Substitute for Petroleum Products

- 4158. SHRI ANANTA PRASAD SETHI: Will the Minister of PETROLEUM be pleased to state:
- (a) whether Government have conducted any study or research to find out substitutes for the petroleum products;
 - (b) if so, the details thereof:
- (c) the names of other substances which can be used as substitutes for the petroleum products; and
- (d) their respective advantages and disadvantages?

THE MINISTER OF STATE OF THE MINISTRY OF PETROLEUM (SHRI NAWAL KISHORE SHARMA): (a) Yes, Sir.

- (b) and (c) IOC (R&D) and IIP have conducted laboratory and field trials on alcohol-ethanol and methanol as partial substitutes for petrol and diesel respectively. Ethanol and methanol can be used in admixture with gasoline and diesel respectively upto concentration of 20%. Research is also being carried out by the National Botanical Research Institute and the Indian Institute of Petroleum on potential petrocrops and their conversion to petroleum hydrocarbons.
- (d) As alcohol fuels have high octane numbers, these can be used in neat from as well as in admixture with petrol, thereby reducing lead pollution for vehicles. Their carburation in diesel vehicles also helps in reducing smoke. The use of alcohol, however, is found to result in increased wear and tear of the engines, faster oil degradation and increased corrosion tendency with fuel system components. Regarding petro-crops, as the research is still at a preliminary stage, their advantages and disadvantages can not be assessed at this stage.

Proposal by Instruments Industry for Setting up Research and Development to Reduce Technology Import

4159. SHRI LAKSHMAN MALLICK: Will the Minister of INDUSTRY AND COMPANY AFFAIRS be pleased to state:

- (a) whether the instruments industry has submitted any proposal for setting up research and development centres with the help of Non-Resident Indians to reduce technology import;
- (b) whether Government propose to give some aid to that industry in this regard; and
 - (c) if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF INDUSTRY AND COMPANY AFFAIRS AND IN THE MINISTRY OF HOME AFFAIRS (SHRI ARIF MOHAMMAD KHAN): (a) No, Sir.

(b) and (c) The question of assistance for setting up R&D centres will be considered as and when specific proposal in this regard is received. However, Fluid Control Research Institute is being set up by the Government at Palghat (Kerala) with UNDP's assistance.

Production of Erythromycin

4160. SHRI LAKSHMAN MALLICK: Will the Minister of CHEMICALS AND FERTILIZERS be pleased to state:

- (a) whether the customs duty on drug intermediates TIOC and 6 APA was raised in September 1984 making the life-saving medicines out of reach of the common man;
- (b) the production of erythromycin by the companies which were issued licences in the year 1984-85?

THE MINISTER OF **CHEMICALS** AND FERTILIZERS AND INDUSTRY AND **COMPANY AFFAIRS** (SHRI VEERENDRA PATIL): (a) Import 6— APA duty on was revised only once after March, 1979. It was revised in August, 1984 in respect of imports other than those by the Canalising Agency namely State Trading Corporation, with a view to ensure that unregulated imports do not affect domestic production of 6-APA.

As regards TIOC, the customs duty on this intermediate was increased from 25% to the present level of 135.21% (total) with a