanger in RMP, ARU, SWS1**  
*Rahul Pawar*, Bharat Petroleum Corporation Ltd., Mumbai Refinery
6. **DeBottlenecking of OHCU Product Stripper Performance by Modification of Internals in Product Stripper**  
*Sitangshu Gupta*, Chennai Petroleum Corporation Ltd.
7. **New Method for Increasing Significant Gas Oil Yield and Energy Efficiency in Crude Distillation Unit**  
*Dr Sunil Kumar*, CSIR, Indian Institute of Petroleum
8. **Energy Improvement Measures In Grassroot CDU VDU Design - A Case Study**  
*Abhijeet Kumar Ram*, Engineers India Ltd.
9. **Revamping Diesel Hydrotreating Unit for simultaneous co-processing of Diesel and VGO**  
*Sachin Shrivastava*, Hindustan Petroleum Corporation Ltd., Mumbai Refinery
10. **Energy Efficient Dividing Wall Column process for the production of Chemical Grade Propylene from C3/C4 rich streams of FCCU**  
*Marial Abhijeet Vijay*, HP Green R&D Centre, Hindustan Petroleum Corporation Ltd.

**11. Swift Identification of Leaks Online in High Pressure Exchangers in DHT - A Case Study**

*G.V. Madhav, Hindustan Petroleum Corporation Ltd., Visakh Refinery*

**12. Changing Energy mix**

*Muralidhar Behera, Indian Oil Corporation Ltd., Corporate Optimization*

**13. Steam Reduction in ISOM and INDMAX**

*Mamoni Basumatary, Indian Oil Corporation Ltd., Guwahati Refinery*

**14. Case Study Regarding Online Identification of Leaking Breech lock Exchanger and Innovative Approach Adopted To Troubleshoot the Leak in DHT Unit of Paradip Refinery**

*Prasanta Adhikari, Indian Oil Corporation Ltd., Paradip Refinery*

**15. Pressure Swing Adsorption Unit – The Preferred Separation Technology in Refineries**

*Mangesh Gampawar, Linde Engineering*

**16. Fresh Catalyst vs In-Situ/Ex-Situ Regenerated Catalyst: Process Parameters & Economics in High Severity Hydrocracker**

*Ritwik Kumar Hatia, Mangalore Refinery and Petrochemicals Ltd.*

**17. Improving Energy Efficiency in Fluidized Catalytic Cracking Unit – A Practical Experience**

*Mannu Jha, Mangalore Refinery and Petrochemicals Ltd.*

**18. Helical Baffle Exchanger- A Shift in Use of Heat Exchanger Technology– A Case Study in Numaligarh Refinery Ltd.**

*Rupam Goswami, Numaligarh Refinery Ltd.*

**19. Catalyst and Technology Support – Journey from the Fuel Based Refinery to High Margin Petrochemical Feedstock Refining**

*John T. Haley, Rezel Catalyst Corporation*

**20. DHDS Throughput Maximization by Using Heavy Kerosene as Filter Backwash**

*Ashish Manne, Reliance Industries Ltd.*

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## Notes

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