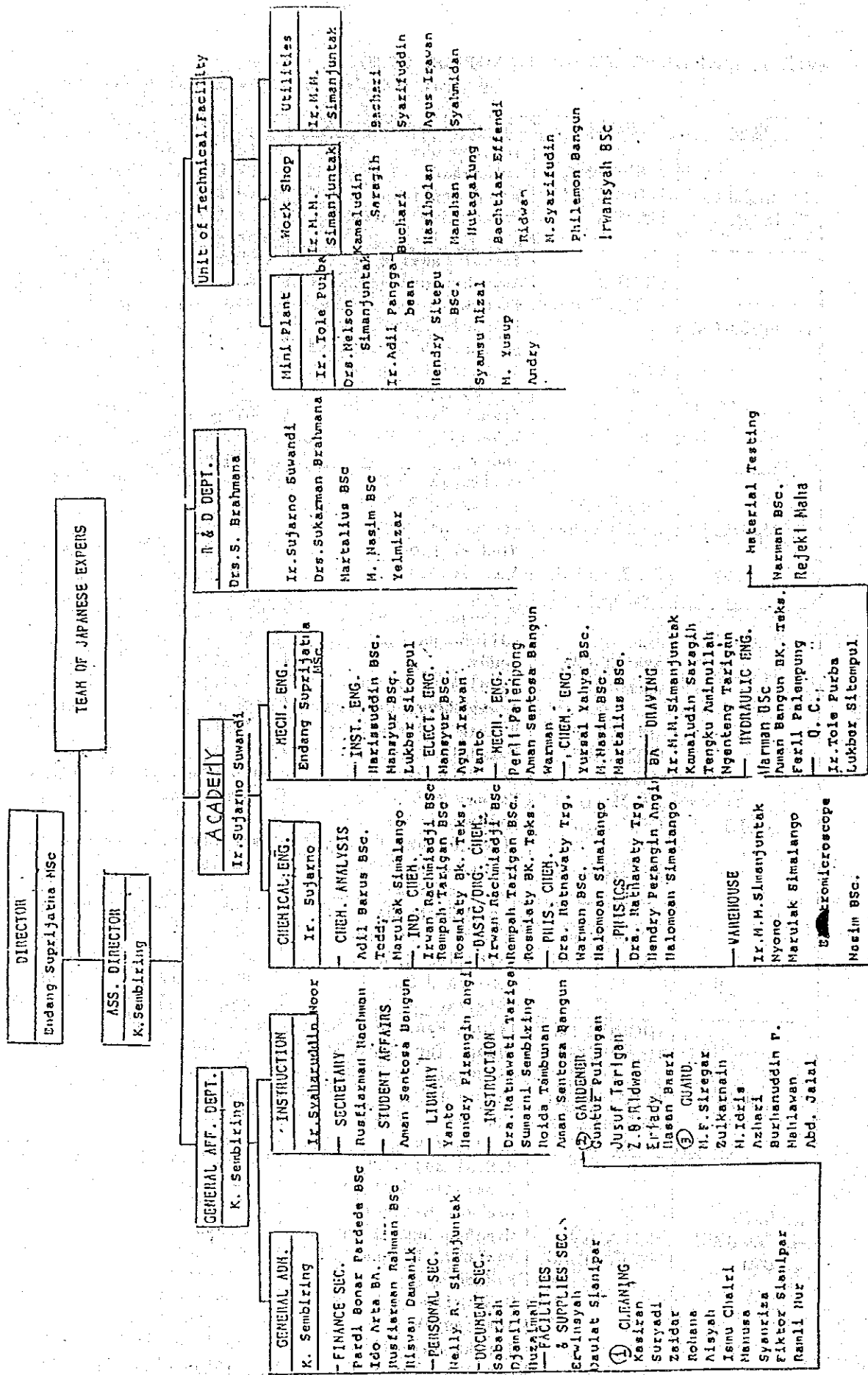


ANNEX 2 Organization for chemical industry training & Development Center



(ANNEX 3) PROVISION OF EQUIPMENT

	FY	BL/AWB	CIF PRICE	FOB PRICE	REMARKS
1	'82	126-64087613	¥ 1,594,056	¥ 1,032,000	Accumulated amount of
2	'82	BEL-1001	¥ 16,613,553	¥ 15,743,200	CIF:
3	'82	BEL-1004	¥ 15,793,802	¥ 14,637,350	Provided equipment: PE
4	'82	618-4112339	¥ 2,912,881	¥ 2,550,943	¥106,779,170.-
5	'82	BEL-1002	¥ 295,591	¥ 256,800	Accompanied/non-accom-
6	'82	BEL-1003	¥ 26,195,053	¥ 24,625,000	panied equipment: AE
7	'82	BEL-1013	¥ 41,617,951	¥ 39,892,650	¥ 4,506,937.-
8	'82	BEL-1003	¥ 6,263,237	¥ 5,375,000	
9	'83	618-4209135	¥ 525,404	¥ 129,320	
10	'83	618-4209136	¥ 1,267,267	¥ 974,945	
11	'83	618-4377334	¥ 663,333	¥ 616,500	
12	'83	BEL-1003	¥ 4,715,120	¥ 4,346,500	PE: ¥ 64,051,082.-
13	'83	618-5077124	¥ 2,239,505	¥ 2,000,000	AE: ¥ 4,695,509.-
14	'83	BEL-1004	¥ 59,335,962	¥ 56,200,000	
15	'84	618-50548363	¥ 3,107,197	¥ 2,517,400	
16	'84	618-5054848	¥ 1,927,287	¥ 1,297,495	
17	'84	YIBW--801	¥ 23,109,339	¥ 20,719,030	
18	'84	618-51548160	¥ 329,045	¥ 300,000	
19	'84	618-55006125	¥ 84,905	¥ 26,000	
20	'84	BEL-1001	¥ 401,026	¥ 300,000	PE: ¥ 48,851,119.-
21	'84	YIBW--801	¥ 19,044,660	¥ 17,643,970	AE: ¥ 5,849,460.-
22	'84	YIBW--001	¥ 6,697,120	¥ 6,235,000	
23	'85	618-57671051	¥ 846,355	¥ 532,350	
24	'85	618-55006431	¥ 648,590	¥ 533,754	PE: ¥ 0.-
25	'85	618-58196213	¥ 988,217	¥ 898,000	AE: ¥ 3,194,792.-
26	'85	618-58196235	¥ 711,630	¥ 610,470	

CHRONOLOGICAL AMOUNT OF GRANTED EQUIPMENT

F.Y. YEAR	AMOUNT OF EQUIPMENT	
	C I F	FO B
1982	111,286,107	89,475,595
1983	68,746,591	69,642,265
1984	54,700,579	49,038,895
1985	3,194,792	2,574,574
TOTAL	237,928,107	210,731,329

(ANNEX 4) JAPANESE EXPERTS DISPATCHED BY JICA

ITEM	IMPLEMENTATION OF THE PROJECT															
	0. PREPARATION			I. BASIC ESTABLISHMENT			II. DEVELOPMENT									
	YEAR	MONTH	YEAR	MONTH	YEAR	MONTH	YEAR	MONTH	YEAR	MONTH	YEAR	MONTH				
1. Chief Advisor (organic)	1/4	2/4	3/4	4/4	1/4	2/4	3/4	4/4	1/4	2/4	3/4	4/4	1/4	2/4	3/4	4/4
2. Coordination				4/26												
3. Industrial Chemistry			12/21													
4. Chemical Engineering				4/26												
5. Instrument Engineering																
6. Mechanical Engineering																
7. Mini Plant (Instrument)																
8. Mini Plant (Mechanical Eng.)																
9. Work Shop (Maintenance) & Canning engineering																
10. Mini Plant Operation																
11. Waste Water Treatment																
12. Water Treatment																
13. Chief Advisor																
14. Coordination																
15. Chemical Engineering																
16. Instrument Engineering																
17. Industrial Chemistry (Inorganic)																
18. Industrial Chemistry (Organic)																
19. Mechanical Engineering																
20. Mechanical Mechining																
21. Electrical Engineering																

(ANNEX 6) COUNTERPARTS TRAINED IN JAPAN

IMPLEMENTATION OF THE PROJECT

PHASE	D. PREPARATION				I. BASIC ESTABLISHMENT				II. DEVELOPMENT				
	YEAR	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	
ITEM	MONTH	1/4	2/4	3/4	4/4	1/4	2/4	3/4	4/4	1/4	2/4	3/4	4/4
A. OBSERVATION													
1. Buhari Tambunan													
2. Raml Hassan													
3. Midjanariko													
4. Endang Suprijatna													
B. TECHNICAL TRAINING													
5. Sujarno Suwandi (Chemical Engineering)						3/2							
6. H.N. Simamung Juntak (Chemical Engineering)						3/2							
7. Ahmed Soflan (Chemical Engineering)						3/2							
8. Inasri Samir (Organic Industrial Che.)						3/2							
9. Reknawaty Tris. (Inorganic Industrial Che.)										2/28			
10. Neslin (Analytical Chemistry)										2/28			
11. Irawan Rachmadji (Organic Industrial Che.)											10/30		2/28
12. Sukarman Brahmans (Water Treatment)											10/30		2/28
13. Karman (Material Testing)											10/30		3/30
14. Tole Purba (Mini Plant Process Control)												3/14	9/13
15. Hendry Siltepu (Mini Plant Mechanical Maintenance)												3/14	9/13
16. Sudl Heryant (Organic Chemistry)													

(ANNEX 5) JAPANESE SURVEY TEAM DISPATCHED BY JICA
IMPLEMENTATION OF THE PROJECT

PHASE	0. PREPARATION			I. BASIC ESTABLISHMENT			II. DEVELOPMENT								
	YEAR	MONTH	DATE	YEAR	MONTH	DATE	YEAR	MONTH	DATE						
1. Preliminary Survey Team Kooji TSUBOI Masahiko TANAKA Takafumi FUKUNAGA Mitsuru SANO Nikko ISHIZUKA	1982	1/4	2/4 3/4 4/4 (September 6 ~ 22, 1979)	1983	1/4	2/4 3/4 4/4	1984	1/4	2/4 3/4 4/4	1985	1/4	2/4 3/4 4/4	1986	1/4	2/4 3/4 4/4
2. Implementation Survey Team Ryuzo NAITO Masaya TANAKA Mitsuru TAKADA Shin NAKAHARA Keiichi MURAKA			(November 5 ~ 18, 1981)												
3. Consultation Survey Team Taiza SUNAMI Naoyuki TODO Seiichi WATANABE Akira OKUYAMA						2/30 3/2									
4. Technical Guidance Team Yoshio HISAICHI Dairokuro YASHIRO Yoza OSIIIO Teiji YAGI Toshio SUGIHARA									10/5 10/14						
5. Technical Guidance Team Keiji HINURA Toshio SUGIHARA														4/25 5/3	

ANNEX 7 INPUT ON NATIONAL BUDGET BY THE GOVERNMENT OF INDONESIA TO THE CHEMICAL INDUSTRY TRAINING AND DEVELOPMENT CENTRE PROJECT IN TERMS OF RUPIA VALUE

(UNIT: One thousand Rupiah)

Category	1980/1981	1981/1982	1982/1983	1983/1984	1984/1985	1985/1986	1986/1987	TOTAL	REMARKS
Personnel cost	-	2,340	5,460	14,940	36,870	44,436	45,678	149,724	
Construction cost	700,000	225,900	598,955	162,471	3,900	87,300	77,850	1,856,376	
Operation cost	-	2,279	61,031	6,668	35,261	75,566	45,670	226,475	
Cost of receiving & installing equipment	-	-	30,000	-	10,000	19,000	4,000	63,000	
Cost of facility of Japanese experts	-	-	7,400	-	2,720	3,000	3,000	16,120	
Others	-	525	885	1,428	11,325	20,456	7,240	41,859	
PLANNED TOTAL	700,000	231,044	703,731	185,507	100,076	249,758	183,438	2,353,554	
ACTUAL TOTAL	700,000	112,915	668,754.71	160,739.50	97,415.27	192,949			
UNEFFECTIVE EXPENDITURE(Δ)	-	118,129	34,976.29	24,767.50	2,660.73	50,109			

THE RECORD OF DISCUSSIONS ON THE JAPANESE TECHNICAL
COOPERATION FOR THE PROJECT ON THE CHEMICAL INDUSTRY
TRAINING AND DEVELOPMENT CENTER

The Japanese Evaluation Team organized by the Japan International Cooperation Agency, and headed by Mr. Keiji IIMURA, visited the Republic of Indonesia from August 6 to August 15, 1986 for the purpose of identifying past achievements and future prospects of the Japan-Indonesia Technical Cooperation on the Chemical Industry Training and Development Center, based on the Record of Discussions signed on November 19, 1981 between the Japanese Implementation Survey Team and the Authorities concerned of the Government of the Republic of Indonesia.

Following the visit of the Japanese Evaluation Team, mentioned above, the Resident Representative of JICA Indonesia Office had a series of discussions with the Indonesian authorities concerned on the possible extension of the period of technical cooperation from November 19, 1986 based on the Joint Evaluation Report signed on August 14, 1986.

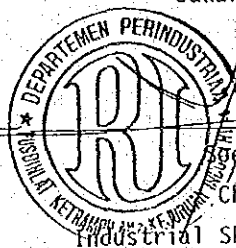
As a result of the discussions, both sides agreed to recommend to their respective governments that the period of the technical cooperation as stipulated in the Record of Discussions of November 19, 1981 be extended until May 18, 1989 and that the technical cooperation be carried out in accordance with the Attached Document in order to fully achieve the objectives which were planned in the said Record of Discussions.

Jakarta, October 22, 1986.



Hideo Endo

Hideo Endo
Resident Representative,
JICA Indonesia Office,
Japan.



Gebroto

Gebroto
Chief,
Industrial Skill and Vocational
Training Development Center,
Ministry of Industry,
Republic of Indonesia.

The Attached Document

I. The objectives of the technical cooperation during the extended cooperation period is to improve the training method and thus achieve the self-reliance by the Indonesians through the following activities.

(a) Academy course

Continuation of the academy courses in chemical engineering and mechanical engineering.

(b) Short-term course

Operation technology course and repair maintenance course for engineers and others.

(c) Technical Service

Preparation of technical service system, namely the seminars, technical consultation, and execution of laboratory tests mainly in the field of water treatment and industrial wastewater treatment.

II. Responsibilities to be assumed by both sides as follows.

1. Indonesian side

- (1) To secure the necessary counterpart personnel.
- (2) To secure the necessary running budget.
- (3) To secure the prompt custom clearance of the machinery and equipment provided by the Government of Japan.
- (4) To secure the timely presentation of A Forms relevant to this project.

ltb.



2. Japanese side

(1) Dispatch of experts

Long-term experts	- Leader	(1)
	- Chemical Engineering (A)	(1)
	- Chemical Engineering (B)	(1)
	- Organic Industrial Chemistry	(1)
	- Inorganic Industrial Chemistry	(1)
	- Mechanical Engineering (A)	(1)
	- Mechanical Engineering (B)	(1)
	- Instrument Engineering	(1)
	- Electrical Engineering	(1)
	- Coordination	(1)

Note: Short-term experts will be dispatched when necessity arises.

(2) Supply of machinery and spare parts

Note: As the main articles of machinery and equipment has been already provided, the supplementary equipment would be supplied.

(3) Training of counterpart personnel in Japan

III. Technical Cooperation Programme of the Project and The Tentative Implementation Programme are shown in the Annex A and B.

IV. Measures to be taken by both sides to the above Cooperation will be treated in the same manner prescribed in the articles of the Attached Document in the Record of Discussions signed on November 19, 1981.

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TECHNICAL COOPERATION PROGRAMME

ANNEX A

ITEM	YEAR MONTH																			
	1986			1987					1988				1989							
	11	12		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
I. Target	<ul style="list-style-type: none"> Improvement of training method and thus achieving self-reliance by Indonesians 																			
II. Activity																				
1. Academy course	<ul style="list-style-type: none"> Improvement of curricurms Improvement of training techniques Acquirement of the practical knowledge and techniques of chemical plant operation and maintenance 																			
2. Short-term Course	<ul style="list-style-type: none"> Operation technology course and repair maintenance course for engineers and others. 																			
3. Technical Service	<ul style="list-style-type: none"> Preparation of technical service system, namely the seminars, technical consultation, and execution of laboratory tests mainly in the field of water treatment and industrial waste-water treatment. 																			

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TENTATIVE IMPLEMENTATION PROGRAMME

ITEM	1986		1987					1988					1989						
	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
I. General Schedule																			
1st Grade																			
2nd Grade																			
3rd Grade																			
II. Indonesian Side																			
1. To secure running fund																			
2. To secure counterpart personnel																			
3. To secure prompt custom clearance																			
4. To secure timely presentation of A Forms																			
III. Japanese Side																			
1. Survey team																			
2. Japanese expert																			
1) Long term																			
Leader																			
Chemical engineering (A)																			
Chemical engineering (B)																			
Industrial chemistry (organic)																			
Industrial chemistry (inorganic)																			
Mechanical engineering (A)																			
Mechanical engineering (B)																			
Instrument engineering																			
Electrical engineering																			
Coordination																			
2) Short term																			
3) Counterpart training in Japan																			
4) Provision of machinery																			

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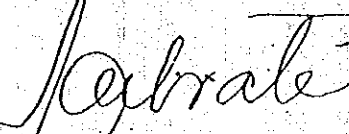

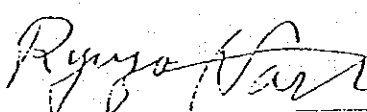
THE RECORD OF DISCUSSIONS BETWEEN THE JAPANESE IMPLEMENTATION SURVEY TEAM AND THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF THE REPUBLIC OF INDONESIA ON THE JAPANESE TECHNICAL COOPERATION FOR THE PROJECT ON THE CHEMICAL INDUSTRY TRAINING AND DEVELOPMENT CENTER

The Japanese Implementation Survey Team (hereinafter referred to as " the Team ") organized by the Japan International Cooperation Agency (hereinafter referred to as JICA) and headed by Dr. Ryuzo Naito, Senior Technical Advisor, JICA, visited the Republic of Indonesia from November 5 to 21, 1981 for the purpose of working out the details of the technical cooperation program concerning the Project on the Chemical Industry Training and Development Center.

During its stay in the Republic of Indonesia, the Team exchanged views and had a series of discussions with the Indonesian Authorities concerned in respect of the desirable measures to be taken by both Governments for the successful implementation of the above-mentioned Project.

As a result of the discussions, the Team and the Indonesian authorities concerned agreed to recommend to their respective Governments the matters referred to in the document attached hereto.

Jakarta, November 19, 1981



Dr. Ryuzo Naito
Leader,
Japanese Implementation Survey Team,
Japan International Cooperation Agency,
Japan

Ir. Soebroto
Chief,
Education & Training Center,
Ministry of Industry,
The Republic of Indonesia

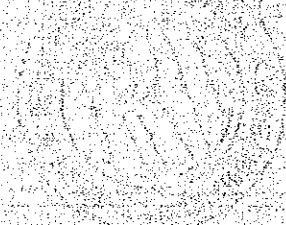
④ オリジナル R / D

(1981年11月)

MINISTRY OF FINANCE
DEPARTMENT OF THE GOVERNMENT
OFFICE OF THE SECRETARY
GENERAL SECRETARIAT

Reference is made to the letter of the Ministry of Education, dated 10/11/1961, regarding the proposal for the establishment of a Technical Institute for the training of technical staff in the field of electrical engineering. The Ministry of Education has requested the Ministry of Finance to sanction the proposal. The Ministry of Finance has examined the proposal and has found that the proposal is in accordance with the provisions of the Finance Act, 1961. The Ministry of Finance has approved the proposal and has directed the Ministry of Education to proceed with the implementation of the proposal. The Ministry of Finance has also directed the Ministry of Education to submit a detailed report on the progress of the implementation of the proposal to the Ministry of Finance.

Dated: 10/11/1961



K. B. K. K.

Secretary to the Government of India
Ministry of Finance
General Secretariat

THE ATTACHED DOCUMENT

I. COOPERATION BETWEEN BOTH GOVERNMENTS

1. The Government of Japan and the Government of the Republic of Indonesia will cooperate with each other in implementing the Technical Cooperation Project on the Chemical Industry Training and Development Center (hereinafter referred to as " the Project ") for the purpose of training engineers and technicians in the fields of chemical engineering and preparing technical service system for the local chemical industries, thereby contributing to the development of chemical industries in the Republic of Indonesia.
2. The Project will be implemented in accordance with the Master Plan which is given in Annex I.

II. DISPATCH OF JAPANESE EXPERTS

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense services of the Japanese experts as listed in Annex II through the normal procedures under the Colombo Plan Technical Cooperation Scheme.
2. Privileges, exemptions and benefits to be granted by the Government of the Republic of Indonesia to the Japanese experts and their families in the Republic of Indonesia will be no less favourable than those granted to experts of third countries or of international organizations performing similar missions, and will include the followings:
 - (1) Exemption from income tax and charges of any kind imposed on or in connection with the living allowances remitted from abroad in relation with the implementation of the Project;

- (2) Exemption from import and export duties and any other charges imposed in respect of personal and household effects which may be brought into from abroad or taken out of the Republic of Indonesia;
- (3) Exemption from import tax, import sales tax, sales tax, and other taxes and charges of any kind imposed on or in connection with the purchase in the Republic of Indonesia by the Japanese experts of one motor vehicle per each expert;
- (4) Free local medical services and facilities to the Japanese experts and their families.

III. PROVISION OF MACHINERY AND EQUIPMENT

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense such machinery, equipment and other materials necessary for the implementation of the Project as listed in Annex III, through the normal procedures under the Colombo Plan Technical Cooperation Scheme.
2. The articles referred to in 1 above will become the property of the Government of the Republic of Indonesia upon being delivered c.i.f. to the Indonesian authorities concerned at the ports and/or airports of disembarkation, and will be utilized exclusively for the implementation of the Project in consultation with the Japanese experts referred to in Annex II.

IV. TRAINING OF INDONESIAN PERSONNEL IN JAPAN

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to receive at its own expense the Indonesian personnel connected with the Project for technical training in Japan through the normal procedures under the Colombo Plan Technical Cooperation Scheme.
2. The Government of the Republic of Indonesia will take necessary measures to ensure that the knowledge and experience acquired by the Indonesian personnel from technical training in Japan will be utilized effectively for the implementation of the Project.

V. SERVICES FOR INDONESIAN COUNTERPART PERSONNEL AND ADMINISTRATIVE PERSONNEL

1. In accordance with the laws and regulations in force in the Republic of Indonesia, the Government of the Republic of Indonesia will take necessary measures to secure at its own expense necessary services for Indonesian counterpart personnel and administrative personnel as listed in Annex IV.
2. As to the Indonesian counterpart personnel, the Government of the Republic of Indonesia will endeavour to allocate the necessary number of suitably qualified personnel corresponding to each Japanese expert to be dispatched by the Government of Japan as specified in Annex II, for effective and successful implementation of the Project.

VI.

MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE
REPUBLIC OF INDONESIA

1. In accordance with the laws and regulations in force in the Republic of Indonesia, the Government of the Republic of Indonesia will take necessary measures to provide at its own expense:
 - (1) Land, buildings and facilities as listed in Annex V;
 - (2) Supply or replacement of machinery, equipment, instrument, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than those provided through JICA under III above;
 - (3) Transportation facilities and travel allowance for the Japanese experts for the official travel within the Republic of Indonesia;
 - (4) Suitably furnished accommodations for the Japanese experts and their families.

2. In accordance with the laws and regulations in force in the Republic of Indonesia, the Government of the Republic of Indonesia will take necessary measures to meet:
 - (1) Expenses necessary for the transportation within the Republic of Indonesia of the articles referred to in III above as well as for the installation, operation and maintenance thereof;
 - (2) Customs duties, internal taxes and any other charges, imposed in the Republic of Indonesia on the articles referred to in III above;
 - (3) All running expenses necessary for the implementation of the Project.

VII. ADMINISTRATION OF THE PROJECT

1. The Chief of Education and Training Center will bear overall responsibility for the implementation of the Project and the Director of the Chemical Industry Training and Development Center will be responsible for the administrative and managerial matters of the implementation of the Project.
2. Japanese Chief Advisor and other experts will provide necessary recommendation and advice to the Chief of Education and Training Center and to the Director of the Chemical Industry Training and Development Center on the technical matters concerning the implementation of the Project.
3. For the effective and successful implementation of the Project, a Joint Committee (hereinafter referred to as " the Committee ") will be established as referred to in Annex VI.
The Committee will have the functions to prepare the Annual Work Plan and consult any matters related to the implementation of the Project, and will be held when necessity arises.

VIII. CLAIMS AGAINST JAPANESE EXPERTS

The Government of the Republic of Indonesia undertakes to bear claims, if any arises, against the Japanese experts engaged in the Project resulting from, occurring in the course of, or otherwise connected with the discharge of their official functions in the Republic of Indonesia except for those arising from the wilful misconduct or gross negligence of the Japanese experts.

IX. MUTUAL CONSULTATION

There will be mutual consultation between the two Governments on any major issues arising from, or in connection with this Attached Document .

X. TERMS OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be basically five (5) years from November 19, 1981. However, there will be a general review by the Committee on the progress of the implementation of the Project after three (3) years from the commencement of the cooperation taking account of measures to be taken by two Governments in order to decide if the cooperation should be continued for two (2) more years.

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MASTER PLAN

1. Main functions of the Center are;
 - (1) to establish Academy Courses to train middle class engineers in the fields of chemical engineering and mechanical engineering,
 - (2) to conduct Short-Term Courses for engineers and technicians from industries and others
and
 - (3) to prepare technical service system to meet the technical requirements of the local chemical industries.
2. The training scheme of the Academy Courses is shown in the following table.

Note: Discussions on the actual planning of the Short-Term Courses are to be made between the Japanese and Indonesian authorities concerned in due course of time.

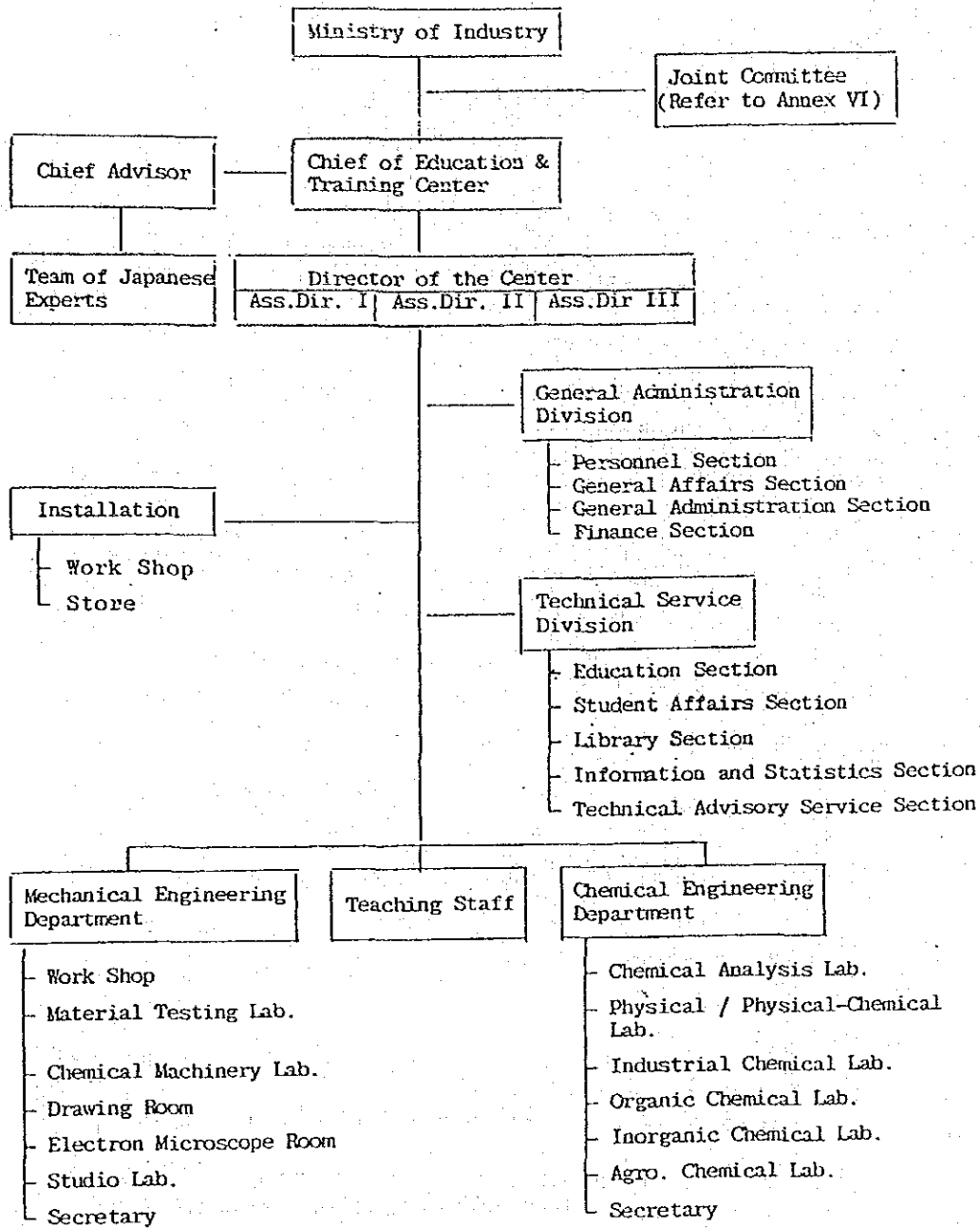
THE TRAINING SCHEME

Items Course	Period	Number of students and trainees to be enrolled	Qualification for entry	Training Target	Number of class
Academy Courses Chemical Engineering Course Mechanical Engineering Course	3 years	Students : 150 (Maximum) 25 students x 2 classes x 3 grades	1. Graduates from senior high schools or technical high schools 2. Those who are equivalent to the graduates from senior high school	To supply middle class engineers in the fields of operation, maintenance and engineering necessary for chemical industries by means of providing basic technical knowledge and ability on chemical industries	6 classes (Maximum) 2 classes per enrollment

1/1/

SP

3. Organization for Implementation



Foot Note: - Assistant Director I : Academic Affairs
 - Assistant Director II : Finance, Personnel and Administration Affairs
 - Assistant Director III : Student Affairs.

JAPANESE EXPERTS

Experts in the fields of:

1. Chemical Engineering (1)
2. Industrial Chemistry (2)
3. Mechanical Engineering (1)
4. Instrument Engineering (1)
5. Coordination (1)

- Note: (1) One of the above-mentioned experts will be appointed as the Chief Advisor.
- (2) Short-term experts may be dispatched, if necessary, for the installation of the equipment and machinery provided by the Government of Japan and for other purposes.

LIST OF MAIN ARTICLES

1. Chemical Analysis Lab.
 - (1) Potentiometer
 - (2) Centrifuge
 - (3) Magnetic Stirrer
 - (4) Drying Oven
 - (5) Rough Balance
 - (6) Glasswares and Chemicals for Chemical experiments

2. Physical/Physical Chemical Lab.
 - (1) Technical Balance weight set.
 - (2) Specific heat specimen set
 - (3) Optical benches with accessories
 - (4) Hook's law apparatus
 - (5) Wheatestone bridge
 - (6) Thermostat
 - (7) Equilibrium distillation still
 - (8) Victor Meyer apparatus
 - (9) Glasswares and Chemicals for Chemical experiments

3. Industrial Chemical Lab.
 - (1) Electrolysis apparatus
 - (2) Electro plating apparatus
 - (3) Pressure/Vacuum Pump
 - (4) Variable transformer
 - (5) Absorption apparatus
 - (6) Glasswares and Chemicals for Chemical testing

4. Material Testing Lab.
 - (1) Ultrasonic Flaw detector
 - (2) Metallurgical microscope
 - (3) Montring (mixer)

(cont'd)

5. Chemical Machinery Lab.
 - (1) Analytical balance
 - (2) Wet tester
 - (3) Heat exchanger
 - (4) Abbe refractometer
 - (5) Drying Oven

6. Drawing Room
 - (1) Drawing Instrument with accessories;
- triangles, scales, ruling pens, dividers,
compass, adjustable curves, lettering sets,
electric eraser, templates.

7. Inorganic Chemical Lab.
 - (1) Furnace (muffle)
 - (2) Thermal gravimetric analyser
 - (3) Glasswares and Chemicals for Chemical testing

8. Organic Chemical Lab.
 - (1) Distillation apparatus with accessories
 - (2) Ultra filtration apparatus with accessories.
 - (3) Rotary viscosimeter
 - (4) Surface tensiometer
 - (5) Refractometer
 - (6) Glasswares and Chemicals for Chemical testing.

9. Agro Chemical Lab.
 - (1) Incubator
 - (2) Autoclave
 - (3) Fermentator
 - (4) Refrigerator
 - (5) Titrimeter
 - (6) Glasswares and Chemicals for Chemical testing.

ANNEX - III

(cont'd)

10. Electron Microscope Room

- (1) Developer (film) with accessories
- (2) Glasswares and Chemicals for chemical experiments

11. Workshop

- (1) Frash machine
- (2) Lathe
- (3) Drill press
- (4) Milling machine
- (5) Power Hack Saw

12. Vehicles

13. Other Necessary Equipment.

LIST OF INDONESIAN STAFF

1. Director of the Center
2. Counterpart personnel to the Japanese experts
 - (1) At least ten (10) engineers corresponding to the fields of the experts as listed in Annex II.
 - (i) Chemical Engineering (2)
 - (ii) Industrial Chemistry (4)
 - (iii) Mechanical Engineering (2)
 - (iv) Instrument Engineering (2)
 - (2) Necessary number of technicians mutually agreed upon.
3. Administrative Staff
 - (1) Administration
 - (2) Accounting
 - (3) Clerical work
4. Other personnel mutually agreed upon as necessary.

LIST OF LAND, BUILDINGS AND FACILITIES

1. Space of land and buildings when necessity arises
2. Office rooms for the experts
3. Conference rooms
4. Library
5. Others

MEMBERS OF THE JOINT COMMITTEE

1. Chairman: Director General of Basic Chemicals Industry,
Ministry of Industry

2. Indonesian Side
 - (1) Chief of Education and Training Center
 - (2) Director of the Center
 - (3) Officials of the Ministry of Finance
 - (4) Officials of BAPPENAS
 - (5) Officials of SET/KAB
 - (6) The other personnel concerned

3. Japanese Side
 - (1) Chief Advisor
 - (2) The other experts and personnel concerned to be
dispatched by JICA, if necessary
 - (3) Resident Representative of Jakarta Office, JICA.

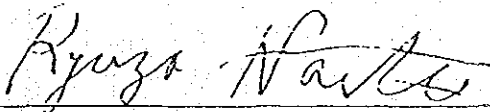
Note: Officer-in-charge of the Embassy of Japan will be able to attend the Joint Committee meetings as an observer.

TENTATIVE SCHEDULE OF IMPLEMENTATION AND TECHNICAL COOPERATION
PROGRAM OF THE TECHNICAL COOPERATION FOR THE PROJECT ON THE
CHEMICAL INDUSTRY TRAINING AND DEVELOPMENT CENTER

The Japanese Implementation Survey Team and the representatives of the Education and Training Center have jointly formulated the Tentative Schedule of Implementation and the Technical Cooperation Program of the Project as annexed hereto.

These have been formulated in connection with 1-2 of the Attached Document of the Record of Discussions signed between the Japanese Implementation Survey Team and the Education and Training Center for the Technical Cooperation Project of the Chemical Industry Training and Development Center in the Republic of Indonesia on the conditions that necessary budget will be allocated for the implementation of the Project, and are subject to change within the framework of the Record of Discussions when necessity arises in the course of implementation of the Project.

Jakarta, November 19, 1981



DR. RYUZO NAITO

Leader,
Japanese Implementation Survey Team,
Japan International Cooperation Agency,
Japan



IR. SOEBROTO

Chief
Education and Training Center,
Ministry of Industry,
The Republic of Indonesia



ANNEX - I
OPERATIVE SCHEDULE OF IMPLEMENTATION

Calendar Year	'19	'00	'01	'02	'03	'04	'05	'06	'07
Fiscal Year	1999	2000	2001	2002	2003	2004	2005	2006	2007
Phase	Preparation								
Building Construction									
Dispatch of Mission									
Academy Course									
General Schedule									
Long-Term Experts									
Chemical Eng.									
Industrial Eng.									
Instrumentation Eng.									
Mechanical Eng.									
Instrument Eng.									
Coordination									
Short-Term Experts									
Curriculum									
Training Materials									
Project Promotion									
Installation and Maintenance									
Training of Indonesian Personnel in Japan									
Provision of Equipment and Machinery									

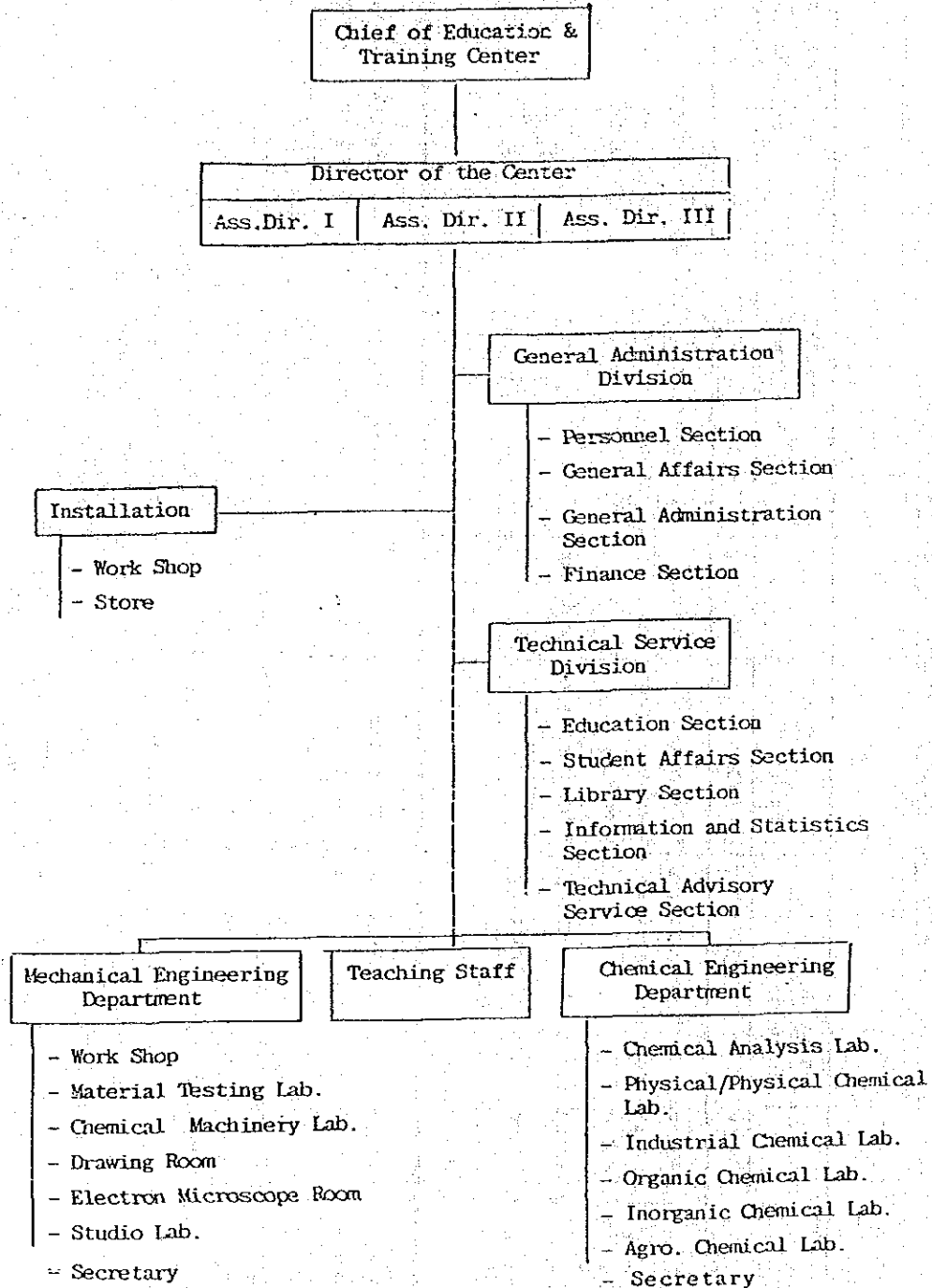
Foot Note: 1. This Schedule is subject to revision that necessary budget will be supplied for the implementation of the Project.
2. This scope of Technical Cooperation is subject to change within the margin of the provision given in the amount of financing.

Technical Cooperation Program of the Project

Phase fiscal year	Phase 0 Preparation		Phase 1 Basic Establishment		Phase 2 Development		Phase 3 Self-Reliance	
	1981	1982	1983	1984	1985	1986	1987	
A. Target	<ul style="list-style-type: none"> * Planning and preparation of the center operation policy * Arrangement of personnel * Preparation of training curriculums and materials 	<ul style="list-style-type: none"> * Establishment of the center operation policy * Mastering of training methodology 	<ul style="list-style-type: none"> * Improvement of training method 	<ul style="list-style-type: none"> * Further development of activities of the center 				
B. Technical Fields Academy Course	<ul style="list-style-type: none"> * Planning and preparation of the center operation policy * Recruitment of staff and establishment of organization * Recruitment of staff and establishment of organization * Preparation of curriculums * Planning and procurement of training facilities * Preparation of training materials 	<ul style="list-style-type: none"> * Establishment of the center operation policy * Mastering of training techniques by practical training facilities * Mastering of operation & maintenance techniques of training facilities * Master of the basic concept of chemical plant operation and maintenance 	<ul style="list-style-type: none"> * Improvement of curriculums * Improvement of training techniques * Acquisition of the practical knowledge and techniques of chemical plant operation and maintenance 	<ul style="list-style-type: none"> * Further development of activities of the academy course 				

ANNEX - III

1. Organization



Foot Note: - Assistant Director I : Academic Affairs
 - Assistant Director II : Finance, personnel and Administration Affairs
 - Assistant Director III : Student Affairs

2. Staffing Plan

Director of the center		(1)
Assistant Directors		(3)
General Administration Division	Head	(1)
Personnel Section		(3)
General Affair Section		(3)
General Administration Section		(3)
Finance Section		(3)
Technical Service Division	Head	(1)
Education Section		(3)
Student Affair Section		(3)
Library Section		(2)
Information and Statistic Section		(3)
Technical Advisory Service Section		(3)
Installation	Head	(1)
Work Shop		(3)
Store		(1)
	Total	<u>(37)</u>

Staffing for the chemical engineering, mechanical engineering, and development department, and teaching group.

I. Department of Chemical Engineering

1. Head of Department Professor/Engineer (1)

1.1. Chemical Analysis Lab.

a. Chief Lab. (1)

b. Assistant Chief (2)

c. Staff (2)

1.2 Physical/Physical Chemical Lab.

a. Chief Lab. (1)

b. Assistant Chief (2)

c. Staff (2)

1.3 Industrial Chemical Lab.

a. Chief Lab. (1)

b. Assistant Chief (2)

c. Staff (2)

1.4 Organic Chemical Lab.

a. Chief Lab. (1)

b. Assistant Chief (2)

c. Staff (2)

1.5 Inorganic Chemical Lab.

a. Chief Lab. (1)

b. Assistant Chief (2)

c. Staff (2)

1.6 Agro. Chemical Lab.

a. Chief Lab. (1)

b. Assistant Chief (2)

c. Staff (2)

1.7 Secretary (2)

Total (33)

=====

II. Department of Mechanical Engineering

1.	Head of Department	Professional/Engineer	(1)
1.1	Work Shop		
	a. Chief Lab.		(1)
	b. Assistant Chief		(2)
	c. Staff		(2)
1.2	Material Testing Lab.		
	a. Chief Lab.		(1)
	b. Assistant Chief		(2)
	c. Staff		(2)
1.3	Chemical Machinery Lab.		
	a. Chief Lab.		(1)
	b. Assistant Chief		(2)
	c. Staff		(2)
1.4	Drawing Room		
	a. Chief Lab.		(1)
	b. Assistant Chief		(2)
	c. Staff		(2)
1.5	Electron Microscope Lab.		
	a. Chief Lab.		(1)
	b. Assistant Chief		(2)
	c. Staff		(2)
1.6	Studio Lab.		
	a. Chief Lab.		(1)
	b. Assistant Lab.		(2)
	c. Staff		(2)
1.7	Secretary		(2)
		Total	(33)
			=====
		Grand Total	(103)
			=====

ANNEX - IV ANNUAL WORK PLAN FICH NOVEMBER 1981 to MARCH 1983

Scope of Technical Cooperation	1981		1982		1983			
	Apr. 1/4	2/4	3/4	Jan. 4/4	Apr. 1/4	2/4	3/4	Jan. 4/4
1. Indonesian Side			Signing of R/D					
(1) Receiving of Japanese Experts								
(2) Training of counterpart persn. in Japan								
(3) Acceptance of mach. and equipment								
(4) Staff recruitment								
(5) Organizational set-up								
(6) Preparation of text book								(Preparation of A-4 Form, etc.)
2. Japanese Side								
(1) Dispatch of Japanese experts								
a) Survey on curricula								
b) Survey on training materials								
c) Project promotion								
d) Chemical Eng.								
e) Industrial Chemistry (organic)								
d) Industrial Chemistry (inorganic)								
(2) Training of counterpart personnel in Japan								
(3) Provision of machinery and equipment								
a) Procurement/shipping								
b) Installation								

5 - 6 persons

Foot Note : 1. This schedule is subject to conditions that necessary budget will be acquired for the implementation of the project.
 2. This Scope of Technical Cooperation is subject to changes within the scope of provisions given in the Record of Discussions

⑤ 技術移転状況表

The Rule of Writing of Evaluation Sheet

Column I. Equipment

0. Not yet
1. Designed or Ordered
2. In shipping
3. Received at the project site
4. Tested
5. Operated in routine

Column II. Practice note (Text book of Practice)

0. Not yet
1. In preparation in English
2. In preparation in Indonesian
3. Completed in English
4. In translation to Indonesian
5. Completed in Indonesian

Column III. Technical Transfer to G/P

1. Not yet
2. Explanation and testing
3. In training (implementation of operating)
4. Completion (Already applied in routine)

Column IV. Final improvement

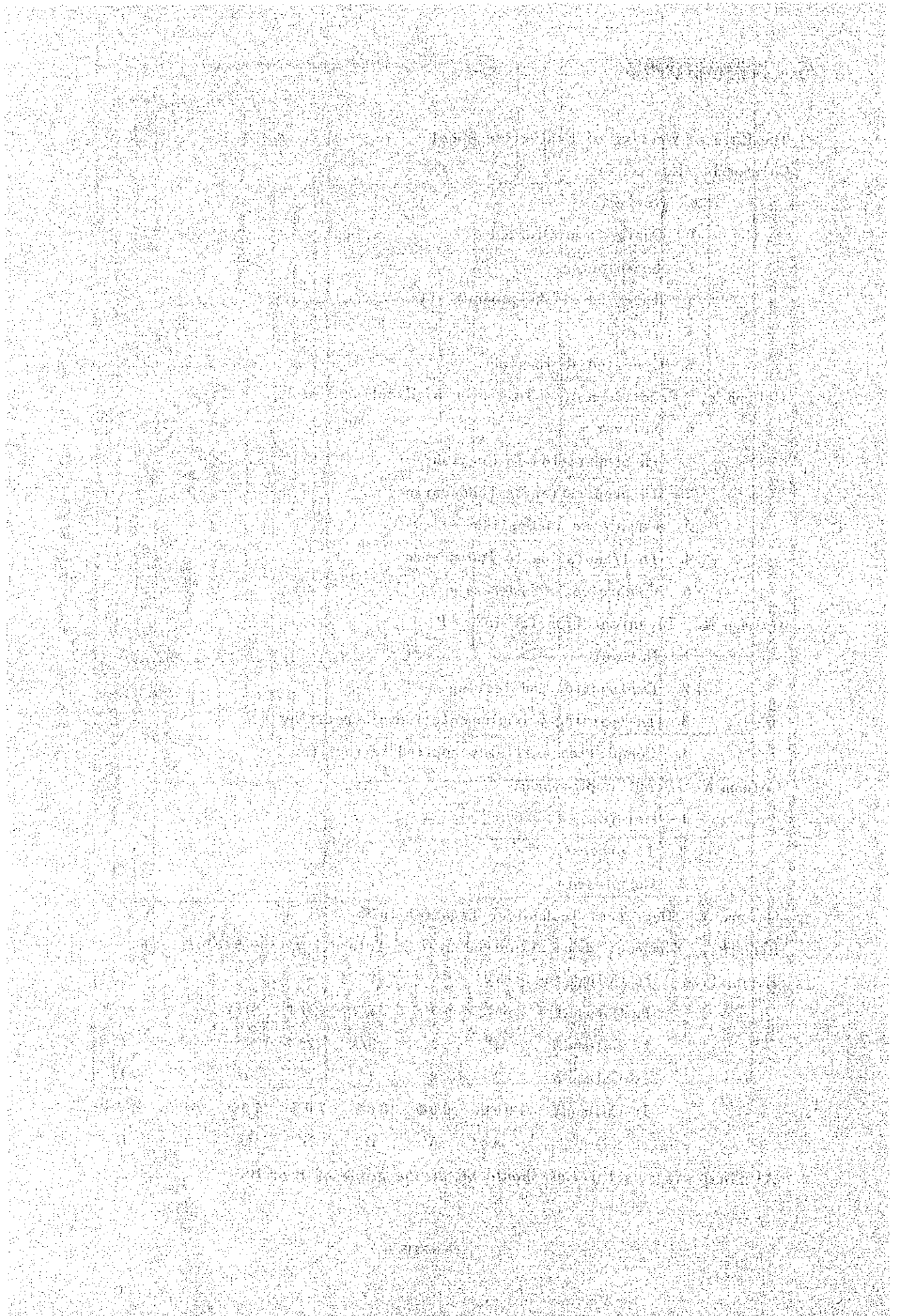
1. Not yet
2. In process
3. Completed

Column V. Degree of Technology Transfer in %

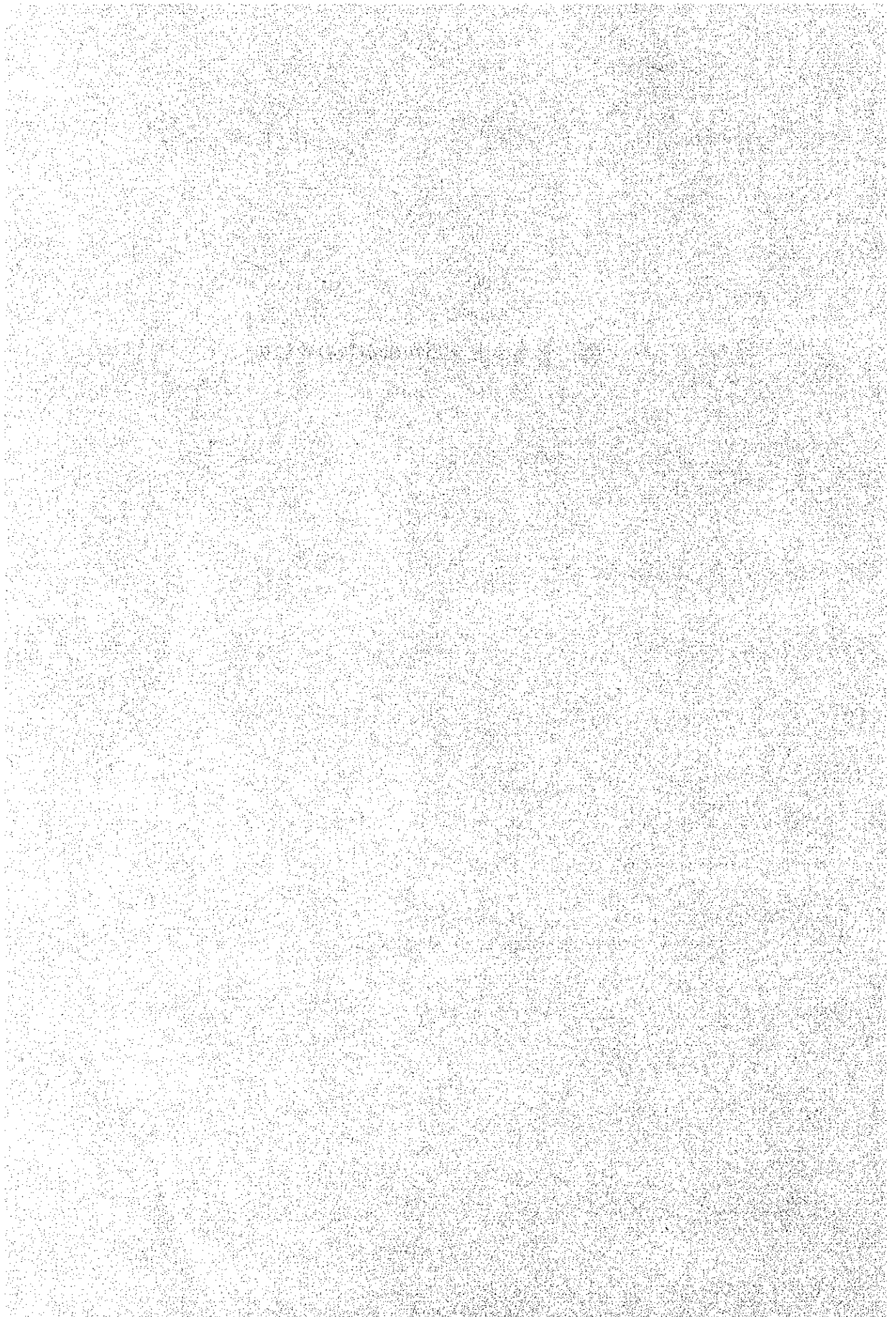
Remarks. Comment about situation at / in future (at the end of team)

Estimation : In Column I	5	5	4	4	4	3	1/2/3
In Column II	5	5	3/4	3/4	1/2	1/2	1/2
In Column III	4	3	3/4	2/3	2	2	1
In Column IV	3	2	1	1	1	1	1
In Column V	100%	90%	80%	70%	60%	50%	40%
	A	A'	B	B'	C	C'	D

At final stage, all items should be at the grade of B or B'



⑥ 北スマトラ州知事からの表彰状





Piagam Penghargaan Karya Basa

Gubernur Kepala Daerah Tingkat I Sumatera Utara
menyampaikan Penghargaan kepada

Nama : Japan International Cooperation Agency
 (JICA)
Perusahaan :

Alamat : Jln. Medan Tenggara bu Medan

yang dengan tulus dan penuh pengabdian telah menyumbangkan tenaga dan pikiran dalam pelaksanaan pembangunan sektor industri di daerah Sumatera Utara sebagai bagian dari pengembangan industri nasional. Semoga prestasi baik ini dapat ditingkatkan dan berkesinambungan dalam pengembangan pembangunan di Sumatera Utara.

Medan, 12 Agustus 1987

Gubernur Kepala Daerah Tingkat I
Sumatera Utara



Kaharudin Nasution
-Kaharudin Nasution-

JICA