

6TH ANNUAL REPORT 1996-97



INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY

Registered Under Societies Act XXI (Registration No. S-21944/1991)

Sector 20, Udyog Vihar, Gurgaon - 122 016 (Haryana)

INTRODUCTION

The Institute of Pesticide Formulation Technology (IPFT) has completed its 6th year of operation. The contribution of the Institute with regard to the development and promotion of safer, efficient and environment friendly pesticide formulations has been widely acknowledged within the country as well as in the Asia-Pacific region. The rapport being developed by the Institute with the pesticide industries of the country clearly promises the success of establishing such Institute by the Government of India with the initial assistance provided by UNDP/UNIDO.

During the past six years of the Institute as a society, a non-profit making organisation, appreciable progress has been made and the services have been well received by the industry. The confidence shown in the activities of the Institute by the industry has resulted in increasing utilisation of the facilities of the Institute in the development and manufacture of user and environment friendly pesticide formulations. The progress of the Institute can be gauged by the increasing number of projects being sponsored by the industry in the fields of formulation development, manufacture, quality control, safety, packaging and study of bioefficacy of pesticides.

The Institute is recognised by the Department of Scientific and Industrial Research, Ministry of Science and Technology and Central Insecticides Board/Registration Committee, Ministry of Agriculture. Regional Network on Safe Pesticides Production and Information for Asia and the Pacific (RENPAF), a programme of UNIDO/UNDP has assigned it the role of technical coordinator unit on pesticide formulation technology and quality control.

ACTIVITIES DURING THE YEAR UNDER REPORT

Pesticide Formulation

Development and transfer of technology for user and environment friendly pesticide formulations to the Indian pesticide industry is one of the main aims of the Institute. The important new generation formulations in focus are suspension concentrates, concentrated emulsions, water dispersible granules and micro-encapsulated suspensions. The major advantages of these formulations vis-a-vis the conventional formulation like dusts, wettable powders and emulsifiable concentrates are :-

- improved efficiency and reduction in the usage of active ingredient
- more safety to the user and environment
- minimum use of toxic, flammable and non bio-degradable solvents

Inhouse expertise and infrastructure have been acquired for the development of most of the newer and conventional types of pesticide formulations. The facilities of pesticide formulation development laboratory include small media wet grinding mill, spray granulator, extruder, laser based particle size analyser, surface and interfacial tensio meters and instruments for rheological measurements.

Details of the studies undertaken by the formulation laboratory during the year 1996-97 are as follows:

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

Sponsored Projects

During the year 1996-97 the two projects sponsored by M/s. Sulphur Mills were completed successfully:

1. Isoproturon 75 WG
2. Cypermethrin 40 WG

Exploratory studies were carried out satisfactorily for two projects, viz. Chlorpyrifos 20 CS for M/s Montari Industries and Mancozeb 75 WG for M/s. Indofil Chemicals. Respective project proposals were sent to the sponsors and their final consent for execution of these projects are awaited.

Developmental Studies

Preliminary studies on the development of Carbendazim 80 WG and Methyl Parathion 25 CS are in progress and the results are promising.

Processing - Job Works : In addition to the developmental studies, laboratory processing facilities for wet milling were extended to M/s. Rallis India, Sulphur Mills, Rhone Poulenc and United Phosphorus Limited.

Particle Size Testing : During the year under review more than 450 samples were tested for particle size distribution for various industries.

Training Programme : Practical oriented training programme of 5 day duration on Pesticide Formulation Technology has been organised covering various aspects of formulation technology for the benefit of Indian pesticide industry. Thirty two participants representing 29 different industries participated in this programme.

Projects Anticipated : M/s. United Phosphorus has approached the Institute to sponsor ten projects mainly based on water dispersible granules and suspension concentrate formulation technologies, of which at least four would be completed during 1997-98, once the projects are sponsored. M/s. Excel Industries and M/s. Bayer India Limited have also shown interest in the development of two formulations. In addition the final consent for the execution of two projects one from M/s. Montari Industries and the other M/s. Indofil Chemicals for which proposals are pending with the parties are awaited.

Analytical Facilities

Analytical Services are being offered to the Indian pesticide industries and the Bureau of Indian Standards (BIS) for the quality control and quality assurance of 125 pesticides and their formulations. Facilities of analytical laboratory include state of art analytical equipments like gas chromatograph coupled with mass spectrophotometric detector, gas chromatograph, high performance liquid chromatograph, super critical fluid chromatograph, infra-red spectrophotometer, fourier transform infra-red spectrophotometer and high performance thin layer chromatograph.

The laboratory is providing pesticide analytical services, method development, method validation and verification of impurity profile of technical pesticide and their formulations to the pesticide industry and BIS.

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The Analytical laboratory has analysed 550 pesticide samples of different parties and has generated an income of Rs. 6.0 lakhs.

The detail of the studies undertaken by the analytical laboratory during the year 1996-97 are as follows:

Method Development

The Institute has developed HPLC method for estimating the active ingredient content of Bromodilone.

A Gas Chromatographic method for active ingredient analysis of Phorate has also been developed.

Collaborative Studies

1. *Collaborative International Pesticide Analytical Council Limited (CIPAC) Collaborative Studies* : The collaborative studies under CIPAC for active ingredients analysis of Flusilazole, and alpha-cypermethrin have been carried out.
2. *GTZ Collaborative Studies* : A collaborative study for the analysis of Azadirachtin content in Neem seed kernels is in progress.
3. *BIS Collaborative Study* : A collaborative Study with Central Insecticides Laboratory/Registration Committee and BIS for the HPLC method for azadirachtin content in commercial formulations of neem is under development.

Projects Anticipated

The following projects are anticipated for the year 1997-98.

- i) Sample Analysis : About 500 samples of pesticides from Bureau of Indian Standards and the pesticide industry.
- ii) Establishment of Chemical equivalence : From the pesticide industry.
- iii) Shelf-life Study : Cypermethrin and Fenvalerate formulations from M/s. Northern Minerals Limited, Gurgaon.
- iv) Impurity profile analysis : From M/s. Kanoria Chemicals, Delhi.
- v) Method Development : From Bureau of Indian Standards

Chemical Weapons Convention (CWC) : The Analytical Chemist on behalf of Government of India participated in the "Expert Group Meetings" on analytical Task Force and Analytical Data Base, of the Preparatory Commission for the Organisation of the Prohibition of Chemical Weapons (OPCW) at the Hague.

Bio-Science Laboratory

The Institute has a well equipped bio-sciences laboratory for undertaking biological evaluation of pesticides and their formulations. The facilities available include microjector/microdoser applicator, Quantimet image analyser, AIMS Droplet Measurement and Analysis Device, Kearns and March Knockdown chamber, seed treatment unit, etc. The Institute also has well equipped facilities for field trials on

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agricultural crops. The services offered by the bio-sciences laboratory include data generation of pesticide formulations as per CIB protocol through bio-assay, bio-efficacy, phytotoxicity evaluation, compatibility analysis and resistance assessment. The unit also conducts regular training programmes/workshops on pesticide registration and regulations for pesticide industries.

The studies completed/being carried out are summarised below:-

Sponsored Projects:

i) *Bioefficacy and Phytotoxicity of Chlorpyrifos 50 WP and Endosulfan 50 WP Formulations:*

The project on bio-efficacy and phytotoxicity of Chlorpyrifos 50 WP and Endosulfan 50 WP formulations on okra and cotton crops for two consecutive years were sponsored by M/s. Excel Industries Limited, Mumbai during 1994-95. Field trials were conducted for two year on two crops with chlorpyrifos and endosulfan formulations. The compilation and statistical analysis of data have been completed and the final reports will be submitted shortly.

ii) *Bio-efficacy Studies of Household Formulations:*

The project on bio-efficacy studies of house-hold formulations against three insect species viz. mosquitoes, house fly and cockroaches was sponsored by M/s. Excel Industries Limited, Mumbai during 1995-96. The bioassay studies through lab trials have been initiated and further work is in progress.

iii) *Workshop on Pesticide Registration & Regulations*

The unit has conducted a Workshop on Pesticide Registration & Regulations for Indian Pesticide Industry from march 10-14, 1997 in which 13 participants attended the Workshop.

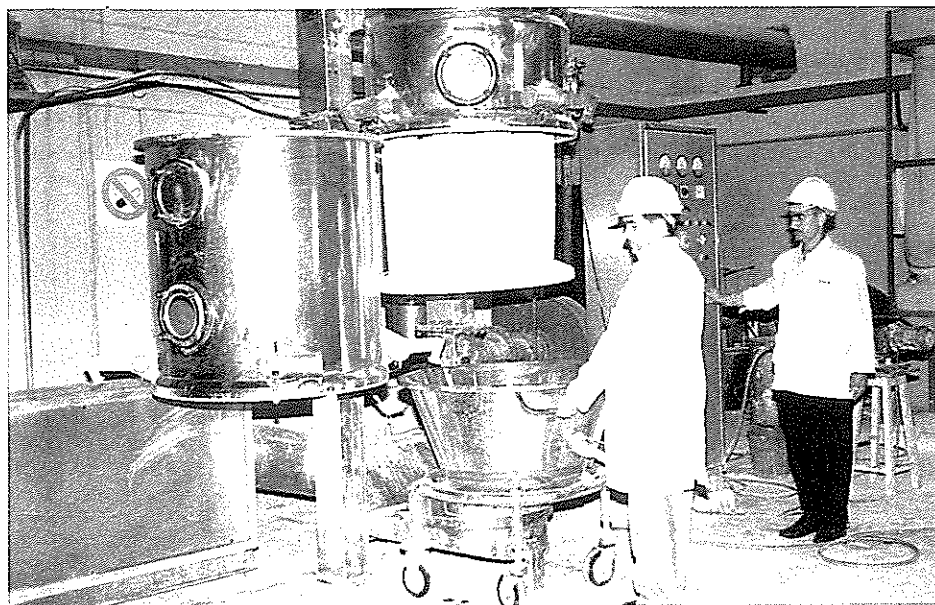
Botanical Pesticides : Eight different plant species have been studied and four have been found to possess pesticidal activity. Further work on identification and screening of plant species is in progress. Collaboration between IPFT & Rothamsted Experimental Station, UK regarding development of botanical pesticides is under consideration.

Pilot Plant

With the development of newer, user and environment friendly formulations for which technologies have been supplied by the Institute, the industry is now coming forward for semi-commercial development-cum-production of these safer formulation using the pilot plant facilities of the Institute. The industry has taken keen interest in the facilities installed in the Pilot plant and large number of enquiries to use these facilities are forthcoming. The state of art equipments for new formulations are in demand that the Institute at times had to stagger the leasing of these equipment to the industry.

The studies completed/being carried out in the Pilot Plant are summarised below:-

a) *Job work of semi-commercial development of Captan Water Dispersible granules*



View of Fluid Bed Spray Granulator

was carried for Messrs Rallis India who had got the formulation development work done in IPFT laboratories.

- b) Job work for processing special type of filler was carried out for M/s. Ranbaxy India Limited by using Fluid Energy Mill System.

3. *In-house Formulation Development Work undertaken during the year are as follows:*

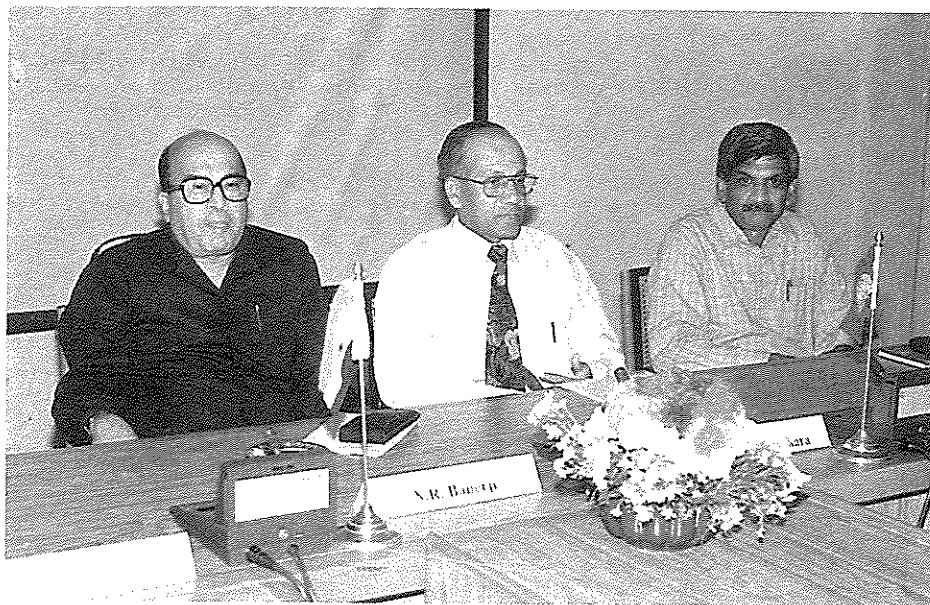
Various pilot plant equipments were used by formulation development laboratory for in house formulation development work. The equipments used were Lodge Mixer, Ribbon Blender, Fluid Energy Mill etc.

Jobs Work Anticipated

- i) Production of Suspension concentrate formulations from M/s. Montari Industries Limited, Mohali.
- ii) Water Dispersible Granule formulation from M/s. Sulphur Mills Limited, Mumbai, M/s United Phosphorous Limited (UPL), Mumbai & M/s. Rallis India Limited, Mumbai.
- iii) Suspension concentrate formulations of various products from M/s UPL, Mumbai.
- iv) Semi-commercial development of other formulations from M/s UPL, Mumbai.

International and National Contacts

In addition to the various training programmes conducted, a number of national and international delegates have visited the Institute to appraise themselves of the



Secretary (Chemicals & Petro-chemicals) inaugurating the training programme



Delegates attended training programme on pesticide formulation technology

facilities available at the Institute for exploring the possibility of collaborative work in different areas of pesticide formulation development.

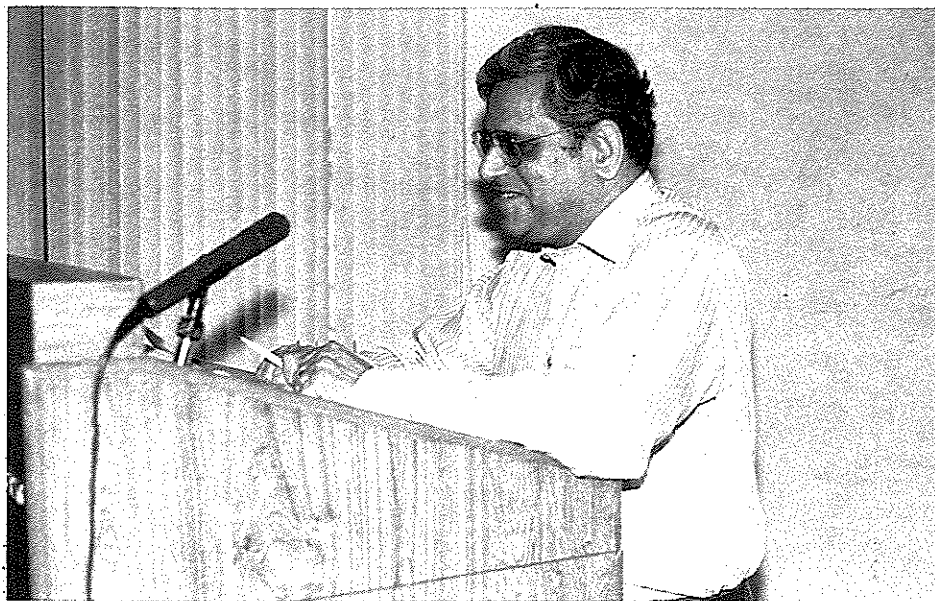
Noteworthy visits have been made by Mr. Frank P. Brosas, Plant Manager-Director & Industrial Coordinator, M/s. Rhone-Poulenc, Surabaya, Indonesia and Mr. Abu Bakar Tambi, R&D Manager, M/s. DowElanco Asia Pacific Sdn. Bhd., Malaysia. There has been business enquiries and mutual interactions with Mr. Husnu Yetkin,

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Kimyagerler Zirai of M/s. Mucadele Ilaclari A.S. Istanbul. Dr. Jochen Vida, Advisor Hazardous Waste Management working with National Productivity Council on Indo-German Cooperation Project (GTZ) visited the Institute for possible joint collaboration of testing of effluent samples and improvement on effluent treatment plant facilities for pesticide sector in the country.

Regional Network on Safe Pesticides Production and Information for Asia and the Pacific (RENAP)

IPFT continued to provide technical backup as Technical Coordinator Unit (TCU) on user and environment friendly pesticide formulation technology and quality control for the Regional Network on Safe Pesticides Production and Information for Asia and the Pacific (RENAP). Facilities of the TCU were extended to the member countries of RENAP for training, consultancy and trouble shooting. The Institute on behalf of Government of India is providing the secretarial assistance facilities and logistic support to the RENAP.



*Joint Secretary (Chemical & Petro-chemicals)
addressing the delegates during training programme*

Management

The composition of the Governing Body of the Institute is given below :-

1. Shri P.C. Rawal, Joint Secretary, Deptt. of Chemical & Petrochemicals.
2. Shri I.S. Malhi, Joint Secretary, Ministry of Agriculture.
3. Shri S. Kabilan, Financial Adviser, Ministry of Chemicals & Fertilizers.
4. Dr. A.V. Ramarao, Ex. Director, Indian Institute of Chemical Technology, Hyderabad.

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5. Ms. Renu Sahni Dhar, Joint Secretary, Ministry of Health.
6. Shri D. Jayaprakash, Chairman & Managing Director, Hindustan Insecticides Limited.
7. Managing Director, Gujarat Agro Industries Corporation, Ashram Road, Ahmedabad.
8. Secretary (Industries) Government of Haryana, Chandigarh.
9. Mr. Rajju Shroff, Managing Director, United Phosphorous Ltd., Mumbai.
10. Director, IPFT and Ex-Officio Member Secretary.
11. Dr. S.P. Dhua, Part-time Chairman.

ACCOUNTS AND AUDIT

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

INCOME AND EXPENDITURE

Figures for 1995-96

Figures for 1996-97

IPFT	RENPAF	TOTAL	HEAD OF ACCOUNT	IPFT	RENPAF	TOTAL
3949565.08	729782.73	4679347.81	Salaries & Wages	3293801.45	599942.40	3893743.85
	—	—	Payment against revision of Grades	290114.33	9669.56	299783.89
313033.50	29685.00	342718.50	Institute Contribution to PF	239704.00	38672.00	278376.00
13818.00	905.00	14723.00	Admn. Charges on PF	16136.00	2505.00	18641.00
8877.00	503.00	9380.00	DLI Charges on PF	9297.00	981.00	10278.00
124.00	—	124.00	Instt's Contribution to Wel. Fund	78.50	—	78.50
22466.65	2500.00	24966.65	Bonus	5993.00	—	5993.00
4307884.23	763375.73	5071259.96		3855124.28	651769.96	4506894.24
91690.44	9562.33	101252.77	Staff Welfare Expenses	92172.51	8035.20	100207.71
58284.59	8706.00	66990.59	Transport Subsidy	54398.00	13328.00	67726.00
29546.60	—	29546.60	LTC	59197.80	11225.60	70423.40
333950.18	34590.57	368540.75	Medical Expenditure	354082.73	41624.71	395707.44
47105.55	1845.00	48950.55	Gratuity	42330.00	2053.00	44383.00
64810.93	20575.50	85386.43	Leave Encashment	100008.80	11118.00	111126.80
93349.90	13882.20	107232.10	Canteen Subsidy	94956.14	13418.85	108374.99
3480.00	—	3480.00	Washing Allowance	5100.00	—	5100.00
			Contribution to ESI	—	2161.26	2161.26
722218.19	89161.60	811379.79		802245.98	102964.62	905210.60
—	500.00	500.00	Expenses on PMC Meeting	—	—	—
139854.70	18060.10	157914.80	Travelling Expenses	75404.65	5049.30	80453.95
31372.48	3513.80	34886.28	Entertainment Expenses	12396.95	741.50	13138.45
47212.36	3587.74	50800.10	Miscellaneous Expenses	9625.87	3486.75	13112.62
43717.54	454.50	44172.04	Repair & Maintenance	63738.37	545.40	64283.77
4205.95	—	4205.95	Laboratory Expenses	32466.86	—	32466.86
19750.20	—	19750.20	Chemicals	16156.37	—	16156.37
54036.87	4208.00	58244.87	Postage, Telegram & Telephones	44033.28	3925.00	47958.28
2279.00	—	2279.00	Expenses on Bio-Science Test	—	—	—
23452.10	226179.60	249631.70	Rent, Rates & Taxes	27279.60	238179.60	265459.20
5307.91	—	5307.91	Insurance	1685.00	—	1685.00
232201.90	6909.50	239111.40	Electric Charges Incl. Diesel	208721.76	6076.50	214798.26
106226.66	47177.45	153404.11	Printing & Stationary & other Supply	36668.63	76413.95	113082.58
18060.78	24758.42	42819.20	Vehicle Maintenance	21909.90	33858.03	55767.93
117323.18	—	117323.18	Security Charges	120241.15	—	120241.15
150.00	—	150.00	Staff Training Expenses	75.00	—	75.00
150.00	—	150.00	Subscription & Membership Fees	3065.00	—	3065.00
7026.00	—	7026.00	Newspaper and periodicals	2283.38	—	2283.38
1956.00	—	1956.00	Bank Charges	3150.00	—	3150.00
1086.00	225.00	1311.00	Cartage & Cooliage	682.50	—	682.50
850.00	850.00	1700.00	Legal Expenses	4250.00	1750.00	6000.00
5000.00	—	5000.00	Audit Fees	5000.00	—	5000.00
2000.00	—	2000.00	Remuneration to Auditors (other jobs)	3500.00	—	3500.00
—	—	—	TA to Auditors	4560.00	—	4560.00
172491.87	3382.31	175874.18	Depreciation	186041.83	3382.31	189424.14
138350.05	—	138350.05	Expenses on CWC	1289.00	—	1289.00
24000.00	—	24000.00	Consultancy Charges	—	—	—
8608.00	—	8608.00	Recruitment expenses	36726.00	—	36726.00
616936.41	3071.00	620007.41	Debit relating to earlier years	17283.14	2977.85	20260.99
—	450.00	450.00	Seminar & Workshop Expenses	—	—	—
—	—	—	Less Income	—	—	—
29781.14	—	29781.14	Expenses on ETP	13560.07	—	13560.07
2410.00	—	2410.00	Sample Clearance Charges	—	—	—
			Excess of Income over Expenditure	7050847.50	266054.23	7316901.73
6885899.52	1195864.75	8081764.27		12660012.07	1397175.00	14057187.07

Sd/-

(B.R. Sharma)
Finance Officer

Place: New Delhi
Date: 27th August, 1997

Auditor's report
In terms of our Separate report of even date

for Ajit & Associates
Chartered Accountants

Sd/-
(Partner)

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

FOR THE YEAR ENDING 31-03-1997

Figures for 1995-96

Figures for 1996-97

IPFT	RENPAF	TOTAL	HEAD OF ACCOUNT	IPFT	RENPAF	TOTAL
3700000.00	500000.00	4200000.00	Grant in Aid	10000000.00	500000.00	10500000.00
			Contribution from Industry			
			Membership Fee Recd.	—		
			Less: Transferred to	—		
			Membership fee fund account	—		
490685.00	454132.00	454132.00	Received from UNDP	—	893475.00	893475.00
	—	490685.00	Testing Charges Recd	698750.00	—	698750.00
			Analytical Lab			560635.00
			Formulation Lab			<u>138115.00</u>
—	—	—	Hiring Charges of Mixer Rec.			
20414.81	—	20414.81	Seminar & Workshop	230664.64		230664.64
			Receipt			343862.70
			Less Expenses			<u>-113198.06</u>
1075350.00	—	1075350.00	Income from Project			
			Formulation Lab			
			Job work PP	80000.00	78450.00	—
			Less Expenses			<u>-1550.00</u>
—	—	—	Training Fees Recd.			
			Indian	—	—	—
			Foreign			
63572.50	—	63572.50	Interests on Deposits	708822.50	—	708822.50
493734.00	—	493734.00	Income from Corpus Fund	600797.00	—	600797.00
			Investment Account			
210697.00	—	210697.00	Income from MF Invst. A/c.	298205.00	—	298205.00
—	—	—	Reimbursement by Central Govt.	—	—	—
—	—	—	Expenses of CWC	—	—	—
60000.00	—	60000.00	CWC Inspection Fee Recd.	—	—	—
4000.00	—	4000.00	Subscription Recd.	—	—	—
162.00	677.30	839.30	Hire charges for private car Recd	—	—	—
—	—	—	Sale of Publication	—	—	—
3436.00	—	3436.00	Credit relating to Earlier years.	41286.93	3700.00	44986.93
			Misc. Income	—	—	—
2312.00	—	2312.00	Income from AMF Fund	2820.00	—	2820.00
			Hire & Rent	216.00	—	216.00

761536.21 241055.45 1002591.66

6885899.52 1195864.75 8081764.27

12660012.07 1397175.00 14057187.07

Sd/-

(R.P. Luthra)
Incharge-IPFT

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

BALANCE SHEET

Figures for 1995-96

Figures for 1996-97

IPFT	RENPAF	TOTAL	HEAD OF ACCOUNT	IPFT	RENPAF	TOTAL
LIABILITIES						
3611763.53	165951.66	3777715.19	Reserve & Surplus as on 01-04-96	2850227.32	-75103.79	2775123.53
761536.21	241055.45	1002591.66	Add Excess of Expn. over Income	7050847.50	266054.23	7316901.73
2850227.32	-75103.79	2775123.53		9901074.82	190950.44	10092025.26
4300000.00	—	4300000.00	Corpus Fund	4300000.00	—	4300000.00
1520000.00	—	1520000.00	Membership fund A/c.	2120000.00	—	2120000.00
Current Liabilities & Provision						
321008.50	—	321008.50	Provision for Gratuity	365391.50	—	365391.50
32366.65	—	32366.65	Provision for Bonus	5993.00	—	5993.00
713027.61	—	713027.61	Provision for Depreciation	902451.75	—	902451.75
637253.63	—	637253.63	Expenses payable	587153.93	—	587153.93
—	—	—	Staff Advance	—	—	—
—	—	—	TDS	276.90	—	276.90
475440.00	—	475440.00	Amount payable to UNDP	691440.00	—	691440.00
220852.41	—	220852.41	Amount payable to HIL (HO)	435525.39	—	435525.39
4896022.78	—	4896022.78	Amount payable to HIL (R&D)	4178188.60	—	4178188.60
14700.00	—	14700.00	Amount received from Parties	3700.00	—	3700.00
—	—	—	Amount received against Bio-efficacy Project	—	—	—
—	—	—	Advance fees received against CWC Inspection	—	—	—
5800000.00	—	5800000.00	Advance received against CWC Project	5800000.00	—	5800000.00
—	—	—	Amount payable to employees RENPAF	34149.00	—	34149.00
—	—	—		142787.14	—	142787.14
21780898.90	-75103.79	21705795.11		29468132.03	190950.44	29659082.47

Auditor's report
In terms of our Separate report of even date

Sd/-
(B.R. Sharma)
Finance Officer

for Ajit & Associates
Chartered Accountants

Place: New Delhi
Date: 27th August, 1997

Sd/-
(Partner)

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

AS ON 31-03-97

Figures for 1995-96

Figures for 1996-97

IPFT	RENPAF	TOTAL	HEAD OF ACCOUNT	IPFT	RENPAF	TOTAL
ASSETS						
			Fixed Assets (Sch. A)			
3674477.27	—	3674477.27	Capital Work in progress	3825778.41	—	3825778.41
2100223.00	—	2100223.00	Building	2100223.00	—	2100223.00
109192.62	—	109192.62	Plant & Machinery	109192.62	—	109192.62
5472.30	5472.30	10944.60	Typewriter	5472.30	5472.30	10944.60
318257.52	42691.00	360948.52	Furniture & Fixture	318257.52	42691.00	360948.52
57968.00	—	57968.00	Office Equipment	303824.00	—	303824.00
562362.56	—	562362.56	Laboratory Equipment	562362.56	—	562362.56
			Investments (Sch. B)			
4300000.00	—	4300000.00	Cor. Fund Inv. A/c.	4300000.00	—	4300000.00
			Addition			
			Total			
1520000.00	—	1520000.00	Membership Fund Invest. A/c.	2120000.00	—	2120000.00
			Current Assets			
6161443.41	—	6161443.41	SBI New Delhi Current A/c.	348469.31	—	348469.31
138766.60	—	138766.60	SBI Dundahera Current A/c.	1250027.28	—	1250027.28
16336.91	—	16336.91	Cash in Hand	9644.58	—	9644.58
2000000.00	—	2000000.00	SBI TDR	13381882.00	—	13381882.00
			CWC-6286993.00			
			TDR-7094889.00			
			Advances			
5365.93	—	5365.93	To Staff, Medical & others	166678.55	—	166678.55
16500.00	1250.00	17750.00	Festival Advances to Staff	21000.00	—	21000.00
			Staff Loan	—	—	—
112320.00	—	112320.00	Medical Advance	—	—	—
13060.19	—	13060.19	Advance to Parties (DAVP, Maruti)	200630.00	—	200630.00
1306.00	—	1306.00	LTC Advance	3074.40	—	3074.40
			Amount Recoverable			
164850.00	—	164850.00	Testing charges	166710.00	—	166710.00
106034.50	—	106034.50	Interest receivable	148514.00	—	148514.00
1765.00	—	1765.00	Prepaid Expenses	1391.50	—	1391.50
270000.00	—	270000.00	Amount receivable from Parties	125000.00	142787.14	267787.14
680.00	—	680.00	TDS	—	—	—
21656381.81	49413.30	21705795.11		29468132.03	190950.44	29659082.47

Sd/-
(R.P. Luthra)
Incharge-IPFT

SCHEDULE OF FIXED ASSETS

Particulars	Gross Block at cost			
	Cost as at 1-4-1996	Additions During the Year	Transfer During the Year	Total Cost as at 31-3-97
IPFT				
Capital Work in Progress	36,74,477.27	1,51,301.14	—	38,25,778.41
Office Equipment	9,815.00	2,45,856.00	—	2,55,671.00
Plant & Machinery	1,09,192.62	—	—	1,09,192.62
Furniture & Fixture	3,18,257.52	—	—	3,18,257.52
Typewriters & Duplicators	5,472.30	—	—	5,472.30
Laboratory Equipment	1,77,481.56	—	—	1,77,481.56
	<u>42,94,696.27</u>	<u>3,97,157.14</u>		<u>46,91,853.41</u>
RENPAF				
Furniture & Fixture	42,691.00	—	—	42,691.00
Typewriter & Duplicator	5,472.30	—	—	5,472.30
	<u>48,163.30</u>			<u>48,163.30</u>
PDC Assets : 01-06-1991/01-04-1995				
Building	21,00,223.00	—	—	21,00,223.00
Equipment & Supplies	3,84,881.00	—	—	3,84,881.00
Misc. Office Equipment	48,153.00	—	—	48,153.00
Vehicle	—	—	—	—
	<u>25,33,257.00</u>			<u>25,33,257.00</u>

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

AS ON 31.03.1997

Rate of Depreciation	Upto 31-3-96	Depreciation			Net Balance	
		During the year 96-97	Written back during the year	Total Dep. upto 31-3-97	As at 31-03-97	As at 31-03-96
					38,25,778.41	36,74,477.27
10%	1,748.71	4,686.17	—	6,434.88	2,49,236.12	8,066.29
15%	54,719.51	16,378.89	—	71,098.40	38,094.22	54,473.11
6%	18,753.30	19,095.45	—	37,848.75	2,80,408.77	2,99,504.22
15%	2,012.15	820.85	—	2,833.00	2,639.30	3,460.15
10%	12,656.46	17,748.15	—	30,404.61	1,47,076.95	1,64,825.10
	89,890.13	58,729.51	—	1,48,619.64	45,43,233.77	42,04,806.14
6%	5,782.46	2,561.46	—	8,343.92	34,347.08	36,908.54
15%	2,012.15	820.85	—	2,833.00	2,639.30	3,460.15
	7,794.61	3,382.31	—	11,176.92	36,986.38	40,368.69
04%	4,06,043.11	84,008.92	—	4,90,052.03	16,10,170.97	16,94,179.89
10%	1,86,025.81	38,488.10	—	2,24,513.91	1,60,367.09	1,98,855.19
10%	23,273.95	4,815.30	—	28,089.25	20,063.75	24,879.05
	6,15,342.87	1,27,312.32	—	7,42,655.19	17,90,601.81	19,17,914.13

Sd/-
(B.R. Sharma)
Finance Officer

**Details of Investment of Corpus Fund, Life Membership Fund
and Associate Membership as on 31st March 1997**

Deposit with	FDR No. & Date	Amount of Deposits Rs.	Intt. Rate p.a.	Due on	Periodicity of payment of Intt.
CORPUS FUND					
SAIL, New Delhi	3106986 29/3/97	6,00,000.00	15%	29/3/2000	Monthly
SAIL, New Delhi	2620129 06/4/94	11,00,000.00	14%	6/4/97	Monthly
SAIL, New Delhi	2926889 1/3/96	5,00,000.00	15%	1/3/99	Quarterly
N.T.P.C., New Delhi	95400155 7/4/94	16,00,000.00	14%	6/4/97	Monthly
N.T.P.C., New Delhi	96400613 4/3/96	5,00,000.00	14%	3/3/99	Monthly
		<u>43,00,000.00</u>			
LIFE MEMBERSHIP FUND					
SAIL, New Delhi	297140 16/05/96	3,00,000.00	14%	16/5/99	Quarterly
SAIL, New Delhi	2691528 21/09/94	7,00,000.00	14%	21/9/97	Quarterly
N.T.P.C., New Delhi	95400241 22/9/94	8,00,000.00	14%	21/9/97	Monthly
N.T.P.C., New Delhi	97400625 18/5/96	3,00,000.00	14%	17/5/99	Monthly
		<u>21,00,000.00</u>			
ASSOCIATE MEMBERSHIP FUND					
N.T.P.C., New Delhi	95400241 22/9/94	10,000.00	14%	21/9/97	Monthly
N.T.P.C., New Delhi	95308513 16/3/95	10,000.00	14%	15/3/98	Quarterly
		<u>20,000.00</u>			

Sd/-
(B.R. Sharma)
Finance Officer

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

Details of Life Membership Fund Account as on 31.03.97

Date of Receipt	Name of the Organisation	Amount (Rs.)
02-09-1994	United Phosphorus Ltd., Bombay	15,00,000.00
06-05-1996	Gharda Chemicals Ltd., Bombay	6,00,000.00
		21,00,000.00

Finance Officer

Details of Associate Membership Fund as on 31-3-97

Date of Receipt	Name of the Organisation	Amount (Rs.)
25-08-94	Agrosynth Chemicals, Bangalore	10,000.00
08-02-95	Pest Control (I) Limited, Bombay	10,000.00
		20,000.00

Sd/-
(B.R. Sharma)
Finance Officer

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

Details of Debits Relating to Earlier Years

Date	Particulars	Amount
18-04-96	Chemicals (SBI Mullitech)	Rs. 6,487.50
27-09-96	Arrears of Dr. S.Y. Pandey	Rs. 2,992.79
22-12-96	T.A. to Auditors	Rs. 3,455.00
31-12-96	Expenses dr. by HIL (R&D)	Rs. 1,397.85
27-03-97	Seminar Expenses	Rs. 950.00
31-03-97	Remuneration to Auditors	Rs. 2,000.00
		Rs. 17,283.14

Details of Credits Relating to Earlier Years

Date	Particulars	Amount
31-03-97	Recovery of Bonus	Rs. 2,123.20
31-03-97	Bonus 95-96	Rs. 2,500.00
31-03-97	Bonus 94-95	Rs. 5,349.67
31-03-97	Recovery of Medical Expenses 1995-96	Rs. 31,314.00
		Rs. 41,286.93

Sd/-
(B.R. Sharma)
Finance Officer

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

Schedule of Income from Membership Fund Investment as on 31-3-97

Income from Life Membership Fund Investment	Rs. 2,98,205.00
Income from Associate Membership Fund Investment	Rs. 2,820.00
Income from Corpus Fund Investment	Rs. 6,00,797.00
	<u>Rs. 9,01,822.00</u>

EXPENSES PAYBLE

1. Mr. K.K. Bansal		Rs. 9,309.53
2. Jeet Enterprises		Rs. 4,87,710.00
3. Ajit & Associates	Audit Feb. 96-97	Rs. 5,000.00
4. Ajit & Associates	*Remuneration to Auditors 96-97	Rs. 2,000.00
5. Hiltop Travel	Seminar Expenses	Rs. 11,000.00
6. SMS Multitech (P) Ltd.	Gases	Rs. 8,846.70
7. Dr. Pralima Singhal	Consultancy	Rs. 105.00
Dr. S.K. Bansal	-do-	Rs. 716.00
Dr. Lata Nagpal	"	Rs. 440.00
Dr. Sanjeev	"	Rs. 1,080.00
Dr. (Mrs.) Chetna	"	Rs. 180.00
Dr. R.K. Bansal	"	Rs. 290.00
8. Hind Chemicals	Chemicals	Rs. 1,725.30
9. Matharu Tourist Taxi	Hiring Taxi	Rs. 10,848.40
Service		
Bill No.	Amount	
19557	621.20	
19558	899.00	
19735	1862.40	
19736	2091.00	
19737	1789.40	
19739	1374.20	
19738	1521.20	
19184	320.00	
19185	370.00	
10. Cousene Cateror	Seminar	Rs. 46,883.00
11. Print Craft	Seminar	Rs. 1,020.00
		<u>Rs. 5,87,153.93</u>

Sd/-
(B.R. Sharma)
Finance Officer

INSTITUTE OF PESTICIDE FORMULATION TECHNOLOGY, GURGAON

NOTES ON ACCOUNTS FOR THE YEAR ENDING 31-03-97

1. As per the prevailing practice in previous year, during the last year also expenses has been booked on the basis of apportionment by Hindustan Insecticides Limited. Out of the total expenses of Rs. 39,72,139.85 (Rupees Thirtynine lakhs seventytwo thousand one hundred thirtyfive and eightyfive paisa only) allocated by HIL, only the following expenses have not been booked during the year by the Institute of Pesticide Formulation Technology.

Provision for Gratuity	Rs. 1,80,203.67
Provision for Gratuity (RENPAF)	Rs. 11,000.50
Provision for Bonus	Rs. 937.50
Provision for Leave encashment	Rs. 1,90,738.00
	Rs. 3,82,879.67

2. Claim submitted by M/s. Jeet Enterprises on account of the final payment on Hostel Building pending verification of the Bill. We have made a provision for Rs. 4,87,710.00 and charged to capital work in progress during 1995-96. Bill has not been received till date duly verified.

3. Depreciation has been provided at Straight Line Method at the following rates:-

Building	04%
Plant & Machinery	15%
Furniture & Fixture	06%
Typewriters & Duplicators	15%
Office Equipment	10%
Laboratory Equipment	10%

4. As per list of the equipments provided by HIL the equipments worth of Rs. 54,590/- have not been identified, however, we have taken in the books of accounts during 1995-96, pending verification are still under investigation.

Sd/-
(B.R. Sharma)
Finance Officer

AUDITOR'S REPORT

To the Members of
Institute of Pesticide Formulation Technology

We have audited the attached Balance Sheet of Institute of Pesticide Formulation Technology as on 31.03.97 and the Income & Expenditure Account for the year ended on that date annexed there to & report that :-

1. Figures of previous year have been regrouped & recast wherever necessary.
2. Building has been capitalised to the extent of Rs. 36,74,477.27. However in terms of our note in earlier years, this capitalisation does not reflect the correct value as it does not take into cognizance amount spent on the building prior to formation of IPFT. Secondly no completion certificate for the same has been obtained. Also the claims of the contractor are disputed and although the same have been provided for, the amount is pending capitalisation. This aspect should be made the subject matter of total assets transfer of Pesticides Development Centre to Institute of Pesticide Formulation Technology as it would be erroneous to capitalise the hostel building at a value less than the amount expended.
3. The land on which the hostel building is being constructed belongs to Hindustan Insecticides Ltd. No lease agreement of the same in favour of Institute of Pesticide Formulation Technology has been executed. The legal implications of transfer of the building have not been ascertained and no provision for any liability on this Account has been created.
4. The difference in the balance of Hindustan Insecticides Ltd. due to non incorporation of certain expenses by Institute of Pesticide Formulation Technology is subject to confirmation by Hindustan Insecticides Ltd.
5. Interest on fixed deposit has been taken on accrual basis.

Subject to the foregoing and in our opinion and to the best of our information and according to the explanations given to us the said Balance Sheet and Income & Expenditure statement read together present a true and fair view.

- i) In the case of the Balance Sheet of the statement of society's affairs as at 31st March 1997.
- ii) In the case of the Income & Expenditure statement of the excess of Expenditure over Income of the society for the year ended 31.03.1997.

For AJIT & ASSOCIATES
Chartered Accountants

Place: New Delhi

Date: 27/08/97

Sd/-
Partner

REPLY TO AUDIT POINTS

Audit Point	Reply
1. Figures of previous year have been regrouped and recast wherever necessary	Calls for no comments
2. Building has been capitalised to the extent of Rs. 36,74,477.27. However in terms of our note in earlier years, this capitalisation does not reflect the correct value as it does not take into cognizance amount spent on the building prior to formation of IPFT. Secondly no completion certificate for the same has been obtained. Also the claims of the contractor are disputed and although the same have been provided for the amount is pending capitalisation. This aspect should be made the subject matter of total assets transfer of Pesticides Development Centre to Institute of Pesticide Formulation Technology as it would be erroneous to capitalise the hostel building at a value less than the amount expended.	At the time of finalisation of the total transfer of assets to the Institute of Pesticide Formulation Technology the matter would be appropriately taken up for finalisation.
3. The land on which the hostel building is being constructed belongs to Hindustan Insecticides Ltd. No lease agreement of the same in favour of Institute of Pesticide Formulation Technology has been executed. The legal implications of transfer of the building have not been ascertained and no provision for any liability on this Account has been created.	CMD HIL, though his letter No. CMD/IPFT/65 dated August 30, 1996 has confirmed demarcation of 17 acres of land in the drawing which include the land on which the hostel building has been constructed. HIL has written a letter to HUDA authorities in Gurgaon for transferring the title of the land in the name of IPFT and the final decision from HUDA is awaited.
4. The difference in the balance of Hindustan Insecticides Ltd. due to non incorporation of certain expenses by Institute of Pesticide Formulation Technology is subject to confirmation by Hindustan Insecticides Ltd.	The non incorporation of certain expenses of the Institute is being brought to the notice of HIL for their confirmation.
5. Interest on fixed deposit has been taken on accrual basis.	Noted

