29TH ANNUAL REPORT 1997-98

INDIAN PETROCHEMICALS CORPORATION LIMITED

BOARD OF DIRECTORS

Shri K. G. Ramanathan
Chairman-cum-Managing Director

Shri N. Chandar
Director (Finance)

Shri Chinmay Bhattacharya
Director (Marketing)

Shri S. K. Anand
Director (Operations)

Dr. C. M. Lamba
Director (Personnel)

Shri S. K. Sood : upto 6-5-1998
Director

Shri P. C. Rawal : upto 22-7-1998
Director

Shri Ashok Chawla : w.e.f. 6-8-1998
Director

Shri A. Parthasarthy Naidu
Company Secretary

REGISTERED OFFICE
P. O. Petrochemicals
Dist. Vadodara 391 346
Gujarat.

REGISTRARS & SHARE TRANSFER AGENTS

M/s MCS Limited
Neelam Apartment
88, Sampatrao Colony
Behind Federation Building
Alkapuri, Vadodara 390 007

BANKERS

State Bank of India
Bank of India
Bank of Baroda
State Bank of Saurashtra
HDFC Bank
Bank of America
Citibank N. A.
American Express Bank
ANZ Grindlays Bank

AUDITORS
M/s B. K. Khare & Company
Chartered Accountants
706/708, Sharda Chambers
New Marine Lines
Mumbai 400 020

BRANCH AUDITORS
M/s Chhotalal H. Shah & Company
Chartered Accountants
Gold Mohar, 1st floor
Shamaldas Gandhi Marg
Mumbai 400 006

M/s H. K. Chaudhry & Co.,
Chartered Accountants
1/9-B, Jindal House,
Asaf Ali Road,
New Delhi 110 002.

M/s Girish Murthy & Kumar,
Chartered Accountants
4502, High Point - IV,
5th Floor,
45, Palace Road,
Bangalore 560 001.

M/s Ghosh & Pande
Chartered Accountants
B-210/2, Bagree Market
71, B.R.B. Basu Road
Calcutta 700 001

NOTICE

NOTICE is hereby given that the Twenty-Ninth Annual General Meeting of the Shareholders of Indian Petrochemicals Corporation Limited will be held at **2.00 p.m. on Tuesday, the 29th September, 1998** at the **Mahatma Gandhi Nagar Gruh, near Jubilee Garden, Vadodara 390 001,** to transact the following business:

Ordinary Business

1 To receive, consider and adopt the Profit & Loss Account for the corporate financial year ended 31st March, 1998, the Balance-Sheet as at that date and the Reports of the Directors and the Auditors thereon.

2 To declare dividend on equity shares.

3 To appoint a Director in place of Shri S. K. Anand, Director (Operations), who retires by rotation and being eligible, offers himself for re-appointment.

Special Business

4 To consider, and if thought fit, to pass with or without modifications the following resolution as an **Ordinary Resolution:-**

"RESOLVED THAT Shri Ashok Chawla be and is hereby appointed as a Director of the Company."

5 To consider, and if thought fit, to pass with or without modification(s) the following resolution as an **Ordinary Resolution:-**

"RESOLVED THAT pursuant to the provisions contained in Sections 16 and 94 and all other applicable provisions of the Companies Act, 1956, the Authorised Share Capital of the Company, be and is hereby increased from Rs. 400,00,00,000 (Rupees four hundred crores) divided into 40,00,00,000 (forty crores) Equity Shares of Rs. 10 (Rupees ten) each to Rs. 500,00,00,000 (Rupees five hundred crores) divided into 40,00,00,000 (forty crores) Equity Shares of Rs. 10 (Rupees ten) each and 10,00,00,000 (ten crores) Preference Shares of Rs. 10 (Rupees ten) each and consequently the existing Clause V of the Memorandum of Association of the Company relating to the Share Capital be and is hereby altered by substituting the following new Clause in its place:-

The Authorised Share Capital of the Company is Rs. 500,00,00,000 (Rupees five hundred crores) divided into 40,00,00,000 (Forty crores) Equity Shares of Rs. 10 (Rupees ten) each and 10,00,00,000 (Ten crores) Preference Shares of Rs. 10 (Rupees ten) each with the rights, privileges and conditions attaching thereto as may be provided by the Articles of Association of the Company for the time being with power to increase and reduce the capital of the Company and to divide and/or subdivide shares in the capital for the time being into several classes and to attach thereto respectively such preferential, guaranteed, qualified or special rights, privileges and conditions, as may be determined by or in accordance with the Articles of Association of the Company and to vary, modify, amalgamate or abrogate any such rights, privileges or conditions in such manner as may, for the time being, be provided by the Articles of Association of the Company but subject always to the provisions of the Companies Act (1 of 1956) including amendments thereto from time to time."

6 To consider and, if thought fit to pass, with or without modification(s), the following resolution as a **Special Resolution:-**

"RESOLVED THAT pursuant to the provisions contained in Section 80 and all other applicable provisions, if any, of the Companies Act, 1956 (including any amendment to or re-enactment thereof), the relevant provisions of the Memorandum and Articles of Association of the Company and subject to such approvals, consents, permissions and sanctions as may be necessary from the appropriate authorities or bodies and subject to such conditions as may be prescribed by them while granting such approvals, consents, permissions and sanctions and subject to such terms, conditions and alterations which the Board of Directors of the Company (hereinafter referred to as the 'Board') be and is hereby authorised to accept, if it thinks fit in the interest of the Company, the Board be and is hereby authorised to issue, offer and allot Preference Shares of the face value of Rs. 10 (Rupees ten) each of an aggregate nominal value not exceeding Rs. 100 crores (Rupees One hundred crores), exclusive of such premium, if any, as may be determined by the Board, in one or more private offerings including private placement, in Indian markets to Indian / Foreign investors (whether institutions/ Banks and /or corporate bodies (including companies) and / or any other body corporate and / or trusts and / or mutual funds and/or local bodies and/or any combination thereof) and whether or not such investors are members of the Company, on such terms and conditions and in such tranches as may be decided by the Board in its absolute discretion.

RESOLVED FURTHER THAT without prejudice to the generality of the above, the Board be and is hereby authorised to determine as to when the said Preference Shares are to be issued, the type or types of the Preference Shares are to be issued, the types and classes of investors to whom the Preference Shares are to be offered, the number and value of the Preference Shares to be issued in each tranche, utilisation of the issue proceeds, the terms or combination of terms subject to which the Preference Shares are to be issued (including combination of terms for Preference Shares issued at various points of time) including but not limited to terms relating to rate of dividend, period of redemption, manner of redemption (including by conversion to equity, if permissible in law), premium on redemption or premature or early redemption at the option of the Company and / or the investors, terms for cumulation or otherwise of dividends and all such terms as are provided in offerings of like nature.

RESOLVED FURTHER THAT for the purpose of giving effect to the above Resolutions, the Board be and is hereby authorised to do all such acts, deeds, matters and things and execute all such deeds, documents, instruments and writings as it may in its absolute discretion deem necessary or desirable and pay any fees and commission and incur expenses in relation thereto.

RESOLVED FURTHER THAT the Board be and is hereby authorised to delegate all or any of the powers herein conferred to any Committee of Directors or Managing Director or any whole time Director or Directors or any other Officer or Officers of the Company to give effect to the aforesaid Resolution."

7 To consider and if thought fit to pass with or without modification(s) the following Resolution as a **Special Resolution:-**

"RESOLVED THAT pursuant to the provisions contained in Section 31 of the Companies Act, 1956, the existing Clause 5 of the Articles of Association of the Company, be and is hereby substituted by the following:

'Article 5
The Authorised Share Capital of the Company is Rs. 500,00,00,000 (Rupees five hundred crores) divided into 40,00,00,000 (forty crores) Equity Shares of Rs. 10/- each and 10,00,00,000 (Ten crores) Preference Shares of Rs. 10 (Rupees ten) each."

8 To consider and if thought fit to pass with or without modification(s) the following Resolution as an **Ordinary Resolution:-**

"RESOLVED THAT pursuant to the provisions contained in Section 372 and any other applicable provisions, if any, of the Companies Act, 1956 and approval of the Central Government, where necessary, consent of the shareholders be and is hereby given to the Board of Directors for making an investment upto a limit of Rs. 50 lakhs in the equity share capital of the Company proposed to be incorporated under the name "Effluent Channel Project Vadodara Limited" or such other name as may be approved by the Registrar of Companies, Gujarat State, Ahmedabad, for managing the Common Effluent Channel Project.

RESOLVED FURTHER THAT the Board of Directors be and is hereby authorised to do all such acts, deeds and things as may be deemed expedient and necessary to give effect to this Resolution."

9 To consider and if thought fit to pass with or without modification(s) the following Resolution as a **Special Resolution:-**

"RESOLVED THAT subject to all applicable provisions of the Companies Act, 1956 (including any statutory modification(s) or re-enactment thereof and any Ordinance promulgated in this regard for the time being in force and as may be enacted / promulgated from time to time) and subject to such other approvals, permissions and sanctions, as may be necessary and subject to such conditions and modifications as may be prescribed or imposed while granting such approvals, permissions and sanctions, which may be agreed to, by the Board of Directors of the Company (hereinafter referred to as 'the Board'), the consent of the Company be and is hereby accorded to the Board to buy back, from the existing holders of shares and / or other securities giving right to subscribe for shares of the Company, on a proportionate basis and / or from the open market and / or from the lots smaller than market lots of the Securities (odd lots) and / or by purchasing the Securities issued to the employees, the shares or such other Securities or Securities having such underlying voting rights as may hereafter be notified by the Central Government or any other regulatory authority, from time to time (herein for brevity's sake referred to as 'the Securities'), of the Company, from out of its free reserves or out of the Securities premium account of the Company or out of the proceeds of any issue made by the Company specifically for the purpose, or from such other sources, as may be permitted by law, on such terms, conditions and in such manner as may be prescribed by law from time to time, provided that the aggregate of the securities so bought back shall not exceed ten (10) per cent of the respective securities of the Company.

RESOLVED FURTHER THAT the acquisition / purchase of such fully paid equity shares of the Company, be not construed as reduction of Equity Share Capital which is subject to the controls as stipulated in Sections 100 to 104 and Section 402 of the Companies Act, 1956 for the time being in force.

RESOLVED FURTHER THAT the Board of Directors of the Company be and is hereby authorised to do all such acts, deeds and things, and deal with all such matters and take all such steps in this regard as it may, in its absolute discretion, deem necessary, fit or proper to give effect to this Resolution."

By Order of the Board of Directors,
for **Indian Petrochemicals Corporation Limited,**

(A. Parthasarthy Naidu)
Company Secretary

Dated : 12 August, 1998
Registered Office:
P.O. Petrochemicals
District Vadodara
PIN 391 346

NOTES

1. A MEMBER ENTITLED TO ATTEND AND VOTE IS ENTITLED TO APPOINT A PROXY AND VOTE INSTEAD OF HIMSELF / HERSELF AND THE PROXY NEED NOT BE A MEMBER. PROXIES IN ORDER TO BE EFFECTIVE MUST BE RECEIVED AT THE REGISTERED OFFICE OF THE COMPANY NOT LESS THAN 48 HOURS BEFORE THE ANNUAL GENERAL MEETING.

2 Explanatory Statement, pursuant to Section 173 (2) of the Companies Act, 1956, in respect of special business is annexed.

3 Members / Proxies should bring the attendance slip duly filled in for attending the meeting.

4 Members attending the meeting are requested to bring their copy of the Annual Report.

5 Shareholders seeking any information with regard to Accounts are requested to send their queries to the Company at an early date so as to enable the Management to keep the information ready.

6 Dividend when sanctioned will be paid after the conclusion of the Annual General Meeting.

7 The Register of Members and Share Transfer Book of the Company will remain closed from Tuesday, the 22nd September, 1998 to Tuesday, the 29th September, 1998 (both days inclusive).

8 Members are requested to inform the changes, if any, in their registered addresses alongwith their Bank Account No., Name & Branch of Bank for remittance of Dividend etc. to the Company's Registrars and Share Transfer Agents - on or before 22nd September, 1998.

Messrs MCS Limited,
Neelam Apartment,
88, Sampatrao Colony, Alkapuri,
Vadodara 390 007

9. The Company has already transferred, unclaimed dividend declared upto the financial year ended 31st March, 1994 to the General Revenue Account of the Central Government as required by the Companies Unpaid Dividend (Transfer to the General Revenue Account of the Central Government) Rules, 1978. Those shareholders who have so far not claimed or collected their dividend upto the aforesaid financial year, may claim the same from the Registrar of Companies, Gujarat, C.G.O. Complex, Opp. Rupal Park, Near Ankur Cross Road, Naranpura, Ahmedabad - 380 013.

The Unpaid dividends that are due for transfer to the Central Government are as follows :-

Financial Year ended		Due for transfer on
31.3.1995	Final Dividend	08-11-1998
31.3.1996	Interim Dividend	01-04-1999
	Final Dividend	06-11-1999
31.3.1997	Final Dividend	03-11-2000

Members who have not encashed their dividend warrants for the aforesaid financial years are requested to approach the Company's Registrars and Share Transfer Agents, for obtaining duplicate dividend warrants.

10. Investors desirous of availing the facility of electronic credit of dividend are requested to fill in the form attached to this Annual Report.

ANNEXURE TO THE NOTICE

EXPLANATORY STATEMENT (PURSUANT TO SECTION 173(2) OF THE COMPANIES ACT, 1956)

Item No. 4

Shri Ashok Chawla, Central Government Nominee, holds office as Director until the conclusion of the Annual General Meeting. The Company has received notice together with necessary deposit under Section 257 of the Compaines Act, 1956, from members signifying their intention to propose the appointment of Shri Ashok Chawla as Director of the Company. Shri Ashok Chawla has agreed to act as Director, if so appointed. The Directors recommend the resolution for members' approval as it is in the interest of the Corporation.

Shri Ashok Chawla may be deemed to be interested in the resolution as it relates to his appointment.

None of the other Directors of the Company is in any way concerned or interested in the Resolution.

Item Nos. 5, 6 and 7

The Corporation with a view to augment resources for its projects, ongoing capital expenditure and other general corporate purposes, proposes to raise finance through the issue of Preference Shares upto an aggregate nominal value of Rs. 100 crores in one or more tranches. Detailed terms and conditions including the issue price, rate of dividend, premium, redemption period etc. will be determined by the Board of Directors of the Company in consultation with the Lead Managers/Advisors/ Consultants and/or depending upon the then prevailing market conditions. The proposed issue as aforesaid will, if required, be subject to the approval(s) of the Government of India, Reserve Bank of India and other relevant authorities.

In order to enable the Company to issue Preference Shares upto the nominal value of Rs. 100 crores as and when deemed fit, it is proposed to create the Authorised Preference Share Capital of Rs. 100 crores and increase the total Share capital from Rs. 400 crores to Rs. 500 crores and consequently to alter Clause V of the Memorandum of Association and Article 5 of the Articles of Association as set out in item Nos. 5 and 7 of the Notice in accordance with the provisions contained in Sections 16, 31 and 94 of the Companies Act, 1956.

A copy of the Memorandum and Articles of Association of the Company is available for inspection during business hours on any working day, at the Registered Office of the Company, upto the date of the meeting.

The Board of Directors recommend adoption of the Ordinary Resolution set out in item No. 5 and the Special Resolution set out in item Nos. 6 and 7 of the Notice.

None of the Directors is, in any way, concerned or interested in the said resolutions.

Item No. 8

Gujarat Government had formulated a Scheme for the construction of a Common Effluent Channel Project to convey the effluents from all the industries in the petrochemical region into the estuary near Gulf of Khambhat. The Scheme was prepared to save the Mahi river and its tributary, the Mini river from further water pollution which would occur if the industrial wastes continue to be discharged into these rivers. The participants in the Common Effluent Channel Project are Indian Petrochemicals Corporation Limited, Gujarat State Fertilizers & Chemicals Limited, Gujarat Alkalies & Chemicals Limited, Indian Oil Corporation Limited (Gujarat Refinery) and Gujarat Industrial Development Corporation Limited. In pursuance of public interest litigation filed in the matter of pollution in Mini river before the Gujarat High Court, the Hon'ble High Court observed that the Common Effluent Channel Project, in which the industries of Vadodara are discharging their effluents, does not have a legal status nor has it requisite consent from the Gujarat Pollution Control Board for discharging effluents. The Court, therefore, desired that all the industries discharging their effluents into the Common Effluent Channel Project should join together and incorporate a Company to endow legal status to the existing Common Effluent Channel Project. In pursuance of the above direction of the Court, the Gujarat Government, vide GR dated 26th November, 1997, issued by the Ministry of Industries & Mines, Government of Gujarat, took a decision to form a Company to manage the Common Effluent Channel Project. Each of the above named promoters of the Common Effluent Channel Project have proposed to enter into an agreement to contribute Rs. 50 lakhs to the equity share capital of the proposed Company and manage the Common Effluent Channel Project as an independent entity, in accordance with the directions of the Gujarat Government and Gujarat High Court. The Directors recommend the resolution for shareholders' approval as it is in the interest of the Corporation.

None of the Directors of the Company is, in any way, concerned or interested in the Resolution.

Item No. 9

Buyback of own shares or other Securities convertible into equity shares by the Companies is presently not allowed under the Companies Act, 1956. The Companies Bill, 1997, sought to lay down the operative provisions to regulate the buyback of shares / securities by Companies. The said Bill has not yet become the law. It is expected that, in due course of time, the law will be amended to allow such buy back.

It is proposed to buy back ten (10) per cent of shares or other securities giving right to subscribe for shares of the Company from the existing security holders on a proportionate basis and / or from the open market and / or from the lots smaller than market lots of the securities (odd lots) and / or by purchasing the securities issued to the employees of the Company, subject to necessary enactment in this regard.

The buy back of shares as aforesaid would entail investing of an amount which would not be less than the market value of the shares or other securities giving right to subscribe for shares of the Company and shall be met out of the free reserves and / or the securities premium account and / or out of the proceeds of an issue specifically made for the purpose or from such other sources as may be permitted by law. The shares so bought back shall be dealt with as per the then prevailing law / regulation.

The Board is of the opinion that it will be in the best interest of the Company if shareholders approve the said Resolution, permitting such buy back, so that the Company will be able to implement this Resolution once the law is amended. The Resolution, if approved, will be operative and given effect to from the applicable date as may be prescribed in this regard.

The approval of the shareholders for such buy back of shares was obtained at the 28th Annual General Meeting of the Company held on 26th September, 1997. The above approval is valid till 25th December, 1998. The Resolution as set out in this Notice is being proposed again as the law in this regard has so far not been amended and the Special Resolution passed on 26th September, 1997 would cease to be valid after 25th December, 1998. Based on the provisions of the Companies Bill, 1997, Resolution to be passed at the ensuing Annual General Meeting shall remain valid upto 28th December, 1999. The Resolution is an enabling provision aimed at facilitating the Company to buy back its shares as soon as legally permissible. The Directors recommend the Resolution for approval of the shareholders.

None of the Directors of the Company is, in any way, concerned or interested in the Resolution.

By Order of the Board of Directors,
for **Indian Petrochemicals Corporation Limited,**

(A. Parthasarthy Naidu)
Company Secretary

Dated : 12 August, 1998
Registered Office:
P.O. Petrochemicals
District Vadodara
PIN 391 346

DIRECTORS' REPORT

To
THE MEMBERS

The Directors have pleasure in presenting the Twenty-Ninth Annual Report of the Company together with the audited statement of accounts for the year ended 31st March, 1998.

FINANCIAL HIGHLIGHTS

During the year under review, the Company achieved an aggregate net income of Rs. 3095 crores representing an increase of 8 per cent over the previous year. The gross income of the Company increased from Rs. 3,430 crores to Rs. 3,692 crores as compared to 1996-97. The highlights of the financial results for the corporate financial year ended 31st March, 1998 are as under :-

	(Rupees in Crores)	
	1997-98	1996-97
Net Sales	**2,983**	2,785
Other Income	**112**	78
Total Expenditure	**2,326**	1,918
Interest	**260**	204
Gross Profit	**510**	741
Depreciation	**237**	148
Profit before tax	**272**	593
Provision for taxation	**29**	83
Net profit after taxation	**244**	510
Profit available for appropriation	**1,830**	1,823
Appropriations		
Debenture redemption reserve	**78**	78
Dividend	**99**	99
Corporate tax on dividend	**10**	10
General reserve and surplus	**25**	60
Paid-up Equity share capital	**249**	249
Earnings per share (Rupees)	**9.82**	20.56
Book Value per share (Rupees)	**121.61**	118.58
Dividend	**40%**	40%

The Company's performance should be gauged against the backdrop of overall sluggishness in the market and industrial recession. There was greater competition from imports due to lower international prices, compounded by over supply in the domestic market which resulted in greater stress on margins. The Company by recording a turnover of Rs. 3,692 crores, has met all the physical and financial targets in the areas of production, sales and project completion. Despite higher production and sales, the bottom-line suffered on account of poor product prices which further worsened due to currency turmoil in the Far-East. The profits of the Company were also adversely affected by abnormal escalation in input prices primarily of petroleum products, power, transportation and higher interest cost, while the market situation did not allow for matching increase in output prices to neutralise the adverse impact. The South East Asian economic crisis that began in July, 1997 started showing its full impact in November, 1997 and the worst sufferer of the crisis was polypropylene where the drop in price was substantial. Prices of PVC also dropped dramatically on account of over supply in the domestic market.

OPERATIONS

The Company, during the year, achieved an all time high production from its mega petrochemical complexes situated at Vadodara, Nagothane and Gandhar. The operational performance of these units during the year under review was as under:-

Vadodara Complex

The production of major saleable products at Vadodara Complex for 1997-98 stood at 4.18 lakh metric tonnes compared to 3.5 lakh metric tonnes last year and registered 18 per cent growth which was noteworthy despite ageing plants. The polypropylene copolymer (PPCP), linear alkyl benzene (LAB) and benzene plants of Vadodara Complex operated much above the nameplate capacity whereas low density polyethylene (LDPE), polybutadiene rubber (PBR-I), acrylic fibre (AF) and acrylates plants operated at close to nameplate capacity. The products like acrylonitrile (ACN) , ethylene, butadiene, monoethylene glycol (MEG), ethylene oxide (EO) recorded the highest ever production and exceeded the targets set for the year. The overall capacity utilization of the Complex including the recently commissioned polypropylene (PP) and polybutadiene rubber (PBR-II) plants was around 87 per cent. The newly commissioned PP plant achieved over 120 per cent of the MOU target signed with the Government of India.

Nagothane Complex

The Company's gas cracker complex at Nagothane in Maharashtra achieved an all time high and record production by producing over 3.71 lakh metric tonnes of saleable products during 1997-98 compared to 3.44 lakh metric tonnes production achieved in the previous year and registered a growth of 8 per cent. The gas cracker plant produced over 3.31 lakh metric tonnes of ethylene and exceeded the nameplate capacity of 3.00 lakh metric tonnes. All downstream plants operated well above nameplate capacity, with overall capacity utilization touching 101 per cent.

Gandhar Complex

In the first year of operation, the production at Gandhar Complex touched a figure of 1.76 lakh metric tonnes. The polyvinyl chloride (PVC) and caustic chlorine plants which were commissioned towards the end of the previous financial year have now stabilized. The polyvinyl chloride and caustic soda plants operated at 95 per cent and 82 per cent of their capacities during the second half of fiscal 1997-98 and successfully overcame the low capacity utilization registered in the first half of fiscal 1997-98.

The combined production of all the three Complexes taken together stood at 9.65 lakh metric tonnes as against 7.09 lakh metric tonnes achieved in the corresponding previous year and registered a growth of 36 per cent. The contribution of polymers, fibre & fibre intermediates and chemicals in the said production from all the three Complexes, during the year under review, was 69, 11 and 20 per cent respectively.

All the three production Complexes during the year, gainfully utilized the infrastructure created at Dahej and Pirpau near Mumbai. At both places, significant quantities of ethylene, propylene and naphtha were imported and this helped in running the plants at high capacities and saving on account of competitive feed-stock costs from imports. The savings on account of import of naphtha was substantial, over and above improvement in production on account of superior quality of imported naphtha.

MARKETING

The financial year 1997-98 proved to be another eventful year in the annals of Company's marketing strategies pursuant to achievement of new landmark in sales. During the year under review, the sales volume kept pace with the sterling production performance despite downtrend in the petrochemicals business world over and turmoil in Southeast Asian countries. A record 10 lakh metric tonnes of products from the Company's three mega Complexes reached customers spread across the country as against 8.15 lakh metric tonnes sold in the corresponding previous year and registered a growth of 23 per cent. The gross sales during the year under review were Rs. 3,692 crores as against Rs. 3,430 crores achieved in the previous year. The contribution of polymer, chemical and fibre and fibre intermediate products in the entire volume of sales was 62, 27 and 10 per cent respectively and the balance was accounted for by traded goods and residuary products.

The polymer prices were depressed through out the year, particularly, during the last four-five months of the year. The substantial price difference amongst various polymer producers as well as price volatility, resulted in inter polymer shifts in consumption. PVC market witnessed tremendous over supply and severe price erosion. Consequently, marketing activities were focused to preserve the Company's share of LDPE and increase its share in the growing LLDPE markets. One such activity was the development of special formulation for an experimental LLDPE grade, ready to use LDPE/LLDPE blends and introduction of nine other new grades. The Product Application Development Centre in association with Research and Development Centre, developed grades for thermoforming of polypropylene. To combat the severe price competition in the wire and cable compound business, a new cost effective wire and cable sheathing compound formulation was successfully developed for field evaluation. A few grades of LDPE, PPCP and HDPE were also approved for international use in automobile sector.

The Chemical Business Group registered significant increase in sales volumes. The Group, during the year, successfully launched two new products viz caustic soda and poly-iso-butylene. The marketing of caustic soda and its byproducts posed an entirely new challenge to the marketing team as the volumes were large, market competitive and customers totally new. Despite all hurdles, the Group successfully sold out volumes and through its sales policies, even influenced the marketing of caustic soda in the country.

The Fibre & Fibre Intermediate Group also performed consistently well despite stiff competition. In the sphere of value addition, the Group worked towards conversion of DMT/MEG to PSF and further conversion to PV yarn.

The Company, pursuant to its emergence as global player and consistent quality supplier of plastic raw materials like LDPE, LLDPE, HDPE, PP, PVC and liquid chemicals such as LAB, paraxylene (PX) etc. has been granted the status of Trading House by the Government of India based on its export performance. PLEXCONCIL, the premier trade body operating under the Ministry of Commerce, in recognition of the efforts made by the Company in the area of exports, awarded a Certificate for best performance in the category of plastic raw materials. The Company, despite global competition during the year, achieved an export turnover of Rs. 149 crores as against Rs. 107 crores in the corresponding previous year and registered 39 per cent growth in export earning. The export basket was widened with the introduction of a variety of petrochemical products, covering polymers, chemicals, fibre and fibre intermediates, reaching countries in Asia, Africa, Europe, Australia and the Middle-East. The International Business Group achieved significant reduction in surface transport freight rates as well as the incidence of demurrage pursuant to all around improvement in logistic efforts and documentation with special thrust on taking advantage of various licensing benefits under the Government schemes such as DEEC and DEPB. The average price realization through exports due to currency fluctuation improved by 5 per cent which was quite significant in the overall depressed market.

In view of the increased competition witnessed from domestic as well as international producers, the Strategic Marketing Group extended exemplary support to all Marketing Groups by providing timely information and well-researched reports/presentations in formulating strategic decisions. To take care of the additional volumes, steps were initiated to beef up the existing regional marketing set up and restructure the Regional Offices. The regional marketing set up was restructured to improve customers' services / coverage and to optimize sales in terms of better penetration of markets and effective distribution management.

INVENTORY MANAGEMENT

Effective and efficient management of inventory and receivables ensured that year-end stocks of finished goods were just around 29 sales days and restricted receivables to 46 sales days, which in terms of value was Rs. 697 crores.

MEMORANDUM OF UNDERSTANDING

The Company's performance in the evaluation of Memorandum of Understanding signed with the Government for the year 1997-98 was commendable in terms of physical performance achieved in production, sales and project implementation.

DIVIDEND

The Directors, in consideration of commendable production/sales performance, recommended 40 per cent dividend for the financial year ended 31st March, 1998, despite depressed profits. The dividend proposed to be paid out of profits of the Company for the year to all those equity shareholders whose names appear on the Register of Members on 29th September, 1998 would be fully exempt from income-tax. The dividend payout for 1997-98 will be Rs. 99.62 crores as against Rs. 99.27 crores in the previous year and necessary provision for the same has been made in the Accounts. During the year the amount remaining unpaid/unclaimed from the dividend for the financial year ending 31st March, 1994 has been transferred to the General Revenues Account of the Central Government in compliance of provisions contained in Rule 4 (a) of the Companies Unpaid Dividend (Transfer to General Revenue Account of the Central Government) Rules, 1978.

FINANCE

During the year, steps were initiated for raising funds for implementation of second phase of Gandhar projects by tapping the External Commercial Borrowing (ECB) route. However, pursuant to deregulation of the interest rates by the Reserve Bank of India, avenues for raising funds from domestic market being attractive, reduction in Bank rates, improved liquidity conditions in the capital market, options were kept open to raise funds in the domestic market to ensure that the project fund requirements are adequately met. Efforts were also continuously on, to optimize the cost associated with exchange rate fluctuations and interest rates.

Secured Bond Issue

During the year, the Company made a successful placement of secured Redeemable Non-convertible bonds aggregating Rs. 300 crores. The Rupee-300 crore bond issue was overwhelmingly subscribed and was the country's first ever issue on the line of price discovery through book building route normally practised in the international market. The issue was priced at 14.2 per cent and received commitment to the tune of Rs. 620 crores. Encouraged by the response and 'AAA' (Triple 'A') rating by the rating agency, the Company decided to exercise the green-shoe option of Rs. 150 crores on this issue. The Company could muster commitment from more than 200 institutional investors at different rates ranging from14 per cent to 14.25 per cent. The price of 14.2 per cent is the lowest ever achieved by any issuer and it reflects the investors' confidence in the strong fundamentals of the Company and its future. These secured non-convertible redeemable bonds have a maturity period of 7 years with put options after 5 years. The Company's success of this particular issue through the book building process speaks of the increasing maturity of the Indian debt market. The investors in the issue include Nationalized Banks, Regional Rural Banks, Provident Funds, Foreign Debt Fund and Financial Institutions.

Commercial Paper Programme

The commercial paper programme worth Rs. 300 crores backed by P1+ rating floated during the year to meet the working capital requirements of the Company, was well received by the participating Banks/Institutions.

Public Deposits

Despite tight money market conditions, the public deposit scheme of the Company, during the year, could attract an all time high deposit of Rs. 441 crores as against the deposit of Rs. 197 crores in the correspon-ding previous year. There were no overdue deposits during the year under review. The Company continued accepting fresh deposits from the public by filing a statement in lieu of advertisement with the Registrar of Companies, Gujarat State, Ahmedabad. The total amount of public deposits held as on 31st March, 1998 was Rs. 441 crores representing 8,463 number of deposit holders. Out of these, 187 number of deposits remained unclaimed. The interest rates on fixed deposits were also restructured pursuant to Reserve Bank of India's directives to slash the interest rates and Nationalized Banks reducing their prime lending rates.

Refinancing of EURO Loan

During the year, the EURO loan facility of US Dollars 75 Million, earlier syndicated by Citibank at the rate of LIBOR plus 0.98 per cent per annum as secured loan was refinanced at LIBOR plus 0.61 per cent as unsecured loan, resulting in considerable reduction in the cost of funding and savings to the Corporation.

Foreign Exchange Earnings & Outgo

	(Rupees in crores)
Foreign exchange earnings	200
Foreign exchange outgo	615

DEMATERIALISATION OF SHARES

The Company's equity shares fall in the select list of securities whereby Securities & Exchange Board of India has come out with a policy decision that requires all Institutional Traders to be shifted to the Depository segment. Pursuant to the Company entering into an agreement with *National Securities* Depository Limited, the Company's equity shares can be dematerialized through 47 Depository Participants providing service to the investors from over 200 locations across the country. Dematerialized shares are now good delivery both in physical and dematerialized segment. This puts an end to all concerns about liquidity of dematerialized shares and shareholders will be free from the botheration of handling stocks physically and the risk of bad deliveries from the market will also get eliminated. Further, buying and holding dematerialized shares or selling dematerialized shares is easier than buying and holding or selling physical shares. All shareholders of the Corporation are, therefore, advised to dematerialize their holding in physical form by availing the services of Depository Participants.

HUMAN RESOURCE MANAGEMENT REVIEW

The Corporation continued its efforts to enhance and maximise the contribution of the human resources towards organisational excellence. Officers and staff are nominated to various internal/external training programmes. Endeavour is made to optimize the organisational goals with the individual needs for development and to channelise the potential of the employees for organisational growth. The manpower strength of the Company in all its production complexes/units based at Vadodara, Nagothane, Gandhar and Thane as on 31st March, 1998 was 13,319 inclusive of supervisory/ non-supervisory employees and company trainees. Training for building the competencies of the employees to meet the challenges of changing business environment continued with the development and implementation of focussed training modules in line with the organizational objectives. During the year, 7805 employees were trained under the Company's wide training schemes.

As in the past, harmonious and congenial industrial relations have been maintained through a process of mutual dialogue with Trade Unions and Officers' Association. As a part of good community relations and to encourage developmental efforts in the fields of health, education and management, the Company took up several projects in the vicinity of its production complexes to improve the quality of life of people living in the villages surrounding the mega complexes. The Corporation, during the year, lived upto its reputation as one of the best international sports organizers in the country. The Presidential Directives on Scheduled Caste (SC)/ Scheduled Tribe (ST) and Other Backward Classes (OBC) continued to be implemented during the year. The Company continued to vigorously pursue its efforts in implementing the Official Language Policy of the Government. The Parliamentary Committee for implementation of Official Language visited Bangalore Regional Office during December, 1997 and expressed satisfaction about the progress made in implementation of Hindi in the Region.

RESEARCH & DEVELOPMENT

The Research & Development Centre of the Corporation continued to support the Company's business. Linkages with national and international scientific and academic institutions were further strengthened. The science base of Research & Development Centre continues to be consolidated through collaborative interactions with international laboratories. During the year, Company's Research & Development Centre made considerable progress in developing catalyst and process for Alpha Olefin (AO) technology. This has led to the international majors approaching the Corporation, offering help to develop technology together. The Company ultimately plans to set up a 50,000 tonnes per annum AO Plant at Nagothane after increasing ethylene capacity.

The Company was granted a US patent for developing a catalyst for dehydrogenation of normal paraffin. The dehydrogenation catalyst developed by a team of the Company's scientists and engineers is a critical item in the dehydrogenation process to manufacture linear alkyl benzene. The catalyst has been developed by the Company's Research Centre at Vadodara and is manufactured at the Company's Catalysts and Adsorbents (CATAD) Division based at Thane. In order to successfully Commercialize Dehydrogenation Catalyst, a project of 20 metric tonnes per annum capacity is being set up at CATAD Unit at an estimated cost of Rs. 6 crores and is likely to be commissioned shortly.

ENGINEERING SERVICES

The Company's Engineering Services Department contributed significantly during the year by initiating steps for preventive maintenance to avert downtime and proper upkeep of the equipment and machineries. The Department successfully developed new techniques and guidelines for preservation of critical engineering components/equipments in Store and carried out several electrical, mechanical, civil and allied engineering jobs of difficult and challenging nature on a warfooting, resulting in considerable savings in expenditure involved in carrying out critical jobs.

TECHNOLOGY

In pursuit of excellence in the area of technology selection, absorption and development, the Technology Wing of the Corporation contributed significantly by improving upon the technologies obtained, developing indigenous and reliable sources of supply, resulting in considerable savings in foreign exchange, cost optimization and improvisation of value added grades. The Department succeeded in application of new generation catalyst and chemicals to reduce the specific raw material consumption and contributed substantially in bringing down the operating cost.

COMPUTERISATION

With the three mega Complexes situated at different locations, 12 marketing outlets all over India and Corporate Office centrally located at Vadodara, the advent of computers play a vital role in providing a logical integration of the functions for centralized monitoring and control. V-SAT installations connect all the Complexes, Regional Offices and Corporate Office. This network facilitates the marketing personnel at Regional Offices to get instantaneous and simultaneous information on the dispatches made, status of pending orders, availability of stock at Complexes etc. and would enable them to give better customer service. The connectivity also facilitates ease of communication across all the offices through E-mail facility. A gateway for Internet E-mail facility is also made through Corporate Office, where all the Internet mail is passed on to the customers, vendors, business associates, all over the world. All the three Complexes are equipped with full-fledged computer centres with adequate number of main servers for on-line applications and a number of LAN for office automation. Similarly all the Regional Offices have LAN systems for their day-to-day routine jobs on marketing and finance. With the help of Training Centre, regular training programmes are being organised for promoting computer education at all levels. Shortly, it is envisaged to move towards client-server technology for all major applications.

ENVIRONMENT, SAFETY & ENERGY CONSERVATION

In pursuit of continuing commitment, highest priority was accorded to safety and environment control programmes at all levels. Safety and environment management are integrated into the business process through carefully devised strategies and systems. In addition to adhering to local and national Government regulations, to protect the environment, the Company has established its own guiding principles and a complimentary set of specific guidelines, tailor made for its business. Self regulation in the management of safety, health and environment is accorded the highest priority. Through careful process audits, reduction in the usage of fresh water and emissions in the manufacturing operations have been achieved. Effluent treatment plants and emission control devices are maintained in regular operating conditions and all statutory regulations are complied with.

The specific energy index during the year under review, in all the three production Complexes of the Corporation, in its totality, stood at 4.90 MMKCal per metric tonne as against 5.40 MMKCal per metric tonne of production registered in the previous year. The reducing trend in the energy index is due to the Company's commitment to energy conservation and adoption of energy efficient technologies and processes in its plants at all locations. The Nagothane Complex of the Corporation was awarded the first prize by the Union Ministry of Power for its achievement in Energy Conservation. The Complex has its own 85 MW captive power generation facility to cater to the energy requirements of various plants. Higher capacity utilization of various production plants, minimization of wastes, maintenance of quality standards of products and overall widespread energy consciousness were the main criteria enabling the Company to receive the coveted award.

During the year, the Company also received a Certificate of Honour by the Gujarat State Safety Council and Gujarat State Factory Inspectorate for conducting safe operation of the plants. The honour was conferred on the Company for conducting more than 3 million man-hours of accident-free operation at Vadodara Complex. Besides the certificate, the Company was also conferred the Rotating Trophy and Citation for its low disabling-injury index. This recognition is over and above the prestigious Certificate of Honour, Merit Certificates, Shields, etc. received by the Company from organizations like National Safety Council, USA and the British Safety Council, UK.

PROJECTS

IPCL's strategy is to concentrate on its polymer business and cement its dominance in the industry by achieving economies of scale, continued backward integration, increase the distribution network throughout India, develop and market new applications of products and simultaneously develop new products and emphasis on volume driven growth. There has been tremendous growth in the Petrochemicals Industry both internationally and in India. The demand-supply gap for polyethylene and polyvinyl chloride over post 2000 period continue to be favourable for setting up additional facilities. The Company being a major player and market leader in polymer products, it is imperative that further investments are made in this sector to continue to retain the market leadership and capture the opportunity of demand growth taking place in this sector. Keeping this in view, the projects conceived by the Corporation in all the three complexes during the 9th plan period are as under :-

Vadodara

Setting up of a 3 lakh metric tonnes per annum capacity Naphtha Cracker plant; a downstream unit for Polyethylene to meet the demand-supply gap; High Rubber Graft facility of 20,000 metric tonnes per annum; and plant for manufacture of Butene and Isobutylene.

Nagothane

Increasing the capacity of ethylene to 5.50 lakh metric tonnes per annum by sourcing additional feed-stock from Oil & Natural Gas Corporation Limited's Usar gas separation complex; 10,000 metric tonnes per annum alpha olefin and derivatives plant; and increasing the capacity of linear low density polyethylene (LLDPE) plant from 80,000 to 1,40,000 metric tonnes per annum.

Gandhar

Increasing the ethylene plant capacity from existing 3 lakh to 4 lakh metric tonnes per annum; setting up of 1.5 metric tonnes per annum capacity PVC plant; 1 lakh metric tonnes per annum capacity ABS plant to effectively use the additional ethylene; and acrylonitrile (ACN) plant with a capacity of 1 lakh metric tonnes per annum and single buoy mooring to facilitate import and export trade.

The various expansions in each of these complexes would need additional utilities, which is proposed to be met by increasing capacity in the respective off-site projects. Once the above mentioned projects are completed, the company will not only be the market leader and the largest ethylene manufacturer in the country but would also make it capable of competing internationally with major business houses. The total capital expenditure of various expansions and the spill over expenditure of Eighth Five-Year Plan would work out to Rs. 7,651 crores of which estimated expenditure during the Ninth Five-Year Plan period would be Rs. 6,000 crores. The Company believes that these expansion projects will enhance the efficiency of operation through improved economies of scale, increased integration and process. In addition, the expansion and enhancement projects will allow the Company to take advantage of the availability of more cost effective feed-stock including ethane/propane for its cracker at the Nagothane/Gandhar Complexes and imported naphtha for Vadodara Complex.

JOINT VENTURES

GE Plastics India Limited

During the year under review, GE Plastics India Limited, a joint venture company set up by the Corporation, achieved a turnover of Rs. 200 crores as against Rs. 143 crores achieved in the corresponding previous year. The Company's revenue during the year stood at Rs. 200 crores and registered 40 per cent growth as compared to previous year. Despite growth in revenue, the Company suffered a net loss of Rs. 14.66 crores due to inflation in raw material cost and erosion in prices because of aggressive pricing by South-East Asian players. The Company despite these difficulties has set a realistic target for 1998-99 and is hopeful of registering profit by better performance. The Company had formed a manufacturing and sourcing alliance for plastics with Polychem Limited and Rajasthan Polymers & Resins Limited. These two companies will manufacture its cycolac brand of acrylonitrile butadiene styrene. The alliance demonstrates the Company's commitment to develop and drive the growth of engineering plastics in India through improving its capability and building sustained partnerships with the local industry. Through the strategic alliance, the company is strongly positioned to meet the needs of the growing market of ABS in India - where the major applications of cyolac (ABS) include appliances, housing, car interiors, two wheelers, telephones, computers etc. The alliance sets the stage for a long term cooperation being planned to set up additional grass root manufacturing facilities for ABS, Styrene Acrylonitrile (SAN) and High Rubber Graft.

Gujarat Chemical Port Terminal Company Limited

The liquid chemical port envisaged by another Joint Venture - Gujarat Chemical Port Terminal Company Limited is fast coming up at Dahej in the Gulf of Khambhat in Gujarat. The construction work on the 2.4 km long jetty has already commenced and on-shore storage work is also in progress. The port is expected to become operational by last quarter of 1999 and would give flexibility of operation to the Corporation in augmenting feed-stock requirements and would also facilitate easy handling of export consignments. The Company's contribution towards equity in the Joint Venture Company would be freezed at around Rs. 46 crores or 30 per cent of the total equity and continues to be the largest equity holder in the joint venture.

Indian Petrovin Limited

The joint venture partners - IPCL and Vinmar Petrochemicals Limited have been engaged in the selection of technology for the manufacture of Methyl Methacrylate (MMA)/ Polymethyl Methacrylate (PMMA). During the course of discussions with various prospective process licensors, one of the leading companies having technical know-how for MMA/PMMA - Rohm Gmbh Chemische Fabrik of the Federal Republic of Germany (ROHM) belonging to the HULS Group - expressed their interest in the supply of technology to the joint venture company as part of their strategy to commence direct investment in India. Rohm's technology for both MMA and PMMA including related end product development being amongst the best, they have been inducted as third partner in the joint venture. Pursuant to this arrangement, the Company has entered into a fresh Memorandum of Understanding with ROHM and VINMAR for equity participation. The project is expected to take-off immediately after seeking all necessary Government approvals/ sanctions.

Other Joint Ventures

In pursuance of the approval accorded by the shareholders, the Company is in the process of taking necessary steps for seeking approval of the appropriate authorities for setting up an acrylic fibre plant of 50,000 MTA capacity in association with Malwa Cotton Spinning Mills Limited and strategic alliance for conversion of acrylic fibre into yarn with GSL India Limited.

BOARD OF DIRECTORS

Shri K. G. Ramanathan, Chairman-cum-Managing Director of your Corporation, was due for superannuation on 31st May, 1998. The Government of India, in consideration of several ongoing projects of the Corporation and in appreciation of the excellent contribution made by him during his current tenure, have extended his term for another one year. Pursuant to this, Shri K. G. Ramanathan has got extension of 2 years beyond the date of his retirement on superannuation.

Shri S. K. Sood, Central Government's nominee on Company's Board, ceases to be Director of your Company consequent upon his transfer. Shri P. C. Rawal, Joint Secretary, Department of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilizers, was appointed as part time Official Director, on the Company's Board, pursuant to vacancy caused by transter of Shri S. K. Sood. Shri Rawal has also ceased to be part time Official Director of the Company pursuant to his transfer. The Board of Directors places on record their its appreciation for the valuable services rendered by Shri Sood & Shri Rawal during their tenure as Government of India's nominee Directors on the Company's Board.

Shri Ashok Chawla, appointed as Central Government Nominee on Company's Board pursuant to transfer of Shri Rawal, holds office until the conclusion of the Annual General Meeting and is eligible for reappointment.

In accordance with Article 76 (2) of the Company's Articles of Association, Shri S. K. Anand, whole-time Director, incharge of operations, retires by rotation and being eligible, offers himself for reappointment.

STATUTORY DECLARATION

The information relating to technology absorption, foreign exchange earnings and outgo required to be disclosed under Rule 2 of the Companies (Disclosures of Particulars in the Report of Board of Directors) Rules, 1988 is given in the Annexure to this Report. Information as per Section 217 (2A) of the Companies Act, 1956 read with Companies (Particulars of Employees) Rules, 1975, as amended forms part of this Report. However, as per the provisions of Section 219 (1) (b) (iv) of the Companies Act, 1956, the Report and Accounts are being sent to all shareholders of the Company excluding the aforesaid information. Any shareholder interested in obtaining such particulars may write to the Investors' Service Cell of the Corporation and/or the Registrars & Share Transfer Agents - MCS Limited, Vadodara.

In Compliance of SEBI directives and listing agreement, the names and addresses of the Stock Exchanges at which the Company's Securities are listed, is annexed. The Company has paid the annual listing fees to each of the Stock Exchanges referred in the said list.

AUDITORS

Statutory Auditors

The Government of India, based on recommendations of the Comptroller & Auditor General of India, appointed Messrs B. K. Khare & Company, Chartered Accountants, Mumbai, as Statutory Auditors of the Corporation for auditing the accounts relating to the financial year: 1997-98. The Statutory Auditors' Report together with the comments of the Comptroller & Auditor General of India on the Accounts and the Review of Accounts are annexed.

As regards Statutory Auditors' observations made in paras 2 (f) and 2 (h) of their Report in respect of sales-tax incentives and interest on 'H' Series bonds, the accounting treatment given has been disclosed in Note Nos. 3 and 12 of Schedule 20 (Notes on Accounts), which is self-explanatory. The management has been advised that, as per Accounting Standard 12, earnings on account of sales-tax incentives estimated on product basis can be credited to income for the year even though actual amount of such benefits is settled and received after the expiry of the relevant accounting period.

Branch Auditors

The Government of India has appointed (i) Messrs Chhotalal H. Shah & Company, Chartered Accountants, Mumbai as Branch Auditors for Regional Offices at Mumbai, Vadodara & Ahmedabad and Sales Centres at Daman, Indore & Bhavnagar (ii) Messrs H. R. Chaudhry & Co., Chartered Accountants, New Delhi as Branch Auditors for Regional Offices at Delhi & Ludhiana and Kanpur Sales Centre (iii) Messrs Girish Murthy & Kumar, Chartered Accountants, Bangalore as Branch Auditors for Regional Offices at Bangalore & Chennai and Hyderabad Sales Centre; and (iv) Messrs Ghosh & Pande, Chartered Accountants, Calcutta as Branch Auditors for Calcutta Regional Office, for the financial year 1997-98.

Cost Auditors

Pursuant to the directives of the Central Government under the provisions contained in Section 233 (B) of the Companies Act, 1956, Cost Auditors have been appointed for Vadodara, Nagothane and Gandhar Complexes to conduct Cost Audit relating to selected products for the year ended 31st March, 1998.

VISION

The petrochemicals industry is strongly influenced by economic growth. The per capita consumption of petrochemicals is very low in India when compared to the western countries, thereby offering significant potential for growth. The domestic market offers significant potential for supply driven growth. Considering future growth prospects, the demand for ethylene, the building block for downstream petrochemicals will continue to outstrip the supply as the market is expected to undergo a change with increased utilization of petrochemicals, and development of new products for newer applications. The margins of domestic producers will come under pressure from international competition as tariffs fall further and companies like IPCL with good market standing will have to increasingly look at volume led growth since margins will be under pressure with increasing competition. The Company believes that the expansion projects will enhance the efficiency of operations through improved economies of scale, increased integration of plants and machinery and utilization of state-of-the-art technology and process. In addition, the expansion and enhancement projects will allow the Company to take advantage of the availability of more cost-effective feed- stocks including ethane/propane for its existing crackers at Nagothane and Gandhar Complexes. The Company's mission is to be on the forefront, constantly search for new opportunities to meet the Country's petrochemical requirements / maximize return on investment and be a major producer in the economic and strategic sectors.

ACKNOWLEDGEMENT

The Board of Directors wish to place on record its special appreciation for the excellent contribution made by the Members of IPCL family in achieving commendable and noteworthy performance. The Board acknowledges the valuable guidance and support received from the Government of India, Government of Gujarat and Government of Maharashtra and expresses its thanks to Comptroller and Auditor General of India, Statutory Auditors, Branch Auditors, Cost Auditors, Company's Bankers, Financial Institutions and Foreign Banks, Industrial and Commercial Undertakings, Registrars & Transfer Agents, Distributors, Consignment Stockists and large number of customers all over the country including overseas customers, for their valued cooperation and support.

For and on behalf of the Board,
For **Indian Petrochemicals Corporation Limited**

Place : Vadodara
Dated : 26 May 1998

K. G. Ramanathan
Chairman-cum-Managing Director

ANNEXURE TO THE DIRECTORS' REPORT

FORM A

DISCLOSURE OF PARTICULARS WITH RESPECT TO CONSERVATION OF ENERGY

	1997-98	1996-97
Electricity purchased (MWH)	**188598**	9260
Total Amount (Rs. in lakhs)	**9839**	1182
Effective overall rate (Rs. per MWH)	**5217**	12765
Electricity generated (MWH)		
By Steam turbine (MWH)	**212628**	194180
By Gas turbine (MWH)	**919496**	735465
Gas Consumed (1000 SCM)	**389410**	384831
Average rate of Gas (Rs.1000/SCM)	**3600**	3099
LSHS Consumed (MT)	**97423**	101823
Average rate of LSHS (Rs./MT)	**6944**	6910
LDO Consumed (MT)	**212**	137
Average rate of LDO (Rs./MT)	**9400**	8724
HSD consumed (MT)	**77258**	2442
Average rate of HSD (Rs./MT)	**11748**	8066
Electricity consumed per MT of product (MWH/MT)	**0.658**	0.614
Electricity exported by steam turbine and gas turbine (MWH)	**49794**	50527
Non-Conventional resources wheeling by Wind Turbine Generation for internal consumption (MWH)	**13918**	7328

FORM B

1 DISCLOSURE OF PARTICULARS WITH RESPECT TO TECHNOLOGY ABSORPTION, RESEARCH AND DEVELOPMENT

In addition to plant/market related activities and exploratory research in emerging areas, technology development efforts have been pursued in areas of relevance to the Corporation. Significant progress has been achieved in the development process for multi-metallic reforming catalyst and an improved version of dehydrogenation catalyst. Adsorptive separation of methane-nitrogen and light hydrocarbon mixtures are being developed. Spinning trials and subsequent carbonization studies were carried out with the special acrylic fibre developed in the laboratory. Semi continuous runs for the scale-up of alpha olefins process were conducted with a view to developing the technology. A hot alkali digestion method was developed for the treatment of acrylonitrile waste water and implemented in the plant.

Exploratory research has been taken up in some important petrochemical areas such as ammoxidation of propane, shape selective alkylation reactions, synthesis of mesoporous materials, functionalization of alkanes, metallocene based catalysts for polyolefins, speciality products based on acrylates, and modeling of petrochemical processes.

Technology absorption, adaptation and innovation

Continuous efforts are being made by the Company to keep pace in improving the technologies obtained, emphasis being on technology