

23RD MEETING

HELD AT

**ENGINEERS INDIA IMITED,
R&D CENTRE, GURGAON**

ON

APRIL 7, 1989

Immediate

No.J-13013/1/87-GenXXIII
Government of India
Ministry of Petroleum & Natural Gas

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Dated New Delhi the 21st July, 1989.

To

1. All the Members of the Scientific Advisory Committee (by name)
2. All participants as at Annexure.
3. CMDs of BPCL, HPCL, MRL, CRL, BRPL, LIL, EIL, IPCL and Dir.(Ref), IOC.

Sub: Next (24th) meeting of the Scientific Advisory Committee on Monday, the 21st August, 1989 at Centre of High Technology, New Delhi.

Minutes of the 23rd meeting of the Scientific Advisory Committee held at EIL, R&D Centre, Gurgaon on 7th April, 1989.

Sir,

The next (24th) meeting of the Scientific Advisory Committee will be held on Monday, the 21st August, 1989 in the Conference Hall of Centre of High Technology, 707, New Delhi House, Barakhamba Road, New Delhi-110001 at 10 A.M. The following will be agenda items for discussion:-

1. Fuel Additives - LIL
2. Distillation column internals - Mr.D.K.Palit, MRL.
3. Substitutes for TEL - CHI
4. Product quality assessment programme - Shri R.A.Rao, LIL
5. Short path distillation progress and status-Digboi Refinery.
6. Ethane Recovery - GAIL/EIL
7. Hydrocracking Pilot plant

2. Notes/papers on the above items will be sent shortly. Kindly make it convenient to attend the meeting.

3. A copy of the minutes of the 23rd meeting of the Scientific Advisory Committee held at EIL R&D Centre, Gurgaon on 7th April, 1989 is sent herewith.

Encl: as above.

Yours faithfully,

T.N. Parameswaran
(T.N. Parameswaran)
Under Secretary to the Govt. of India
(Tel: 382583)

Copy alongwith copy of minutes to:

1. Adv(E)/Adv(R)
2. JS(E)/JS(R)/JS(M)/AS&FA
3. PS to Secretary(P)
4. FA&CAO, OADB, New Delhi.

MINUTES OF THE 23RD MEETING OF THE SCIENTIFIC ADVISORY
COMMITTEE OF PETROLEUM & NATURAL GAS HELD ON 7TH APRIL,
1989 AT THE EIL HEADQUARTERS, GURGAON.

List of participants is given at Annexure.

23.1 Welcome:

23.1.1 Shri L.K. Chandok, Chairman & Managing Director welcomed the members and participants of SAC to EIL R&D Centre.

In his welcome address Shri Chandok gave a brief account of EIL's activities towards technology absorption, adaptation, updation and development. He brought out the need for developing cost effective and contemporary technologies.

23.1.2 Prof. M.M. Sharma, Chairman, SAC, thanked Shri L.K. Chandok for extending the hospitality to SAC members and participants.

23.1.3 This was followed by a brief presentation regarding EIL R&D Centre and visit to their facilities.

23.2 Confirmation of the Minutes:

23.2.1 As there were no comments/observations on the minutes of the last SAC meeting, the same were confirmed.

23.3 Lubricant Additives

23.3.1 Dr. G. Jayarama Rao presented the recommendations of the SAC, drafted by the sub committee appointed for this purpose.

These include recommendations on:

- a) area of upgradation of Lubricant Quality;
- b) strategy for introducing and manufacturing new components and packages;
- c) support to be given for indigenous development of new components.

23.3.2 The recommendations of the sub-committee on "Upgradation of Lubricants and additives" include:

a) for passenger cars

- Multigrading
- High performance oils SF/SG
- Use of friction modifiers.

b) for two stroke engines

- Use of alternate low ash systems
- Optimisation of Lube Oil/fuel ratios
- Optimisation of bright stock proportion
- Assessment of the benefits of use of synthetic oils and polybutenes

c) for diesel engine oils

- Optimise and use M11 O/CD engine oils
- Development of long drain oils
- Gradual introduction of appropriate multigrade oils in the market
- Development of partial synthetic oils

d) for gear oils

- Evaluation of alternate additive systems
- Introduction of energy saving multigrade oils.

23.3.3 Dr. Rao said that on the "Manufacturing Aspects" the Committee recommended the following:

- a) Improve the processes to make them energy efficient.
- b) attain capabilities to transfer manufacturing know-how.
- c) production of improved/alternate dispersants.

23.5 Aromatics:

23.5.1 A presentation of the indigenous design capabilities was made by EIL/IPCL. EIL brought out its capabilities with regard to optimisation of the overall aromatics complex, design of various non-licensed processes and licensed units based on minimum information from the catalyst vendors. It was also highlighted that EIL has performed this activity for a number of commercial plants.

23.5.2 Recent developments as regards IIP/EIL sulfolane aromatics extraction technology, to ensure its constant updating were presented.

23.5.3 A presentation regarding xylene isomerisation by IPCL, highlighted the developments in Eucilite catalyst, since the first commercial trials at Baroda. The SAC was informed that presently IPCL is evaluating the indigenously manufactured monometallic reforming catalyst by loading it in the commercial unit (600 Kg. catalyst).

23.5.4 SAC particularly appreciated the outstanding capability of EIL in overall integration and optimisation of aromatics complex and technological capability of international stature in processes like benzene extraction by it and isomerisation by IPCL.

23.6 Hydrocracking:

23.6.1 A paper entitled "Scale-up strategy for hydrocracker" was circulated by IOC(R&D). The question of the need for having a large sized pilot plant and its location was debated. It was

felt that the pilot plant should be located close to a refinery having a hydrocracker. However, it was decided that a small group of the SAC would look into the details and prepare a report. Chairman, SAC agreed to coordinate this and table the report in the next SAC meeting.

23.7 Next Meeting

It was decided that the next meeting would be held on September 1, 1989 at Haldia Refinery. The agenda items for discussions shall be as under:

1. Fuel Additives - LIL
2. Distillation column internals - Mr.D.K.Palit, MRL.
3. Substitutes for TEL - CHT
4. Product quality assessment programme - Shri R.A.Rao, LIL.
5. Short path distillation progress and status - Digboi Ref.
6. Ethane Recovery - GAIL/EIL
7. Hydrocracking pilot plant.

(Subsequently at the request of Chairman, it has been decided to hold the meeting on August 21, 1989 at New Delhi in the Conference Hall of Centre of High Technology, 707, New Delhi House, Barakhamba Road, New Delhi-110001)

23.8 The meeting ended with appreciation of hospitality extended by EIL and a vote of thanks to the Chair.

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