2nd annual international summit
COAL GAS 2011

"Vision 2020: National Option for Clean, Green and Sustainable Energy"
14 - 15 February 2011, NDCC-II Convention Centre, New Delhi, India

Present

• The only International Summit on COAL GASIFICATION
• Supported by Indian Ministries
• 500+ Energy Professionals Attending
• 40+ National & International Speakers
• 7 Technical Sessions
• 2 Panel Discussions
+ Report on Coal Gasification
+ Free Membership to EnergyRX

In Support of:
Ministry of Coal
Ministry of Power
Ministry of Environment & Forest
Ministry of Chemical & Fertilisers

For Registration Contact: Sivakumar T | +91 22 6522 0770 / 71, +91 98208 03110 | secretariat@missionenergy.org
As you are aware, high petroleum prices, natural gas price volatility, increasing worldwide energy demand, in combination with concern over the potential effect of CO emissions from fossil fuel power 2 plants on the global climate, are influencing decision makers to consider gasification-based energy systems. Gasification technology is the baseline technology to meet the demand for the clean production of electricity, fuels and chemicals.

Gasification technologies are increasingly being developed to provide environmentally clean and efficient power generation from a range of fuels such as coal, biomass and oil residues. In this context, they can be used in integrated gasification combined-cycle (IGCC) systems, which have the potential to provide high efficiencies and low environmental emissions by combining gas- and steam-turbine power generation technologies. The only technology that will enable the deployment of clean, affordable energy systems that uses our Nation’s abundant domestic feedstock to meet the growing energy needs of our vibrant economy.

Mission Energy Foundation, an independent not-for-profit organisation that strives in educating the public about coal gasification technology and ongoing contacts and discussions with the public and industry concerning what the future of coal gasification should be. Although in commercial use for more than 100 years, the technology has undergone a continuing evolution in order to meet today’s energy needs and contribute to several vital national goals:

Clean power generation:
Coal fuels the majority of power generation capacity in India and many other areas of the world. With technology advances, future coal power systems will be dramatically cleaner and more efficient than plants based on older technologies.

Secure and reliable energy supplies:
Coal is an abundant domestic energy resource. At current rates of consumption, coal could meet the needs for more than 250 years. With new technologies, our nation can use this valuable resource while also meeting environmental protection goals.

Climate change:
On a global and national level, coal use accounts for a significant proportion of greenhouse gas emissions. Making coal power systems more efficient contributes to the national goal of reducing carbon intensity.

Toward a hydrogen economy:
Our large domestic coal resources offer a viable mid-term resource for producing the large quantities of hydrogen that will be required to meet our country’s vision of hydrogen as India’s clean energy choice.

With our expertise in organising and delivering successful international summits on the above technology, we are glad to announce the 2nd Annual International Summit COAL GAS: 2011. The planned summit will strive to bring notice on improvements in gasification technologies that can help to provide a clean, stable, secure, affordable energy supply to meet the world’s growing energy demands.

The comprehensive Advisory Board shall deliver a high level of quality discussion on the theme “Vision 2020: National Option for Clean, Green and Sustainable Energy” during the two intensive days. The Advisory Board includes professionals from industry, universities and government bodies closely associated from the growing energy sector.

To Book Your Seat Contact secretariat@missionenergy.org
Summit Patrons

Dr. R V Marathe
Director - Institute of Reservoir Studies (ONGC)

Manoj Jayaswal
Chairman - Abhijeet Group

Partha S Bhattacharyya
CMD - Coal India

Program Committee

Biswajit Kar
Lurgi

Jasper Marias
Jindal Steel & Power Ltd

Dr. R K Malhotra
OCL

Dr. Michael Blinderman
Ergo Exergy

A K Singh
CMPD

Mike Fowler
Clean Air Task Force

G Rajeshwar Rao
Air Liquide

Jona Pillay
Jindal Steel & Power Ltd

Sponsorship Committee

Jaspal Singh
KBR

S Krishnan
Larsen & Toubro Ltd.

Anand Kumar
Petrotech Society

Dr. I Dayasagar
Uhde India Pvt. Ltd

Markus Leu
Midrex Technologies Inc.

Dr. D M Kale
ONGC Energy Centre Trust

Delegate Committee

Nikolaj Knudsen
Chairman - Delegate Committee
Haldor Topsoe A/S

Don Bunnell
Synthesis Energy Systems (SES), USA

Dr. S B Gaidhani
Gupta Corporation Ltd

Aditya Gupta
Shell Technology India Pvt Ltd

Shanmugavelu
Shriram EPC Ltd

Radha Krishna Chandragiri
APGENCO

Siva Ariyapadi
KBR

Operation Committee

Ashwinkumar
Chairman - Operation Committee
Mission Energy Foundation

Venkatachalam Kuppusami
Orissa Power Generation Corp

Dr. R R Sonde
Thermax

Nick Cohen
Future Fuels LLC
Who should attend?
Anyone involved in or considering launching a clean coal project
CEO, COO, Director, Financial Director, President, Vice President, General Managers, Managers, Policy Officers, Environment / CO2 Manager across National & International energy sector

Sponsor the conference to...
Our aim is to deliver you an event that exceeds your expectations, thus becoming an integrated part of your annual marketing program.

Sponsoring this annual gasification conference COAL GAS: 2011 will make your company stand out as a leader in this burgeoning industry and will leave a strong impression of your brand in key decision makers’ minds. Sponsors have an incredible amount of presence and it will not only give your company optimum exposure but also the opportunity for delegates to meet you and your executives to find out more about your role and business opportunities in the sector.

- Gain PUBLICITY with our advertising and promotional campaigns
- Obtain DIRECT ACCESS to potential clients during and after with our meticulously prepared confidential delegate list
- Receive a KEY SPEAKING POSITION to address an audience of top executives and decision makers from the industry
- Create PERMANENT REMINDERS of your product or services in conference documentation
- Profile yourself as INDUSTRIAL LEADER, as your corporate logo and profile will be featured prominently in event marketing collaterals
- NETWORKING with the industries leading Government Officials, Senior Level Delegates and Experts
- Achieve GREATER EXPOSURE and BRAND BUILDING through our partners and much more

The Organisers
Mission Energy Foundation, an independent not-for-profit organisation that strives in educating the public about coal gasification technology and ongoing contacts and discussions with the public and industry concerning what the future of coal gasification should be. With our expertise in organising and delivering successful international summits involving who's who from Entrepreneurs to Academicians to Government Authorities to Technology Providers to Consultants to Industry Professionals from the growing energy sector globally.

Our events ensures that we cover the right issues, attract the right speakers, at the right time and well attended participants who rely on:

- Focused, topical and professionally organised conferences, seminars & summits
- Eminent speakers such as ministers, leading academics and industry professionals are gathered on a interactive platform
- Insights into Government thinking and policy initiatives together with examination and analysis in energy sector
- Senior level delegation with whom networking and deliberating industry issues is at ease

Abhijeet Group is a contemporary and dynamic Indian conglomerate into Infrastructure and Industrial Development. The Group, by virtue of its entrepreneurial skills, innovative strategies and seamless execution has emerged as a well-diversified entity with significant presence in the six core sectors of Mining, Cement, Steel, Ferro Alloys, Power and Roads.
IN AUGURAL PROGRAMME

08:00 Summit Registration

Inaugural Welcome Addresses’
09:00 Shri Sriprakash Jaiswal
Union Minister for Ministry of Coal
09:10 Shri Sushil Kumar Shinde*
Union Minister for Power
09:20 Shri M K Alagiri *
Union Minister for Ministry of Chemicals & Fertilisers
09:30 Shri Jairam Ramesh*
Minister of State (Independent Charge) - Ministry of Environment & Forests

Key Note Address’
09:40 Shri Naveen Jindal
EVC & MD, Jindal Steel & Power Limited
09:45 Shri Dr. Ajit Sapre
Group Director Research & Development - Reliance Industries Limited
09:50 Shri Gurdial Singh
Chairperson - Central Electricity Authority

Summit Patrons Welcome Address’
10:00 Shri Partha S Bhattacharyya
Chairman - Coal India Limited
10:05 Shri Manoj Jayaswal
Chairman - Abhijeet Group
10:10 Shri Dr. R V Marathe
Director - Institute of Reservoir Studies (ONGC)
### Session 1: National Energy Scenario and Energy Security
Session Chairman: C Balakrishnan, Secretary - Ministry of Coal

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Organization/Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00</td>
<td>B C Tripathi, CMD - GAIL India Limited*</td>
<td></td>
</tr>
<tr>
<td>11:20</td>
<td>Arup Roy Choudhury, Chairman - National Thermal Power Corp*</td>
<td></td>
</tr>
<tr>
<td>11:40</td>
<td>National Energy Scenario &amp; Energy Security</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C Kapil Mohan, Dy Director General - Bureau of Energy Efficiency</td>
<td></td>
</tr>
<tr>
<td>12:00</td>
<td>Low Carbon Growth Strategies of India</td>
<td>Pamposh Bhat, Chairperson - Jwala Trust Foundation</td>
</tr>
</tbody>
</table>

**Session 2: Surface Coal Gasification**  
Session Chairman: T K Lahiry, Chairman - Bharat Coking Coal Limited

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Organization/Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:30</td>
<td>KBR Transport Gasifier (TRIG™) - A Clean Coal Technology for the Indian Gasification Market</td>
<td>Mr. Ron Gualy, Vice President Coal Monetization, KBR</td>
</tr>
<tr>
<td>12:50</td>
<td>Gasifier Manufacturing Challenges - L&amp;T's China Experience</td>
<td>Girish Savant, Sr. Dy General Manager - Larsen &amp; Toubro Limited</td>
</tr>
<tr>
<td>13:10</td>
<td>Further Development and Commercial Progress of CFB Gasification &amp; BGL Gasification Technologies</td>
<td>Hansjobst Hirschfelder, Managing Director &amp; Werner-Fr Staab, Head of Sales - Envirotetherm GmbH</td>
</tr>
<tr>
<td>13:30</td>
<td>Use of Lurgi FBDB Gasification Within India and for SNG Production</td>
<td>Pietro Di Zanno, Director Chemical Conversion - Lurgi GmbH</td>
</tr>
</tbody>
</table>

**Session 3: Underground Coal Gasification**  
Session Chairman: A K Singh, Chairman - CMPDI

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Organization/Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:30</td>
<td>Presentation Title Awaited</td>
<td></td>
</tr>
<tr>
<td>14:50</td>
<td>Transitioning Towards Cleaner Coal: The Role of Gasification &amp; UCG</td>
<td>Daniel P Goldman, EVP &amp; CFO - GreatPoint Energy</td>
</tr>
<tr>
<td>15:10</td>
<td>The Physics, Chemistry, and Simulation of Underground Coal Gasification</td>
<td>David W. Camp - Lawrence Livermore National Laboratory</td>
</tr>
</tbody>
</table>

**Session 4: Latest Development of Coal Gasification Technology**  
Session Chairman: Dr. R K Malhotra, Director R&D - IOCL

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Organization/Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:00</td>
<td>Shell's experience from the start-up and operations of the licensee plants in China</td>
<td>Aditya Gupta, BDM - Shell Clean Coal Energy - Shell Technologies</td>
</tr>
<tr>
<td>16:20</td>
<td>Viresco Energy's Advanced Gasification Technology</td>
<td>Arun SK Raju, Director of Research - Viresco Energy LLC</td>
</tr>
<tr>
<td>16:40</td>
<td>EmberClear - Clean Energy Solutions!</td>
<td>Nick Cohen, Chief Operating Officer - EmberClear Inc. (Formerly Future Fuels LLC)</td>
</tr>
<tr>
<td>17:00</td>
<td>SES U-GAS® – the Gasification Technology for High Ash Feed-stocks</td>
<td>Francis Lau, Chief Technology Officer - Synthesis Energy Systems (SES)</td>
</tr>
<tr>
<td>17:30</td>
<td>Panel Discussion on: Road Map for Development of Gasification Technologies in India</td>
<td></td>
</tr>
</tbody>
</table>

**Panel Discussion on:**  
**Moderator:** Anand Kumar, Director General - Petrotech Society  
**Panel:** A K Srivastava, Group Director Mining - Abhijeet Group  
Dr. R R Sonde, EVP Innovation & Technology - Thermax India  
G Rajeshwar Rao, Director - Asia Pacific Energy Market - Air Liquide India Holding Pvt. Limited  
Jona Pillay - Executive Director CTL - Jindal Steel & Power Limited  
Ajit C Kapadia, Vice Chairman - Centre for Fuel Studies and Research  
Dr. I Dayasagar, Executive Director Engineering - Uhde India Pvt. Limited

19:30 **Networking Dinner at Margosa Lawn, Habitat World, India Habitat Centre.**
AGENDA - DAY 2

08:30 Welcome Tea

Session 5: Coal Gasification - Its Applications
Session Chairman: R G Rajan, CMD - RCF Limited*

09:00 Presentation Title Awaited
Jasper Marias, Director Coal Gasification - Jindal Steel & Power Limited

09:20 Employing Coal Gasification for Ironmaking to Serve India’s Needs Via MXCOL™
Markus Leu, Plant Sales Manager - Midrex Technologies Inc.

09:40 Gasel™: Axens Syngas to Diesel Technology for CTL Projects
Mr Jean-Paul Margotin, Managing Director - Axens India

10:00 Presentation Title Awaited
Thomas Mathew, Group Vice President - Reliance Industries Limited

11:00 Automation Solutions for Coal Gasification
Vivek Pai, Business Development Manager - Honeywell Automation India Ltd.

11:20 Improving Refinery Economics… Polygeneration
Ganesh Nayak, leader for Gasification Technology - GE Energy

12:00 WSA Technology for Treatment of Coal Gases
Michael Sylvest-Johansen, Senior Process Engineer - Haldor Topsøe A/S

11:40 Improving Refinery Economics… Polygeneration
Ganesh Nayak, leader for Gasification Technology - GE Energy

12:00 WSA Technology for Treatment of Coal Gases
Michael Sylvest-Johansen, Senior Process Engineer - Haldor Topsøe A/S

13:00 Presentation Title to be Advised
Dr. S R Wate, Director - National Environmental Engineering Research Institute

14:00 Panel Discussion on:
Policies, Planning & Sustainable Development of Coal Gasification Technologies
Moderator: Thomas Mathew, Senior Group Vice President - Reliance Industries Limited

Panel:
Venkatachalam Kuppusami, Director Operations - AES-OPGC
Radha Krishna Chandagari, Director Projects - APGENCO
Mike Fowler, Climate Technology Innovation Coordinator - Clean Air Task Force
Biswajit Kar, Director Sales - Lurgi India

Session 6: Non-Coal Gasification Technologies
Session Chairman: A K Purwaha, CMD - Engineers India Limited

11:00 Presentation Title Awaited
Thomas Mathew, Group Vice President - Reliance Industries Limited

11:20 Automation Solutions for Coal Gasification
Vivek Pai, Business Development Manager - Honeywell Automation India Ltd.

11:40 Improving Refinery Economics… Polygeneration
Ganesh Nayak, leader for Gasification Technology - GE Energy

12:00 WSA Technology for Treatment of Coal Gases
Michael Sylvest-Johansen, Senior Process Engineer - Haldor Topsøe A/S

14:00 Panel Discussion on:
Policies, Planning & Sustainable Development of Coal Gasification Technologies
Moderator: Thomas Mathew, Senior Group Vice President - Reliance Industries Limited

Panel:
Venkatachalam Kuppusami, Director Operations - AES-OPGC
Radha Krishna Chandagari, Director Projects - APGENCO
Mike Fowler, Climate Technology Innovation Coordinator - Clean Air Task Force
Biswajit Kar, Director Sales - Lurgi India

Session 7: Gasification - Policy, Environment & Economics
Session Chairman: Dr. D M Kale, DG - ONGC Energy Centre Trust

15:00 Transitioning Towards Cleaner Coal: The Role of Gasification and UCG
Mike Fowler, Climate Technology Innovation Coordinator - Clean Air Task Force

15:20 Coal Gasification – Economics & Drivers
Kalpana Jain, Sr Director Financial Advisory - Deloitte Touche Tohmatsu India Private Limited

15:40 Coal Gasification – Economics & Drivers
Prabhakar Bhandarkar, Director Business Development - Simon India

16:00 Presentation Title to be Advised
Dr. S R Wate, Director - National Environmental Engineering Research Institute

17:00 Thanks Giving by Summit Patrons

17:30 Thanks Giving by Mission Energy Foundation
REGISTRATION FORM

NOTE:
• Kindly fill the registration form completely and email to us
• Kindly provide with a valid email id for correspondence
• A confirmation of the registration will be sent via email after receipt of the payment through electronic transfer
• No refund will be made in case of no-show / no-attendance
• Registration fee is exclusive of service tax as applicable
• Registration fee include lunch, refreshment and conference document/material at the venue. It does not include cost of accommodation and travel

CONFERENCE REGISTRATION FEE (EXCLUSIVE OF SERVICE TAX):
• Indian delegate: Rs. 13,500/- per delegate (Kindly add service tax @ 10.3% to the total value)
• International delegate: EURO 500 per delegate (Kindly add service tax @ 10.3% to the total value)
• 10% group discounts available for three or more delegates.

MODE OF PAYMENT:
Cheque / DD in favor of MISSION ENERGY FOUNDATION payable at Mumbai or visit our website for ONLINE PAYMENT

Communication Address:
Shop No. 2, B-47, Sector 1, Shanti Nagar, Mira Road (E), Mumbai - 401107
Phone: +91 22 6522 0770 / 71
Website: http://missionenergy.org

Company Details (Please type in Block Alphabets)

Total Amount (in Rupees): __________________________________________________________________________
Transaction Reference: __________________ Bank Name: _______________________ Date:___________________
Company : _____________________________________________
Address : ________________________________________________
City : __________________________ Pincode: ___________________ State: _______________________
Delegate (1) : _____________________________________________ Job Title:____________________________
Tel : _______________________ Mobile: ________________ Fax: _______________________________
Email : _____________________________________________ Alt Email: __________________________
Delegate (2) : ______________________________________________ Job Title:____________________________
Tel : _______________________ Mobile: ________________ Fax: _______________________________
Email : _____________________________________________ Alt Email: __________________________
Delegate (3) : ______________________________________________ Job Title:____________________________
Tel : _______________________ Mobile: ________________ Fax: _______________________________
Email : _____________________________________________ Alt Email: __________________________

(For more than 3 delegates kindly make copies of the registration form)

Mail the completed form to Mr. Sivakumar T at secretariat@missionenergy.org or contact +91 9820803110

Cancellation Policy: Should a delegate be unable to attend, a substitute delegate from the company is always welcome at no extra charge. Alternatively, for any cancellations, the following rules shall apply
• 70% refund of registration fee if cancellation is done on or before 15 working days of the schedule
• 50% refund of registration fee if cancellation is done on or before 10 working days of the schedule
• Thereafter, no refunds can be made

Important note: Please quote the name of the participant and event title on the advice when remitting payment. Bank charges to be deducted from the participation organisation’s own accounts. Attendance will only be permitted upon receipt of full payment. It may be necessary for reasons beyond the control of the organiser to alter the content or the event date or location or the identity of the speaker/s.