

पैट्रोलियम और प्राकृतिक गैस मंत्रालय, भारत सरकार

Greetinas!!

Centre for High Technology Ministry of Petroleum & Natural Gas, Govt. of India

From the desk of the Executive Director



Esteemed Readers,

During the quarter, 25th Energy Technology Meet was organised successfully by Centre for High technology in association with Hindustan Petroleum Corporation Ltd. from 15-17 September 2022 at Hotel Sahara star Mumbai. The theme of the event was "Refining in New Energy Era." Over 1000 delegates were attended the event from India and Abroad from Oil and Gas companies. The programme was inaugurated in presence of Chief Guest Shri Hardeep Singh Puri, Hon'ble Minister of Petroleum & Natural Gas and Housing & Urban Affairs and in the August presence of Shri Rameswar Teli, Hon'ble State Minister of Petroleum & Natural Gas and Labour & Employment; Dr Anil Kakodkar, Eminent Scientist and Chairman of Scientific Advisory Committee on Hydrocarbons

of MoP&NG; Shri Pankaj Jain, Secretary, Petroleum and Natural Gas. Various awards were presented including Refinery Performance Improvement Award, Innovation award, etc. for the year 2019-20 and 2021-22. Addressing the gathering, Union Minister for Petroleum and Natural Gas Hardeep Singh Puri said that despite the unique challenges posed by the current global setting, India is wedded to the concept of net zero and is committed to making a transition from the world of hydrocarbons to a world where green and sustainable energy will be determining our energy needs. The 25th Energy Technology Meet was witnessed a total of 78 oral papers including 42 by foreign companies and 24 speakers from abroad, spread over 15 Technical Sessions and 15 Exhibition Stalls. A special bulletin will be published soon covering 25th Energy technology Meet in detail.

This edition of CHT News Bytes highlights some of the key events of past quarter viz. ACM on "Oil & Gas Pipelines and SBM" at IOCL Rajkot; Meeting on Experience sharing on Ural Crudes processing; 94th Scientific Advisory Committee Meeting; Meeting on Petrochemicals; Meeting for 2G Ethanol pricing; Release of Compendium on Best Practices by Indian Refineries, etc.

CHT celebrated Independence Day celebration, Hindi Pakhwara from 16th -30th September and various activities conducted in Hindi Pakhwara like, Kavi Sammelan, easy writing, noting drafting, self written poems, etc.

Your views, suggestions and ideas to improve the CHT News Bytes further are solicited.

(Alok Sharma) Executive Director, CHT

25th Energy Technology Meet

Energy Technology Meet formerly known as Refining & Petrochemicals Technology Meet (RPTM) is organized by Centre for high technology on various topics of interest to the Refining Sector under aegis of Ministry of Petroleum and Natural Gas, Govt. of India in association with one of the oil companies. 25th edition of the meet was organised by Centre for High Technology in association with Hindustan Petroleum Corporation Limited.

The Downstream Hydrocarbon Sector is currently passing through a challenging phase with developments in alternative sources of energy, Electric mobility, environmental concerns and growing demand for petrochemicals. The theme of the Meet was therefore aptly kept as "Refining in New Energy Era".

The meet received overwhelming response from the entire oil and Gas sector within the country and from leading technology & service providers from abroad establishing once again the popularity and utility of the event. The three day meet broadly focused on issues related to theme "Refining in New Energy Era"

The meet was inaugurated Sh. Hardeep Singh Ji Puri, Hon'ble

Minister of Petroleum and Natural Gas & Housing and Urban Affairs and Sh. Rameswar Teli Ji, Hon'ble Minister of State for Petroleum & Natural Gas and Labour & Employment

During Inaugural session, the compendium of technical papers in soft form was released by the Chief Guest. Awards for Refinery Energy Performance, Oil & Gas Conservation Awards, and Innovation Awards for 2019-20 as well as 2021-22 were also given away by the Chief Guests. The Hon'ble Ministers also inaugurated Poster gallery and the Exhibition.

During inaugural session, Dr Anil Kakodkar, Eminent Scientist and chairman of SAC on Hydrocarbons of MoP&NG gave Special address followed by Keynote address by the Secretary, PNG setting the tone for the event.

After the inaugural session, Technical Sessions started with plenary session on "Refining in the new energy era" which was chaired by Sh Dr Anil Kakodkar, Eminent Scientist and Chairman of Scientific Advisory Committee on Hydrocarbons of MoP&NG

The second plenary session on "Crude to chemicals for driving Refining & Petrochemicals towards Sustenance" was chaired by Shri Sunil Kumar, Joint Secretary (Refineries), MoP&NG. The last plenary session on first day on "Moving Towards Sustainable Future" was chaired by Ms Vartika Shukla, CMD EIL.

Thereafter, 12 technical sessions were held on various topics of relevance in parallel halls spanning over one and half day. In all, 78 oral technical papers spread across 15 sessions were

presented including 42 by foreign consultant/ licensors/ vendors. Besides, 59 poster papers were presented during the event.

The event was sponsored by 24 Process Licensors, Design and Engineering Companies, Oil companies, Catalyst







Manufacturers, R&D institutes including 14 foreign companies 15 exhibition stall were put up by oil companies technology providers, licensors and consultants including 6 foreign companies to showcase their expertise.

The presentations/ Papers have been uploaded on the CHT website www.cht.gov.in for the benefit of the delegates.

CHT shall bring out special issue covering glimpses of the event and feedback including takeaways from the meet.







1. ACM on "Oil & Gas Pipelines and SBM"

Centre for High Technology under the aegis of Ministry of Petroleum & Natural Gas in association with IOCL, WRPL-Rajkot organised Activity Committee Meet (ACM) on "Oil & Gas Pipelines and SBM" on **22nd July 2022** at Indian Oil Corporation Ltd. (IOCL) Western Region Pipelines, Rajkot.

During Inaugural session D.S. Nanaware Director (Pipeline) IOCL, delivered Presidential address and Theme address was

given by Shri Alok Sharma ED-CHT. An overwhelming response was received in the event with delegates from all parts of the country. The meet was held in Hybrid mode with a total participation of approx. 95 members (Online & Offline) to share various initiatives and best practices. Out of total 18 presentations 16 presentations were made by PSUs (IOCL, BPCL, HPCL R&D, OIL EIL and GAIL). OISD & CHT also presented on "Safety" and "Repurposing of NG pipeline" respectively. To promote Atmanirbhar Bharat Abhiyaan CHT has provided a solid platform to start-up companies like Corrosion Intel, Urban Matrix, etc.

During the meet, the various issues related to Pipeline Operation, Design and Construction, Inspection & Maintenance, Pipeline Integrity Management, Cathodic Protection, Detection and Prevention of Pilferage, SBM Operations & Maintenance, Transportation of Hydrogen blends in gas distribution and transmission pipelines and Digital intervention in Pipelines O&M were discussed in various presentations. It was an interactive and knowledge sharing session. This meet had truly resonated with CHT's role on knowledge dissemination for the benefit of the industry.





2. Experience sharing on Ural Crudes processing

An online meeting was held on 2nd Aug' 2022 to discuss problems faced by Refineries during processing of Ural crudes in Indian refineries. Refineries reported problem of organic Chlorides/ Arsenic while processing Ural Crudes. Refineries presented their experience as under:

- a. Quantity of Ural crude processed
- b. Problems encountered
- c. Mitigating solutions

All the refineries have eagerly participated and a very good interaction has taken place during the meeting.

3. Scientific Advisory Committee Meeting

94th Meeting of the Scientific Advisory Committee (SAC) on Hydrocarbons of MoP&NG was held under the Chairmanship of Dr Anil Kakodkar through hybrid mode at Mumbai on 3rd Aug'22. Shri Alok Sharma, ED-CHT welcomed the Chairman, JS (R), other esteemed members of the SAC and special invitees. ED-CHT briefed the SAC about the terms of reference of SAC and focus areas for research, development & demonstration. The agenda points of the meeting included the 2G ethanol projects under PM JI-VAN Yojana and R&D/Demo projects. Chairman stressed that in addition to achieving the vision of PM JI-VAN Yojana, selected R&D projects should be aligned with the vision of GOI in making the country self-reliant with respect to its energy needs and to achieve Net Zero target.

During the meeting SAC reviewed and deliberated on the RFS-I projects under PM JI-VAN Yojana. SAC also deliberated on the proposals received against RFS-III under PM JI-VAN Yojana & evaluated by the Select Committee of SAC. After extensive deliberations SAC recommended the commercial proposals of MRPL & SIMPL (SheII India Marketing Pvt. Ltd.) and demonstration proposals of HPCL & CIPL (Chempolis India Pvt. Ltd.) for consideration of Steering Committee of CHT, subject to fulfilment of certain RFS requirements.

ED-CHT made a presentation on Energy strategy for India. Chairman gave few suggestions on the presentation and advised to have comments of each member on the document. He also emphasized that this document need to kept dynamic and regular updates can be done.

During the meeting SAC deliberated on five new proposals (including two proposals already discussed during 93rd SAC

meeting), submitted for funding by OIDB. SAC also had detailed review of the on-going R&D and HCF projects. SAC recommended closure of one on-going R&D project.



4. Innovation Awards

MoP&NG has instituted Innovation Awards which aims at recognizing the hidden creative talent in individuals or group in industry/ R&D system that could be harnessed for the benefit of the Nation. The Innovation Awards are conferred in the following three categories;

- Category-1 (Best Indigenously Developed Technology)
- Category-2 (Best Innovation in Refinery (refinery/group/ individual))
- Category-3 (Best Innovation in R&D Institute (institute/ group/individual)

Applications for the above awards were invited from both public and private sector units. A total of 58 nos. nominations in all the three categories were received from Refineries and R&D Institutes. These include innovations in catalyst, energy optimization, Process troubleshooting, environment issues, digitalization and development of new technologies. The applications were initially scrutinized by in-house CHT committee and Screening Committee. The shortlisted applications were presented to constituted Award Committee on 17th August 2022 through Video conferencing under the chairmanship of Dr Anil Kakodkar, Chairman, SAC. The Innovations Awards were presented during 25th ETM.

5. Refinery performance Award selection Meeting.

For the finalisation of Refinery Performance Improvement & Saksham Awards for the year 2021-22, a virtual meeting was conducted on 23rd Aug'2022. The meeting was attended by Award Selection Committee members CMD EIL Ms. Vartika Shukla, ED-OISD Sh. Arun Mittal, IIP-Dehradun Director Dr. Anjan Ray, ED-CHT Sh. Alok Sharma and CHT team. After a healthy and technical discussion and based on available facts from the various refineries the IOCL-Digboi declared as winner and HMEL as runner up under the category of Refinery Performance Improvement. A commendation certificate also declared to BPCL-Kochi Refinery for its good improvement in refinery performance. Under the category of Saksham award for best reduction in steam leak, IOCL-Panipat Refinery stood as the winner for the year 2022. All the above awards were given away during the 25th ETM at Mumbai.

6. Meeting on Petrochemicals

A Virtual Meet was held on **30th August 2022** to discuss the present and future demand of Petrochemicals, its availability and the barriers for enhancing the Petrochemical Production. Also the suggested measures to improve the Petrochemical production and Petrochemical Intensity Index in Indian Refineries was also discussed. The meeting was chaired by JS-Refineries and attended by the Directors of IOCL, BPCL, HPCL, MDs of MRPL, CPCL and NRL. The Chairman directed CHT to take inputs from Refineries to improve the overall Petrochemical Intensity Index of Indian PSU Refineries. Also, IOC was advised for conducting the Petrochemical Conclave.

7. 2G Ethanol pricing

A review Meeting on 2G Ethanol pricing, chaired by Joint Secretary (R), was held on **1^{et} September** at 1530 hrs through VC. The following points were deliberated during the meeting and input from PDs (IOCL, BPCL, HPCL & ABRPL) were sought:

- IRR working at 12% rate for all the projects
- Mechanism for incorporation of carbon credits into 2G
 Ethanol pricing
- As a measure of cost reduction, in-situ production of enzyme is to be explored
- Price discovery for the export of 2G ethanol to be explored
- Lignin valorisation to be looked in collaboration with IIP

8. New R&D Projects

CHT has received about 28 new R&D Project proposals which are under review by Chairman Sub-Committee. Shortlisted proposals by members of Sub-Committee will be reviewed and put up to SAC.

9. Processing of Proposal of Oil PSUs seeking relaxation for Global Tender Enquiry (GTE) for Tenders below Rs. 200 Crore

During this quarter CHT have received 52Nos of proposals from OPSU's i.e from M/s BCPL, CPCL, HPCL, IOCL, MRPL seeking relaxation for GTE for tender below 200Cr.

CHT have processed/ recommended 37 proposals in this quarter and 15 proposals are under processing/ awaiting clarification from OPSUs.

10. Release of "Compendium on Best Practices by Indian Refinerles"

Shri Alok Sharma, ED, CHT has released the "Compendium on Best Practices by Indian Refineries" on **27th September, 2022.**

The Compendium has been compiled and edited by CHT based on the information received from 17 refineries to make a ledger of experiences on the best practices and share major success stories. The compendium broadly covers the various projects/schemes which were implemented/ under implementation/ identified for future, best practices adopted by the refineries during 2019-2021 and summary of best practices identified in previous Compendium published in May 2018.

ED, CHT has sincerely acknowledged the contribution of refineries and extended special thanks to them for making it possible to bring out this compendium for mutual benefit of refineries.

स्वतन्त्रता दिवस 2022





ने स्वच्छता से संबंधित अनेक कार्यक्रम आयोजित किए।

बच्चों के बीच स्वकता पर ज़ाब्न / मेंटिन प्रतियोगिता, सीएचटी

ग्रीद्योगिकी केंद्र ने 1–16 जुलाई 2022 के दौरान स्वच्छता पखवाज़ा गनाया। स्वच्छता पखवाड़ा

को सफल बनाने के लिए सीएचटी सीएचटी अधिकारियों के

पेट्रोलियम एवं प्राकृतिक गैस मंत्रालय, णास्त सरकार के दिशा–निर्देशों के सनुपालन में उच्च

स्वचछता पखवादा

अधिकारियों की पत्नियों के बीच स्वरूपता बेस्ट आखट लॉफ वेस्ट प्रतियोगिता. संविदा कर्मियों के बीच स्वच्छता पर माषण प्रतियोगिता जैसे विभिन्न प्रकार के कार्यक्रम आयोजित किए गए। सीएचटी अधिकारियों के बीच स्लोगन व अन्य प्रतियोगिताएं आयोजित की गयी। लाल बहादुर



इंडिया बिजनेस ऑपरेशंस, फिलिप टाउनसेंड - झूस्टन, यूएसए, द्वारा किया गया। श्री विनायक मराले तथा डॉ.ए.वी.पंडित चदेख्यों के अनुपालन में, 24 अगस्त 2022 को 'ग्रीन एनजी एंड कार्बन में तकनीकी विकास ह पर सीएचटी में एक तकनीकी कार्यशाला आयोजित की गई थी। कार्यकारी निर्देशक महोदय श्री आलोक हामी साइब ने कीं,ए.बी.पंडित तथा श्री विनायक मराहे जो का स्वागत किया। कार्यशाला एनर्जी एंच कार्बन में तकनीकी विकास पर तकनीकी कार्यशाला तच्च प्रौडोगिंगकी केंद्र के अबरें स्थापना दिवस पर जानकारी साझा करने के लिए सीएचटी जी ने अपने कार्यकाल का अनुभव सीएवटी के अधिकारियों के साथ साझा किया। का खद्याटन श्री विनायक मराते. हेव --रसोसिएटस, इंक 카









सास्त्री बाल वाटिका वभुंषपा. गाणियाबाद में अनाथालय के बच्चों को और प्राथमिक विद्यालय खंगोड़ा गांव, दादरी, गौतम बुद्ध नगर, यूपी के बच्चों को स्वच्छता किट (स्कूल वैंग, पानी की बोतल, मास्क, सैनिटाइजप, ईंड टॉवल, डेटॉल साबुन, बिस्किट और विष्क आदि से युक्छ) वितरित की गई। इस अवसर पर ओआईबीबी क्षक्न के चारो और वॉकबॉन का आयोजन किया

गया जिसमें कर्मयारियों ने स्वरकता के बारे में जागरूकता फैलाने के लिए बैनर और हैक्आसट निकाले। स्वस्मरा पखयादा के दौरान आयोजित की गयी प्रतियोगिताकों में किजेता प्रतिमागियों को श्री आलोक रामी, कार्यकारी निरोशक सीएचटी द्वारा 15 जुलाई 2022 को स्वच्छता पखवाड़ा





हिन्दी पखवाड़ा

उच्च प्रौद्योगिकी केन्द्र में 16 सितम्बर से 30 सितम्बर 2022 तक हिन्दी पखवाड़े का आयोजन किया गया जिसका शुबारंभ श्री आलोक शर्मा, कार्यकारी निदेशक, सीएवटी ने किया। हिन्दी पखवाड़ा अवधि के दौरान अनेक प्रतियोगिताएं आयोजित की गयी जिसमें उच्च प्रौद्योगिकी केन्द्र के सभी अधिकारियों एवं कर्मचारियों ने उत्साहपूर्वक भाग लिया। समापन समारोह एवं हिन्दी कार्यशाला के उपलघ में मुख्य अतिथि के तौर पर उपनिदेशक (हिन्दी), पैट्रोलियम एवं प्राकृतिक गैस मंत्रालय, श्रीमति शोमना श्रीवास्तव जी उपस्थित रही और हिन्दी में काम करने की प्रेरणा दी। सीएचटी कार्याशाल में पहली बार कवि सम्मेलन भी आयोजित किया गया, जिसमे जाने–माने कवियों ने हिन्दी पर अनेक कविताये सुनाई। मुख्य अतिथि श्रीमति शोमना श्रीवास्तव जी तथा श्री आलोक शर्मा, कार्यकारी निदेशक, महोदय द्वारा समारोह के समापन और हिन्दी कार्यशाला में विजयी प्रतिगागियों को पुरूस्कृत किया गया और सभी प्रतिभागियों का होसला बढ़ाया।





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