

**10<sup>TH</sup> MEETING**

**HELD AT**

**MINISTRY OF PETROLEUM  
SHASTRI BHAWAN, NEW DELHI**

**ON**

**MAY 1, 1985**



1041

No. J-13013/1/83-Gen.X  
Government of India  
Ministry of Petroleum

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Dated New Delhi the 25th May, 1985.

To

1. All the members of the Committee (by name)
2. All participants who attended the meeting (Annexure-I).

Sub: Brief Record of the 10th meeting of the Scientific Advisory Committee for Ministry of Petroleum held on 1st May, 1985.

Sir,

A copy of the brief record of the 10th meeting of the Scientific Advisory Committee for Ministry of Petroleum held on 1st May, 1985 is sent herewith. Comments, if any, may kindly be furnished immediately.

Encl: as above.

Yours faithfully,

(T.N. Parameswaran)

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

Copy with enclosure to:

1. Adv(EPP)    2. All JSs    3. Adv(R)/Adv.(PC)
4. PS to Secretary(Petroleum)
5. FA&CAO, Oil Industry Development Board, 704, Surya Kiran Building, 10, K.G Marg, New Delhi.



MINUTES OF THE 10TH MEETING OF THE SCIENTIFIC ADVISORY  
COMMITTEE HELD ON 1ST MAY, 1985 IN NEW DELHI.

List of persons who attended the meeting is attached (Annexure I).

Minutes of the 9th meeting, already circulated to the members, were confirmed. Subsequently the various agenda items were taken up for discussion.

10.1 Report prepared by IOC on "Additives for fuel products"

Dr. P. K. Mukhopadhyaya presented the report in brief. Subsequently, the upgradation of fuel products by the addition of additives like antioxidant particularly in the context of large quantity of cracked/catalytic stock being available was discussed at length by the Committee members. The Committee noted that engines for vehicles, aircrafts etc. are being selected based on the latest design without taking into consideration the quality of fuel available in India. The Committee, therefore, strongly recommended that due consideration should also be given for the fuel quality available and likely to be made in India for the selection of engines. After deliberations on this subject, the Committee noted that there is a definite need for the indigenous development of additives for fuel products due to the fact that there would be sufficient demand for additives in India, particularly for the cracked/catalytic stock which are expected to be available in large quantities.

10.2 Note prepared by M/s. Lubrizol India Limited on  
"Synthetic Oils"

The note was presented by Dr. Mallik. Subsequently the Chairman emphasised the importance of the Synthetic oils and indicated that due to the high price of synthetic oil, the utilisation could not increase rapidly in spite of its superior properties. He also informed that polyalphaolefins based synthetic lubricants have good market potential and even if the raw-material i.e. Decene-I is not available indigenously, work should be started on synthetic oil production based on imported raw material. Dr. Jayarama Rao, Adviser(R), however, expressed that the demand of synthetic oils, based on PAO, is not increasing even in the world market mainly because of the high price difference and also the demand in civil aviation market may not develop for the product developed indigenously due to the reasons that the product has to be approved by the engine manufacturers before utilisation for this purpose. Dr. Aghoramurthy pointed out that the utilisation of the right quality synthetic oils will lead to high engine performance and the need for the changing oil often in the engine would be also eliminated. After extensive discussion, the Committee recognised the need for various synthetic oils utilisation and suggested that systematic steps



for the indigenous development of PAO based synthetic oil should be undertaken expeditiously. In the course of discussions on Lube base manufacture, based on indigenous crudes, the Committee recommended that indigenous crudes especially from North Kadi and Santhal of North Gujarat should be examined in great detail by OIIB/IIP for processing to make Lube base stock.

10.3 Note on "Detailed characterization of Feedstocks for FCC and Hydrocracking units".

The proposal was presented by Dr. Krishna of IIP. After discussion, the Committee members welcomed the proposal of having high resolution MSGC by IIP for characterisation of various feedstocks. However, since the acquisition of MSGC has been included by IIP in their Hydrocracking programme also, it was agreed that there is no need to indicate the acquisition of MSGC under this head separately.

✓ 10.4 Note on "Hydrocracking Technology Development"

The proposal was explained by Dr. Gulati of IIP. Dr. Jayarama Rao informed that the phase-I of R&D programme of IIP on the development of Hydrocracker Technology can be processed further only when the Committee approves the proposal. In this connection, Prof. Sharma wanted to know the linkage with IPCL's pilot plant which is under implementation of Catalyst Preparation and Characterisation etc. It was indicated that IPCL's proposal is with regard to scale-up study related to catalyst manufacture and as such there will not be any duplication in the work. In view of the above clarification and also the decision taken to include MSGC under this proposal only, the Committee recommended the phase-I proposal of IIP for further consideration and implementation.

10.5 Recovery of Naphthalene from petroleum fractions

Dr. Kothari presented the analytical results obtained on the ATF and kerosene fractions of the Bombay High Crude. The Committee desired that a detailed techno-economic study should be undertaken by IIP/EIL/Dr. Kothari to decide on the best alternative between the solvent extraction for aromatics removal followed by Naphthalene manufacture and the Hydroprocessing of ATF fraction to meet the desired stringent specifications.

Prof. Sharma, Chairman, profusely thanked the Committee members for their sincere involvement in the task assigned to them and also the whole-hearted cooperation extended to the Committee. He also thanked the Government officials in particular Dr. Aghoramurthy, Mr. Sundaresan, Mrs. Singh and Mr. Parameswaran for their able guidance and assistance provided to the Committee.



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Annexure-I

List of participants who attended the Scientific Advisory Committee meeting held on 1st May, 1935 in Hastri Bhawan, New Delhi.

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Members

1. Prof. M.M. Sharma, Chemicals Engineering, Deptt. of Chemical Technology, Bombay.
2. Dr. Sukh Dev, Director, Malti Chem Research Centre, Vadodara, Gujarat.
3. Dr. P.K. Mukhopadhyaya, Director, IOC(R&D), Faridabad.
4. Dr. I.B. Gulati, IIP, Dehradun.

Invitees

5. Shri K.K. Bhattacharyya, IIP, Dehradun
6. Dr. N.C. Kothary, IPCL/CIDR.
7. Shri R. Krishnamurthy, Engineers India Limited, New Delhi.
8. Shri D.N. Rihani, -do- (R&D)
9. Shri K.L. Malik, Lubrizol India Ltd., Bombay.
10. Shri R.A. Rao, -do-
11. Shri P.K. Rudra, MD, Lurizol India Ltd., Bombay.
12. Shri K.N.V. Subramanian, OSD, IPCL, Baroda.
13. Dr. R. Krishna, IIP, Dehradun.
14. Shri G. Balamalliah, IIP, Dehradun.
15. Dr. G.C. Joshi, IIP, Dehradun.
16. Dr. K. Aghoramurthy, OICB Task Force.

Ministry of Petroleum

17. Dr. G. Jayarama Rao, Adv(R).
18. M.B. Lalitha Singh, PO(LS)
19. Shri L.S. Sundaresan, PO(S).