

AIT
ANNUAL
REPORT
1980



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 Asian Institute of Technology

Notes

- *Ex Officio Member* :
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 normally after the January Board meeting.
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Principal Academic Developments During 1980

Division of Computer Applications

The year 1980 has been an important one for the relatively new Division of Computer Applications. The first batch of students admitted in January 1979 received their Master's degrees at the August 1980 graduation. In the September term, the first Doctoral Student was admitted in this Division.

Division of Energy Technology

In January 1980, the first 20 students began their studies in the new Division of Energy Technology. In addition to the three faculty members seconded to this Division, the French Government has given a grant for the establishment of an Energy Park equipped with a valuable set of solar and wind energy devices for demonstration and research purposes.

In July the Institute concluded an agreement with the Government of the Federal Republic of Germany to fund construction of an Energy Building to house the Division of Energy Technology. The agreement also calls for joint research projects between German and AIT scientists, the exchange of scientists and the procurement of necessary equipment for the Energy Building.

The Continuing Education Center

The Continuing Education Center (CEC) started to operate in January 1980 when Dr Nicanor C. Austriaco assumed his duties as CEC Director. During the year, steps were taken to establish the base at which the Center will pursue its objectives. Information was gathered on technical topics which are of prime relevance to the professional development of engineers in the region. Establishment of a network of persons/ organizations in the region, who will act as coordinators or co-organizers of AIT country activities in continuing education, was started with the identification of those from Bangladesh, Pakistan, Philippines and Republic of China. (Preparation of a 'Roster of Experts' in the region who could be tapped as CEC special lecturers and development of comprehensive mailing lists for CEC programs are in progress.)

During the year, steps were taken to seek approval from the Royal Thai Government to undertake the organization of a 1-year training project for various government officials and farmer leaders involved in the water resource development of Northeast Thailand. In fact, design of the program has been started awaiting the imminent approval of the US\$180,000 project. The project is jointly undertaken by the Agriculture and Food Engineering Division and the Continuing Education Center.

The Continuing Education Center has also established ties with other international organizations for the purpose of establishing regional projects and jointly seeking funding sponsors.

- (i) International Center for Theoretical Physics, Italy – jointly developing a short course on Systems Analysis to be possibly funded by UNDP through UNESCO.
- (ii) University of Wisconsin-Extension, Madison, U.S.A. – developing a roving type of seminar for engineers to be possibly funded by the National Science Foundation, U.S.A.
- (iii) Ecole Nationale des Ponts et Chaussees/Centre d'Actualisation Scientifique et Technique, France – jointly developing a roving type of seminar for engineers to be possibly funded by the French Government.

A special program is being developed by the French Cultural Service in Bangkok and the Continuing Education Center whereby, under French Government sponsorship, the CEC arranges short visits of Asians to AIT, in particular to the AIT Energy Park.

Library and Regional Documentation Center

As of December 1980, the library collections included the following:

Books and bound journals	126,483	volumes
Maps	1,419	sheets
Microfilms	655	reels
Microfiches	3,138	titles
Periodicals	2,083	titles
Vertical files	5,125	items

During 1980 the Regional Documentation Center had more than 1,250 subscribers in 91 countries in Asia, the Pacific region, Africa, North and South America, and Europe.

The four information centers are:

- *The Asian Information Center for Geotechnical Engineering, AGE.
- *The International Ferrocement Information Center, IFIC.
- *The Renewable Energy Resources Information Center, RERIC.
- *The Environmental Sanitation Information Center, ENSIC.

Under construction is a new Library, donated by Japan which will house a library block with a capacity for 250,000 books.

The Language and Media Center will be re-organized into the English Language Center, ELC, and the Office for Academic Services, OAS.

The OAS is to be administered by a Coordinator who will have the responsibility for providing the services inherited from the Media Center.

Dr Murtagh J. Murphy has been seconded by the British Council beginning in January 1981, as the first Director of the ELC.



The Regional Computer Center

The year 1980 was a very significant one for the Regional Computer Center (RCC). In January, the unique and important partnership between AIT, the AIT Foundation, IBM A/FE, and USAID has entered the second five-year agreement with considerable upgrade in facilities as well as diversification of activities. In May, the IBM A/FE loaned computer system 370/145 has been replaced by a fully configured IBM system/3031 with 6 million bytes of main storage. This is approximately four times bigger and faster than the previous one. Including contributions from AIT and USAID, the new computer system will have over 3,000 million bytes of on-line disk storage, 8-tape drives, over 50 video display terminals, 2 highspeed printers, interactive

graphic equipment and other standard on-and off-line peripheral equipment. IBM A/FE is continuing its financial support and the secondment of skilled computer personnel for the next five years.

Under the new partnership with USAID, AIT will be the center for the transfer of an advanced technology having exciting and far-reaching implications for Asia and the developing world. USAID is funding the establishment at AIT-RCC a program to provide training in the techniques and applications of LANDSAT based remote sensing technology. The US\$5.6 million grant from USAID is providing staff, equipment, and fellowships for a six-year program. The faculty members (five from the US) are expected to join AIT at the end of 1981, and the training program is expected to be operational in the beginning of 1982.

Faculty & International Research Staff

The Government of Italy joined the AIT family during the year by seconding its first faculty member to the Division of Geotechnical & Transportation Engineering. Of the 22 nationalities represented by the faculty, Thailand led the way with 17 faculty members, followed by Australia and Japan with six faculty members each, the United Kingdom with five faculty members and France with four. To keep pace with the increas-

ing number of students, the year 1981 looks much brighter, with Austria indicating it will second one faculty member, Belgium one, and the United States sending one energy expert and five remote sensing experts. In the private sector Shell International Petroleum Corporation will be seconding one faculty member. There have been discussions with the Republic of Korea to second faculty members to the Institute.

Faculty and International Research Staff During 1980

Country of Origin	January Term			May Term			September Term		
	Faculty	Staff	Total	Faculty	Staff	Total	Faculty	Staff	Total
Australia	3	-	3	4	-	4	6	-	6
Bangladesh	1	-	1	1	-	1	-	-	-
Belgium	1	-	1	1	-	1	2	-	2
Canada	1	-	1	1	-	1	1	-	1
China, Republic of	1	-	1	1	-	1	1	-	1
Denmark	2	1	3	2	1	3	2	1	3
France	4	-	4	4	-	4	4	-	4
Germany	3	-	3	3	-	3	3	-	3
India	3	1	4	3	1	4	3	-	3
Israel	1	-	1	1	-	1	1	-	1
Italy	-	-	-	-	-	-	1	-	1
Japan	6	-	6	6	-	6	6	-	6
Nepal	1	-	1	1	-	1	1	-	1
Netherlands	1	-	1	-	-	-	-	-	-
Pakistan	-	-	-	-	-	-	1	-	1
Philippines	2	-	2	2	-	2	2	-	2
Sri Lanka	3	-	3	3	-	3	3	-	3
Switzerland	1	-	1	2	-	2	2	-	2
Thailand	14	3	17	14	3	17	16	1	17
U. K.	6	-	6	6	-	6	5	-	5
U. S. A.	2	-	2	2	-	2	2	-	2
Vietnam	1	-	1	1	-	1	1	1	2
TOTALS	57	5	62	58	5	63	63	3	66

Students

Number of Students by Country in 1980

COUNTRY	JANUARY	MAY	SEPTEMBER
Afghanistan	6	5	3
Bangladesh	58	41	56
Brunei	2	1	1
Burma	4	3	5
Ghana			2
Hong Kong	38*1	29*1	28
Indonesia	31	19	39
Iran	2	1	1
Japan	3	2	6
Korea	8	5	7
Malaysia	30	23	23
Nepal	14	9	24
Pakistan	36	24	28
Papua New Guinea	1		1
Philippines	68	51	51
Rep. of China	50	31	43
Singapore	3	1	2
Sri Lanka	58	36	54
Thailand	117*3	79*2	104*2
U. S. A.	1	1	2
Vietnam	7	6	7
Total	546*4	372*3	493*2

Student Enrollments in 1980 by Division

	January Term					May Term					September Term				
	Dip.	Masters	Doctors	Other	Totals	Dip.	Masters	Doctors	Other	Totals	Dip.	Masters	Doctors	Other	Totals
Agricultural and Food Engineering	(1)1	(34)32	2	-	70	2	62	1	-	65	(6)1	36	1	-	44
Computer Application	*1	(36)27	-	(9)	72*1	1*1	57	-	(8)6	72*1	2	28	(1)	1	32
Energy Technology	-	(20)	-	-	20	-	18	-	-	18	-	18	-	-	18
Environmental Engineering	-	46*1	4	-	50*1	-	26	4*1	(1)	31*1	-	(33)21*1	(2)3	-	59*1
Geotechnical and Transportation Engineering	10	80	1	1	92	-	45	1	-	46	(5)	(44)36	1	-	86
Human Settlements Development	1	59	-	2	62	1	(1)30	-	2	34	(3)	(29)32	-	-	64
Industrial Engineering and Management	-	48*1	6	-	54*1	-	28	(1)5	-	34	1	(26)25	6	-	58
Structural Engineering and Construction	-	*(1)47	1	-	48(*1)	1	24*1	1	-	26*1	(2)	(35)22*1	(2)1	(1)	63*1
Water Resources Engineering	(13)	(4)54	4	3	78	13	30	3	-	46	(4)	(37)25	3	-	69
Totals	(14)12*1	(95)393*2	18	(9)6	546*4	18*1	(1)320*1	(1)15*1	(9)8	372*3	(20)4	(204)243*2	(5)15	(1)1	493*2

*AIT Staff. () The first number is the total enrollment. The number in parenthesis is the new intake in the particular term.

Graduation 1980



The year 1980 witnessed the 2,000th graduate from the Institute. A total of 268 degrees and diplomas were awarded, bringing the total number of graduates to 2,052.

Four Doctoral degrees, 162 Master's degrees, 11 Diplomas of AIT and one Honorary Doctor of Technology degree were conferred during the 30th Graduation Ceremony on April 25.

Dr Utai Voodhigula, former Dean of the Institute when it was known as the SEATO Graduate School of Engineering, was awarded the honorary degree of Doctor of Technology.

Receiving Doctor of Engineering degrees were Mr Tran Ngoc Thanh of Vietnam, Mr Coomaraawamy Sivandran of Sri Lanka and Mr Pichit Sukcharoenpong of Thailand.

During the 31st Graduation on August 13, one Doctoral degree, 72 Master's degrees and 18 Diplomas were awarded. Mr Vu Ann Tuan of Vietnam received a Doctoral degree from the Division of Environmental Engineering.

Dr Kasem Suwanagul, Rector of Chulalongkorn University, Bangkok, delivered the Commencement Address.

1980 Graduates Record

Degree	Graduation	COUNTRY																DIVISION							Totals			
		Afghanistan	Bangladesh	Hong Kong	India	Indonesia	Iran	Japan	Korea	Malaysia	Nepal	Pakistan	Papua New Guinea	Philippines	Republic of China	Singapore	Sri Lanka	Thailand	Vietnam	Agri. & Food Eng.	Comp. Appli.	Envi. Eng.	Geo. & Trans. Eng.	Human Settl Dev.		Ind. Eng. & Mgt.	Str. Eng. & Cons.	Water Res. Eng.
M.Eng	April	2	9	1	6	6		1	2	7	3	8		13	22	2	17	25		5	11	31	4	19	22	23	124	
	August	1	2		8		1			4		7		11	2		6	10		23	15	2	4		2	1	5	52
M.Sc.	April		3	2	3	2			1		1	4	1	2	1		5	13		1		8	4	25				38
	August		3		2				1	2	1	1					1	9		3	9	4	3	1				20
D.Eng.	April																1	2		1			1			1		4
	August																		1			1						1
Dip. AIT	April		7			3											1						8	1			2	11
	August		15		2				1											1	2			1		1	13	18
Totals		3	39	3	21	11	1	1	5	13	5	20	1	26	25	2	31	59	2	34	26	26	51	32	22	24	53	268

Continuing Education

The Continuing Education program has expanded so rapidly in the past several years that it was deemed necessary to name a Coordinator for the various conferences, seminars, short courses and workshops. In January, Dr Nicanor Austriaco was appointed

Director of the Continuing Education Center. Besides the conferences, workshops and seminars listed below, there have been private and government organizations who have availed themselves of the excellent facilities in the AIT Center.

Conferences, Workshops and Seminars in 1980*

Division/ Center	Title	Dates
AFE	1. Final Meeting on the Global Network of Projects on Wastewater Reuse.	28 Jan. – 1 Feb.
CA & RCC	1. Seminar on Information Systems Project Management.	28 Jan. – 1 Feb.
	2. Seminar on Managing Computer Center.	23 – 27 June
	3. Seminar on Data Base Management System.	25 Aug. – 3 Sept.
	4. Seminar on Software Engineering.	10 – 14 November
CEC	1. Audiovisual Materials and Techniques for Instructors. (with LMC)	15 Apr. – 24 May
	2. Water Pollution Control Techniques. (with ENV)	1 – 30 June
	3. Librarianship and Documentation. (with LRDC)	1 – 30 June and 6 – 31 October
ENV	1. Seminar on Water Pollution Control and Management.	24 – 29 November
ET	1. Symposium on Solar Science and Technology.	25 Nov. – 4 Dec.
	2. SOLEX'80: An Exhibition of Renewable Energy Equipment.	25 Nov. – 4 Dec.
GTE	1. International Conference on Engineering for Protection from Natural Disasters. (with SEC)	7 – 9 January
	2. Seminar on Geotechnical Engineering in Practice.	29 – 31 March
	3. Sixth Southeast Asian Conference on Soil Engineering.	19 – 23 May
	4. Seminar on Natural Resources and Their Development.	29 – 31 July
	5. International Symposium on Problems and Practice of Dam Engineering.	1 – 5 December
IE	1. International Conference on Industrial Systems Engineering and Management in Developing Countries.	3 – 6 November
SEC	1. International Conference on Engineering for Protection from Natural Disasters. (with GTE)	7 – 9 January

*This list does not include ½ to 1 day lectures arranged by every division using experts passing through Bangkok.

Sponsored and Grant Research

Sponsored research is an important activity at AIT because it:

- enables the Institute to contribute to the solution of urgent problems impeding the development of the region.
- brings the faculty into working contact with development agencies, government departments and practitioners in engineering and planning.
- provides topics for student thesis research.
- provides an additional source of income to the Institute.

The amount of sponsored and grant research increased significantly during 1980. During the year contracts completed and in-progress amounted to more than US\$3.3 million. Details of these projects are given in the following table.

In addition to external sponsorship of research, AIT makes available a small sum each year to support promising research projects proposed by younger members of the Faculty.

Contract and Grant Research Projects Completed and In-Progress During 1980

Title	Sponsor	Principal Investigator(s)	Amount US\$	Status
<u>DIVISION OF AGRICULTURAL AND FOOD ENGINEERING</u>				
1. Solar Power Water Pump Project	Shell Company of Thailand	Prof. Cowell	8,000	Completed
2. Solar Food Dehydrator	U.S. Peace Corps, Bangkok Office	Dr Singh	967	Completed
3. Manual Soybean Seeder	Canadian Embassy, Bangkok, Thailand	Dr Singh	1,600	In-Progress
4. Mechanics of Hammer Mill Grinding of Grains as Related to their Mechanical Properties	AIT	Dr Jindal	4,000	In-Progress
5. Recycling Urban and Rural Nightsoil in Thailand	International Development Research Centre (IDRC), Canada	Dr Edwards Dr Chongrak	93,844	In-Progress
6. Pedological Soil Tests	Lahmeyer International, GMBH	Dr Apichart	13,613	In-Progress
7. Small Scale Fishery Project in Pathum Thani Province, Central Thailand: A Socio-Economic and Technological Assessment of Status and Potential	Overseas Development Administrations (ODA), U. K.	Dr Edwards Dr Chongrak Dr Vokes Dr Weber	81,331	In-Progress
8. Integrated Farm Unit	Kamol Kij Co., Ltd., Bangkok. International Center for Living Aquatic Resources Management (ICLARM)	Dr Edwards	1,941	In-Progress
9. Fertilizer and Water Management Effects on Yield, Mineral Composition, Protein Production and Protein Quality of Tropical Food Crops	Danish International Development Agency (DANIDA)	Dr Eppendorfer	52,190	In-Progress

Title	Sponsor	Principal Investigator(s)	Amount US\$	Status
10. Farm Machinery	Japan International Cooperation Agency (JICA)	Prof. Konaka	2,025	In-Progress
11. Small Scale Integrated Farm	Ministry of Foreign Affairs, The Netherlands	Dr Edwards Dr Apichart Dr Eppendorfer Dr Singh	39,991	In-Progress

DIVISION OF ENERGY TECHNOLOGY

1. The Development of Low Cost Rice Dryer, Phase I	IDRC	Dr Exell	25,590	Completed
2. The Design and Development of Solar Powered Refrigerator	ODA	Dr Exell	24,470	In-Progress
3. The Development of Low Cost Rice Dryer, Phase II	IDRC	Dr Exell	100,000	In-Progress
4. Photo Cell Test Bed Construction	Government of France	Dr Follea	10,784	In-Progress

DIVISION OF ENVIRONMENTAL ENGINEERING

1. Palm Oil Waste Treatment Study in Malaysia and in Thailand	IDRC	Dr Thanh Mrs Samorn Dr Lohani	61,225	Completed
2. Monitoring and Evaluation of Village Demonstration Plants and Slow Sand Filtration Project (Phase II)	Ministry of Public Health, Thailand	Dr Thanh Mrs Samorn	10,850	In-Progress
3. Heavy Metals, DDT and PCBs in the Upper Gulf of Thailand (Phase II)	National Environment Board of Thailand (NEB)	Dr Chongrak Dr Lohani Mrs Samorn	47,000	In-Progress
4. Mathematical Optimization for Regional Water Quality Management: A Case Study of Chao Phraya River (Phase II)	NEB	Dr Lohani Dr Thanh Mrs Samorn	16,365	In-Progress
5. Recycling Rural and Urban Nightsoil in Thailand	IDRC	Dr Chongrak Dr Edwards	143,064	In-Progress
6. In-Plant Evaluation and Treatment Feasibility Study of Wastewater at Shell "CNS Installation"	Shell Company of Thailand	Dr Thanh Mrs Samorn	21,725	In-Progress
7. Measurement of Air Emission at Lever Brothers Company	Lever Brothers Company	Dr Thanh Mrs Samorn Dr Lohani	22,400	In-Progress
8. A Measurement of Vehicle Exhaust Emission	Caltex Company Thailand	Mrs Samorn	17,750	In-Progress

Title	Sponsor	Principal Investigator(s)	Amount US\$	Status
<u>DIVISION OF GEOTECHNICAL AND TRANSPORTATION ENGINEERING</u>				
1. Research Related to Bored Piles in Thailand	Fondisa Far-East Co.,Ltd.,	Prof. Balasubramaniam	3,700	Completed
2. Geotechnical Observations on Samples from Deep Bored Holes at Memorial Bridge Site	Norconsult-PAE-MEC-Joint Venture	Prof. Balasubramaniam Mr Sataporn	4,650	Completed
3. Evaluation of Soil Parameters for Finite Element Analyses of an Embankment Dam for San Roque Project, Philippines	Electro Consult, Milan	Prof. Balasubramaniam Mr Sataporn	6,150	Completed
4. Geotechnical Parameters of Soils for the Upper Quae Yai Dam	Electricity Generating Authority of Thailand (EGAT)	Prof. Balasubramaniam Mr Sataporn	2,775	Completed
5. Geotechnical Parameters of Soils and Rocks from Lang Suan Dam, Thailand	EGAT	Prof. Balasubramaniam Dr Brenner Dr Campbell	6,750	Completed
6. Monitoring the Bangkok Traffic Management Project	British Transport and Road Research Laboratory	Prof. Jones	71,500	Completed
7. Determination of In-situ Modulus of the Foundation Rock at Lang Suan Dam Site	EGAT	Dr Brenner	4,325	Completed
8. Monitoring of Effects of Construction Activities on the Shell Building, Wireless Road, Bangkok	The Siam Cement Co., Ltd.	Dr Brenner Dr Akagi	13,339	Completed
9. Strength Parameters of Soils for Bangkok Mass Transit Project	K. Engineering Consultants Co., Ltd., Bangkok	Prof. Balasubramaniam Mr Sataporn	1,680	Completed
10. Geotechnical Properties of Soils from Ban Tha Si	EGAT	Prof. Balasubramaniam Mr Sataporn	3,200	Completed
11. Geotechnical Parameters for Slope Stability Analysis of the Mae Moh Lignite Deposit	Universal Exploration Co., Ltd., Bangkok	Prof. Balasubramaniam Mr Sataporn	1,560	Completed
12. Effective Stress Strength Parameters of Soil Samples from Multi Storey Hotel Cum Shopping Complex, North Bridge, Coleman Street, Singapore	Fondisa Far East Co., Ltd.	Prof. Balasubramaniam Mr Sataporn	6,300	Completed
13. Investigation of Land Subsidence Caused by Deep Well Pumping in the Bangkok Area (Phase II)	NEB	Dr Prinya Prof. Balasubramaniam Dr Brenner Dr Akagi	176,123	Completed

Title	Sponsor	Principal Investigator(s)	Amount US\$	Status
14. Evaluation of Performance of a Proposed Reservoir at Bang Pakong Thermal Plant, Thailand	EGAT	Dr Premchitt Mr Prida Prof. Balasu-bramaniam	40,204	In-Progress
15. Site Investigation for Power House Site at Chao Phraya Project	EGAT	Prof. Balasu-bramaniam Mr Sataporn	19,862	In-Progress
16. Geotechnical Aspects of Ban Tha Si Project Stage II	EGAT	Prof. Balasu-bramaniam Mr Sataporn	2,865	In-Progress
17. Geotechnical Aspects Related to Construction Material for Clay Core Kud Project	Royal Irrigation Department of Thailand (RID), SEATEC	Prof. Balasu-bramaniam Mr Sataporn	5,000	In-Progress
18. Geotechnical Properties of Soils for Upper Quae Yai Dam (Phase II)	EGAT	Prof. Balasu-bramaniam Mr Sataporn	11,880	In-Progress
19. Investigation of Land Subsidence Caused by Deep Well Pumping in the Bangkok Area (Phase III)	NEB	Dr Prinya Prof. Balasu-bramaniam Dr Brenner Dr Akagi	97,622	In-Progress
20. Rural Roads and Poverty Alleviation in Thailand	International Labour Organization	Prof. Jones	3,000	In-Progress

DIVISION OF HUMAN SETTLEMENTS DEVELOPMENT

1. Case Studies of Progressive Approaches to Slums and Squatter Settlements in Asia and the Pacific	Canadian International Development Agency (CIDA)	Dr Angel	7,000	Completed
2. A Rural Development Model for Sri Lanka	CIDA	Dr Dias	5,000	Completed
3. Selection of Optimal Public Investment Patterns Based on Indices for Measuring the Quality of the Urban Living Environment : A Case Study in Metropolitan Manila	CIDA	Dr Kaji	6,500	Completed
4. The Position of Women and their Contribution to the Improvement of Low-income Residential Areas: The Case of the Klong Toey Slum, Bangkok	CIDA	Dr Weber Mrs Hermance	4,000	Completed
5. Local Participation in Rural Development Planning in Northeast Thailand	CIDA	Dr Weber	5,000	In-Progress
6. Appropriate Technology in Village Development: A Socio-economic Analysis of Small-scale Rice Mills in Malaysia	CIDA	Dr Vokes	6,100	In-Progress

Title	Sponsor	Principal Investigator(s)	Amount US\$	Status
7. Local Participation in Rural Development Planning in West Malaysia	CIDA	Dr Weber	7,700	In-Progress
8. Monitoring and Evaluation of the Building Together Project in Bangkok	CIDA	Dr Angel	4,000	In-Progress
9. Small-scale Fishery Project in Pathum Thani Province, Thailand	ODA	Dr Vokes	84,258	In-Progress
10. Monitoring the Implementation of Production Programs in Self-help Land Settlement Projects in Thailand	Deutsche Gesellschaft fur Technische Zusammenarbeit, (GTZ)	Dr Weber	44,000	In-Progress
11. Tambon Information Center Project	Canadian Embassy, Bangkok	Dr Dias	12,050	In-Progress
12. A Rural Development Training Manual	CIDA	Dr Dias	15,000	In-Progress
13. The Chinese Shophouse in Southeast Asia: Its role in Urban Development	CIDA	Mr Kammeier	5,000	In-Progress
14. Urban Land Pooling Research and Demonstration Project	CIDA	Mr Archer	5,000	In-Progress
15. Village Technology, Pathum Thani Province	CIDA	Dr Dias	7,340	In-Progress
16. Building Together Mutual Aid Housing Project	CIDA	Dr Angel	21,370	In-Progress

DIVISION OF INDUSTRIAL ENGINEERING AND MANAGEMENT

1. A Study of Energy Consumption Pattern and Its Potential Savings in Selected Industry in Thailand	National Energy Administration, Thailand	Prof. Pakorn Dr Tabucanon	5,911	Completed
2. The Role of Japanese Joint Ventures in the Development of the Automobile Assembly Industry in Thailand	Japan Foundation	Prof. Pakorn Dr Tabucanon Dr Tang	15,000	In-Progress
3. Prefeasibility Study of Selected Industries in Thailand for Investment Promotions	Board of Investment of Thailand	Prof. Pakorn Dr Tabucanon Dr Tang	29,556	In-Progress

DIVISION OF STRUCTURAL ENGINEERING AND CONSTRUCTION

1. Mechanical Properties of Rock Salts and Related Ores (2nd Contract)	Mineral Resources Department, Thailand	Prof. Pisidhi Dr Pichai	5,000	Completed
2. Evaluation of Foundation and Superstructure Conditions of Phra Boromathat Chedi, Wat Phrathat, Nakhon Sri Thammarat	Fine Arts Department, Thailand	Prof. Pisidhi Dr Prinya Dr Pichai Dr Worsak	25,000	Completed

Title	Sponsor	Principal Investigator(s)	Amount US\$	Status
3. Mechanical Properties of Rock Salts and Related Ores (3rd Contract)	Mineral Resources Department, Thailand	Prof. Pisidhi Dr Pichai	5,000	In-Progress
<u>DIVISION OF WATER RESOURCES ENGINEERING</u>				
1. Southern Ports Project	Harbour Department, Thailand	Mr Prida	227,987	Completed
2. Development of a Water Resources Information System for Thailand	EGAT	Dr Gupta	124,065	Completed
3. Optimum Water Resources Utilization Study, Tachia River Basin	Taiwan Power Company, Republic of China	Dr Tawatchai Dr Selvalingam	90,803	Completed
4. Scale Model Investigation of the Chao Phraya River – Bang Ma Fo Reach	Bureau Central d'Etudes Pour Les Equipments D'Outremer (BCEOM)	Dr Tawatchai	66,130	Completed
5. Development and Management Studies of Groundwater Resources in the Bangkok Area – Phase II	NEB,	Dr Gupta	178,788	Completed
6. Hydraulic Model Study of Lang Suan Dam Spillway, Lang Suan Multi-purpose Project	EGAT	Mr Prida	19,440	Completed
7. Supervision on 1979 Flood Forecasting Operation for the Chao Phraya River	National Economic and Social Development Board, (NESDB), Thailand	Dr Tawatchai	4,435	Completed
8. A Water Balance and Economic Appraisal of a Groundwater Development Project in Sukhothai Province	Royal Irrigation Department, Thailand (RID)	Dr Apichart	65,517	Completed
9. Thermal Diffusion – Ao Phai	EGAT	Dr Suphat	71,250	In-Progress
10. Water for the Northeast: A Strategy for the Development of Small-Scale Water Resources	NESDB	Dr Apichart	83,744	In-Progress
11. Morphological Study on the Effects of Sand Dredging in the Chao Phraya River, Thailand	NESDB	Dr Tawatchai	59,114	In-Progress
12. Thermal Diffusion – Bang Pakong	EGAT	Mr Prida	44,652	In-Progress

Title	Sponsor	Principal Investigator(s)	Amount US\$	Status
13. Development and Management Studies of Groundwater Resources in the Bangkok Area – Phase III	NEB	Dr Gupta	96,089	In-Progress
14. Salinity Intrusion Problem During Severe Drought in the Chao Phraya (Salt Water)	RID	Dr Tawatchai	6,294	In-Progress

LIBRARY AND REGIONAL DOCUMENTATION CENTER

1. Union List of Serials in Thailand	UNESCO	Dr Valls	1,500	In-Progress
2. Asian Information Center for Geotechnical Engineering (AGE)	IDRC	Dr Valls Dr Brenner	125,000	In-Progress
3. International Ferrocement Information Center (IFIC)	Government of New Zealand, IDRC, USAID	Dr Valls Dr Pama	45,000 62,000	In-Progress
4. Renewable Energy Resources Information Center (RERIC)	Government of France, UNESCO	Dr Valls Dr Exell	14,000 4,000	In-Progress
5. Environmental Sanitation Information Center (ENSIC)	IDRC	Dr Valls Dr Chongrak	95,200	In-Progress

JOINT PROJECTS

1. Fish Cultivation in Sewage Stabilization Pond Effluent (AFE and IE)	IDRC	Dr Edwards Dr Tabucanon	37,018	Completed
2. A Water Balance and Economic Appraisal of Groundwater Development Project in Sukhothai Province (AFE, IE and WRE)	Government of Thailand USAID	Dr Apichart Dr Tawatchai Dr Gupta Dr Tang	65,517	Completed
3. Study on Northeast Small Scale Irrigation (AFE, HSD and WRE)	Government of Thailand USAID	Dr Apichart Prof. Anat Dr Weber Dr Vokes	75,252	Completed
4. Handpump Development for Rural Thailand Project (GTE and SEC)	IDRC	Prof. Pisidhi Dr Prinya Dr Pichai Dr Worsak	85,000	In-Progress

Campus & Physical Plant

The Institute occupies a 400-acre campus 42 kilometers north of Bangkok. The teaching, administrative and residential buildings are grouped together and much of the campus is as yet undeveloped. Close attention has been given to landscaping around the buildings and, as a result, the campus is already a place of considerable beauty.

The principal buildings are :

- **Academic Buildings** – providing classrooms, a library, laboratories and faculty offices. The Institute's well-equipped laboratories are among the best in the region.
- **Regional Computer Center** – providing the latest IBM 3031/6 Computer System.
- **Regional Engineering Experimental Center** – providing 10,500 square meters of covered space for experimental research, and associated laboratories and offices.
- **Administration Building** – providing offices for the President, senior administrative officers and central administrative service.
- **Physical Plant** – providing workshop and maintenance facilities.
- **AIT Center** – providing a 600-seat auditorium, simultaneous translation facilities, audio-visual facilities, dining room, recreational facilities and hotel rooms.
- **Cafeteria** – serving a wide variety of inexpensive meals.
- **Sports Facilities** – including a swimming pool, tennis courts, basketball court, football, cricket and hockey fields, and a nine-hole golf course.
- **Medical Center** – providing a well-equipped medical unit with a doctor and supporting staff.



In July 1980 Mr. Kriengkrai Phimolmas took up duty as Project Architect. Mr. Phimolmas is on leave for two years from the Thai Ministry of Education and is a very experienced architect and administrator. The Institute is fortunate to add him to its team.

Following the approval of the Executive Committee, Design + Develop, was commissioned to prepare working drawings for **Student Village III**. The project is being designed in anticipation that a donor will be identified in time for the village (or some part of it) to be completed by the end of 1981 to enable the Institute to accept its planned intake from January 1982. Preliminary sketch plans have been submitted and approved, and work is now proceeding on detailed working drawings.

An 18-room staff dormitory funded by the Royal Thai Government at a contract price of US\$ 171,466 was completed in 1980. It is occupied by 36 staff members.

The Energy Park, funded by the Government of France at a cost of US\$94,000 was officially opened on December 15, 1980.

The Library, funded by the Government of Japan at a cost of US\$4,000,000 is in progress and it is expected that the building will be completed in mid-1981.

The Government of the Federal Republic of Germany is funding the construction of the Energy Technology Building, which will house the Division of Energy Technology. A contract was signed with Waltzen Enterprise Co., Ltd., for construction of the building, with costs of both stages being approximately US\$700,000. The building contract was signed on December 3 and it is expected that construction will be completed in September 1981.

A contract has been signed with Stancon Co., Ltd. for a **Low-Cost Staff Housing Project** at a cost of about \$230,000. The project will be funded by the Royal Thai Government (\$200,000) and the Maintenance and Construction Reserve Funds (\$30,000). The project is due for completion in April 1981 and will house 54 single staff and 8 married staff with families. A planned **expansion of the cafeteria facilities** is being undertaken by Economic Construction Co., Ltd. at a cost of \$34,000. Work will commence in January 1981. This project is being funded by the Maintenance and Construction Reserve Funds.

Other Developments

TECHNOLOGY FOR THE PEOPLE EXPOSITION

The Institute was very capably represented at the "Technology for the People" exposition held in Geneva, Switzerland, in September, by Vice President for Development, Dr Ricardo P. Pama and Dr N.C. Thanh, Chairman of the Division of Environmental Engineering.

The exposition proved to be a highly-successful meeting ground for more than 4,000 participants and 240 exhibitors.

According to Mr David Dichter, organizer of the exhibition, it was "a unique one-step shopping place for buyers and sellers of practical, affordable goods and services for the developing countries."

Among the various displays in AIT's attractive booth were a scale model of a "slow sand" water filtration unit, a scale model ferroement water storage tank, a scale model rice dryer, examples of low-cost building materials, color photo displays of various low-cost technologies, and publications of the Institute.

The AIT family is very grateful to the Government of Switzerland, which provided financing for developing the display, shipment of the display, airline tickets and hotel accommodation.



STUDENT UNION

The Student Union continues to be very active in organizing various activities such as sports competitions, cultural shows, trips, debates and concerts.

The Student Union has two broad objectives: safeguarding the student's rights and privileges, and organizing a range of extracurricular activities.

It has a role in making the campus a home away from home for the students.

The organizational set-up is as follows: the General Assembly, consisting of representatives from different nationalities, serves as a legislative and policy-making body; the Executive Council, appointed by the President with approval of the General Assembly, organizes and implements the extracurricular activities.

The Union is a forum where each student can develop his individual skills and talents for leadership and responsibility. It is also a forum where students can meet and establish rapport on matters of common interest and thereby create lasting bonds of friendship and mutual understanding.

The Student Recreation Center was opened early in the January term, providing students with recreation facilities from colored TV to parlour games and ping-pong. In February, a snack bar was opened in the Center to serve after-dinner customers.

AIT FAMILY DAY

The annual AIT Family Day celebration took place on April 20. Student participation was the most extensive yet with 14 national stalls, five game booths, three refreshment and souvenir counters and a skit in the afternoon.



The AIT Family Day gives students, faculty and staff members a chance to become more closely acquainted and also provides an opportunity for their families to enjoy themselves and introduce their families to AIT'ians they might not otherwise meet.

Donor Relations

The following summarizes the current developments with Governments, Foundations, Industries and other Organizations that support the wide-ranging activities and programs of the Institute.

ASIA AND THE PACIFIC



1. Australia

For the fiscal year 1979–80, the Government of Australia provided a grant of US\$800,000 to the Institute. This grant provides for thirty scholarships and twelve faculty and staff secondments.

2. Bangladesh

From September 30 – October 4, 1980 the Vice President for Development was in Dacca for a series of meetings with officials of the Government of Bangladesh. The VPD was assured that Bangladesh will provide AIT with an additional Taka grant as soon as AIT has utilized the initial grant of one million Taka (US\$63,000) pledged in 1979. The Government of Bangladesh has also promised its support to the extension of the UNDP–funded training program of Bangladeshi professionals at AIT. The existing program which calls for the training of 35 professionals per year in the Diploma program is expiring in 1981. The program provides the Institute with an income of about US\$210,000 per year in tuition and fees.

3. Burma

The Government of the Union of the Socialist Republic of Burma is now implementing the cooperation program which AIT proposed to them in March 1979. The Burmese Government has sent students to AIT and more nominations have been made for entry in 1981.

4. Brunei

Initial contact has been made with Shell Brunei to discuss the possibility of providing training to deserving students from Brunei with the scholarships to be provided by Shell Brunei and the State of Brunei on a matching arrangement.



5. Republic of China

The Government of the Republic of China continues to provide strong financial support to the Institute. The Government maintained one faculty secondment and twelve scholarships during the fiscal year 1979–80. An additional faculty secondment has also been pledged but no suitable candidate has been identified so far.

6. Hong Kong

Previous efforts to obtain support from the Government sector in Hong Kong have not produced any positive results.

Fortunately for the Institute, the Marden Family continues with its support to our scholarship program.

7. India

The Government of India continues to support the Institute by providing some equipment and short-term secondments of Indian experts to AIT. During the fiscal year 1979–80, the Government of India presented a prototype feed mill and sent two short-term experts to AIT.

On November 3–14, 1980, the Vice President for Development visited all the five Indian Institutes of Technology in Delhi, Bombay, Madras, Kharagpur and Kanpur as guest of the Government. The purpose of the trip was to discuss the possibility of establishing mutually beneficial linkages between the IIT's and AIT.

The need for the establishment of a Rupee grant in New Delhi was discussed and a formal proposal will be presented to the Government of India soon.



8. Indonesia

The Institute is pleased with the strong support that the Directorate General of Higher Education is providing in implementing our cooperation program in Indonesia. As a result, the number of Indonesian students at AIT is increasing.

In the fiscal year 1979-80, the Government of Indonesia made another contribution of \$10,000 to the Endowment Fund to the Institute. In addition, Hasanuddin University is now sending its staff members to AIT for their Master's degree with the financial support being provided by the Asian Development Bank. Petra Christian University also has sent two faculty members to AIT for the Master's degree program.

9. Japan

The Government of Japan continues to provide very strong financial support to the Institute. The construction of the library building is progressing well and final completion is expected in July 1981. So far ¥ 535,387,575 (US\$2,348,247.72) has been released by the Government for this project.

This year, Japan provided twelve scholarships, supported six faculty members and sponsored the short-term visits to AIT of five Japanese experts. It also donated equipment worth ¥ 18,183,000 (US\$79,925) and made a cash grant of US\$40,000 to help meet the operating costs of the Institute.

10. Korea

Following the visit that the President and the Vice President for Development made to the Republic of Korea on August 17-21, 1980, there are now very strong indications that the Government of Korea will approve our proposal for ten scholarships per year and two faculty secondments beginning in 1981.

11. Malaysia

On October 8-10, 1980, the President and Vice President for Development visited Kuala Lumpur and met with several officials of the Malaysian Government. The President appealed for financial contribution from Malaysia in the form of scholarships, a local grant and faculty secondment.

12. Nepal

Our cooperation program with Nepal is progressing very well. The problems on student recruitment and selection have been resolved and this year 24 students from Nepal are enrolled at the Institute.

13. New Zealand

The Government of New Zealand is providing eight scholarships annually. A new proposal has been presented to the

Government of New Zealand for increasing their scholarships to ten. New Zealand continues to provide financial support of US\$15,000 annually to the International Ferrocement Information Center.

14. Pakistan

The Government of Pakistan has informed the Institute of its intention to provide a grant of Rupees 500,000 (US\$50,000), the first US\$20,000 to be made available in FY 1980 and the remaining US\$30,000 in FY 1981. In the past, the Government of Pakistan had also provided the Institute with a grant of US\$ 50,000.

15. Papua New Guinea

A promotional trip is being planned to Papua New Guinea in March or April 1981. A follow-up on the visit made by the Vice Chancellor of the University of Technology to AIT in May 1980 will be included.

16. Philippines

In the fiscal year 1979-80, the Republic of the Philippines made a further contribution of US\$30,000 to the Institute; \$20,000 to the operating cost and \$10,000 to the Endowment Fund.

In April 1980, Ministry of Education and Culture sent nine officials for short-term training on Audiovisual Materials and Techniques for Instructors. The program was supported by the Asian Development Bank.

17. Singapore

The Lee Foundation of Singapore continues to support the scholarship program with an annual grant not exceeding US\$ 50,000.

However, the Institute has not been successful in getting any form of financial assistance from the Government sector.

18. Sri Lanka

The Government of Sri Lanka has informed the Institute that the first installment amounting to Rupees 100,000 of the Rupees 500,000 pledged earlier has been released by the Government. The grant is to be utilized in organizing various activities in Sri Lanka.



19. Thailand

For the fiscal year 1979-80, the Royal Government of Thailand provided the Institute with a grant of Baht 30,752,985 (US\$1,537,649) for scholarships, construction, operation expenses and tax reimbursements.

20. Vietnam

The Government of the Socialist Republic of Vietnam continues to nominate students to AIT.

EUROPE

21. Austria

The Government of Austria is seriously considering the secondment of Mr. Frederick Prinzl to the Division of Geotechnical and Transportation Engineering provided that suitable accommodation can be arranged for him on campus. Mr. Prinzl hopes to join AIT in July 1981. He will be the first Austrian faculty member to be seconded to AIT.

22. Belgium

The Royal Government of Belgium is presently providing 15 scholarships annually. In addition, it is seconding two Belgian faculty members.

23. Denmark

The Royal Danish Government is supporting the Institute with eight scholarships annually. In addition, it is seconding three Danish experts. DANIDA is also sponsoring one research project at the Institute.

24. Finland

A new appeal for financial assistance has been sent to authorities in Finland but so far no response has been received.



25. France

The Government of France is supporting the secondment of five French experts at AIT. In addition, it made an initial cash contribution of US\$106,341 for the construction of the Energy Demonstration Park, operating costs and research grant. It is also donating equipment to the new Division of Energy Technology.



26. Germany

The Institute signed an agreement with the Government of the Federal Republic of Germany last July 9, 1980. The agreement covers the following:

Construction of Energy Technology Building (Phase I)	= DM	500,000
Equipment	=	500,000
Joint Research Project	=	450,000
		<hr/>
	DM	1,450,000
	or US\$	(725,000)

The agreement also stipulates for the secondment of six German experts equivalent to 120 man-months.

In addition, the Federal Republic of Germany through the German Academic Exchange Services (DAAD) and the Carl Duisberg Gesellschaft e.V. (CDG) are providing a total of 54 scholarships, 16 through DAAD and 38 through CDG. The total value of these scholarships is US\$728,000 per year.

27. Italy

The Government of Italy is seconding a faculty member to AIT for the first time. Dr. Andrea Tomiolo is now with our Division of Geotechnical and Transportation Engineering.



28. Netherlands

The Royal Netherlands Government is presently providing the Institute with the following grant annually:

Scholarships	= US\$ 300,000	(Dfl. 600,000)
Library Grant	=	15,000
		<hr/>
	US\$	315,000

In addition, it is making a grant of US\$ 556,900 to support five Asian faculty over a four-year period. The Netherlands Government will also second a Dutch expert in Food Process Engineering. A short-term Dutch expert was also seconded to AIT to assist our Division of Energy Technology in its research work on wind energy. The Delft Hydraulics Laboratory in the Netherlands is also supporting one Asian faculty member at AIT.

29. Norway

The Royal Government of Norway is presently providing the Institute with 15 scholarships which are offered every 20 months. Following the recent visit of the NORAD team to AIT, we hope that in 1981, Norway will provide 15 scholarships annually (instead of every 20 months), support four Asian faculty members and second a short-term Norwegian expert in Aquaculture.

30. Sweden

Proposals for scholarship support on behalf of the Governments of India, Pakistan, and Sri Lanka have been sent to Sweden for consideration. The reply from Sweden to the proposal on behalf of the Government of Pakistan has been negative. No response has been received on the other two proposals yet.

Our Division of Energy Technology is presently preparing a proposal on a research project on biomass as alternative energy source to be presented to the Swedish Council of Energy Production Research.



31. Switzerland

The Government of Switzerland is seconding one Swiss faculty member and provides six scholarships annually. A request has been made for ten scholarships starting in 1981.

32. United Kingdom

The Government of the United Kingdom supported five faculty members in the fiscal year 1979-80. It is hoped that the UK Government will maintain this level of support in 1980-81.

NORTH AMERICA

33. Canada

The Canadian International Development Agency (CIDA) which is supporting our program in Human Settlements Develop-

ment with a grant of C\$2.085 million has agreed to our proposal for budget readjustment of the program. This means that within the present budget we could now employ two Asian faculty members to assist in the teaching and research in the Division of Human Settlements Development.



34. United States of America

(a) The Government of the United States has signed an agreement with AIT for a grant of US\$440,000 to support a project on renewable energy resource development for the ASEAN countries. The project has three components:

1. Technical Assistance - This will enable the US Government to second one American expert in energy technology to AIT for two years.
2. Professional Development - A four-week ASEAN Energy Technology Seminar will be held in Indonesia.
3. Information Exchange - A grant will be made to AIT's Renewable Energy Resource Information Center to facilitate the exchange of relevant information between the ASEAN countries and the US in the field of renewable energy.

(b) The US-supported project on the establishment of the Asian Remote Sensing Training Program at AIT with an initial grant of US\$3.21 million is proceeding smoothly. We hope to have the services of the five American experts on remote sensing sometime in 1981.

(c) The US-supported AIT-ASEAN Scholarship and Research Program which has a grant of US\$3.21 million is also progressing well. A total of 33 Asian scholars are presently at the Institute under this program and 16 additional students are entering the Institute in the January 1981 term.

(d) The USAID offices in Bangladesh, Ghana, Nepal and the Philippines are also sponsoring students at AIT.

MIDDLE EAST

35. Afghanistan

Preliminary discussions have been made with UNDP about the possibility of providing financial assistance to Afghanistan to enable their students to study at AIT. A similar program now supported by UNDP at AIT for the Bangladesh Government is envisaged in the future.

36. Israel

The only form of assistance that AIT obtains from Israel at the moment is to send AIT students and alumni to Israel for short-term training.

37. Saudi Arabia

The University of Petroleum and Minerals at Dharan, Saudi Arabia has sent to AIT a high-ranking official to explore possible collaboration. AIT intends to make a follow-up of this visit by sending the Vice President for Development and Vice President for Academic Affairs to Saudi Arabia and Kuwait sometime in March 1981.

FOUNDATIONS, INDUSTRIES & INTERNATIONAL ORGANIZATIONS

1. Konrad Adenauer Foundation

The Konrad Adenauer Foundation of the Federal Republic of Germany is seconding a faculty member in the Division of Human Settlements Development. This faculty secondment is part of the project which KAF is funding at AIT. The budget for this project is DM 915,000 for three years.

2. Shell International Petroleum Corporation

The Shell Grants Committee has announced its decision to finance, for a period of five years the following:

(a) Three scholarships per year in Energy Technology @ \$ 13,000	=	US\$ 39,000
(b) One faculty member in Energy Technology	=	25,000
		<hr/>
		US\$ 64,000

Total for five years = US\$ 320,000

The grant is in addition to the existing scholarships now in operation.

3. KEIDANREN

The KEIDANREN which represents Japanese Industries continues to support the scholarship program at the Institute. At present they are supporting nine students.

4. International Development Research Center

The IDRC of Canada continues to provide strong financial support to our research projects. At present they are supporting seven projects with a total grant of US\$459,870. The IDRC is also sponsoring one diploma student.

5. Agricultural Development Council, Inc.

The ADC continues to send their fellowship awardees to the Institute. It plans to increase the number of ADC fellows at AIT in 1981.

6. UNDP/Bangladesh

The UNDP regional office in Bangladesh is presently supporting a project which enables 35 Bangladeshi professionals to attend the diploma program at AIT.

7. AIT Foundation, Inc.

Through the efforts of the AIT Foundation, the Institute has received and installed a new computer, an IBM System 3031 Model 6 on loan from IBM. The system is now fully operational. This year, IBM also made a cash grant to AIT through the AIT Foundation Inc. of US\$ 398,750.

8. Rockefeller Foundation

The Rockefeller Foundation sponsors a scholarship at AIT for a student from Indonesia and will send a second Indonesian fellow in January 1981.

9. International Rice Research Institute

Our collaboration program with IRRI is progressing well. AIT students can do their research at IRRI with funds provided by the latter and IRRI staff providing the supervision.

10. Industries and Semi-Governmental Organizations in R.O.C.

The Institute continues to receive the assistance of the following companies and semi-governmental organizations in the Republic of China:

- BES Engineering Corp.
- China Technical Corp.
- Chinese Petroleum Consultants, Inc.
- Ret-Ser Engineering Agency
- Taiwan Cement Corp.
- Taiwan Power Co.

These organizations sponsored 14 scholarships this year. Taiwan Power Co. has made a commitment to support one faculty member in Management for the next four years and has provided an equipment grant.

The Taiwan Water Supply Corporation has offered a scholarship for 1981/82 through the AIT Alumni Association.

11. Commission of the European Communities

Two proposals have been submitted by the Institute to the Commission of the European Communities for possible funding. The first proposal is for a grant of US\$ 1.79 million for scholarships, European faculty secondment and funds for Asian faculty for our eight academic divisions. The other proposal is for a grant of US\$ 1.071 million to support the teaching and research activities of the new Division of Energy Technology.

Further negotiations with the CEC will be held in Brussels in early February 1981.

12. Additional Scholarship Donors

The following organizations support the scholarship program of the Institute with at least one scholarship in 1979-80:

- Mekong Committee
- World Health Organization
- Mahidol University (Thailand)
- P. T. Caltex (Indonesia)
- International Labour Organization
- Ford Foundation
- British Council
- PUSRI (Indonesia)
- Indonesian National Army
- Starr Foundation (U. S. A.)



1. Table I shows the number of scholarships actually utilized in 1979/80, scholarships obtained for 1980/81 and the scholarship projection for 1981/82.

2. The Faculty and International Staff Secondment contribution by donor governments and agencies for 1980/81 and the projections for 1981/82 are shown in Table II.

3. Table III shows in percentages the contributions made by donor governments and agencies in the fiscal year 1979-80. The summary table is based on actual cash and in-kind services received for this period.

4. Table IV summarizes the total contributions made to AIT by donor governments and agencies for the period 1959-80.

5. The Public Relations Office published the AIT Annual Report-1979, four issues of the AIT Review, Board of Trustees Handbook, Facts about AIT and several information brochures during the year. It also published in the local and regional papers several news items and photo releases focussing on the various activities of the Institute during the year. A new edition of the slide/tape presentation was prepared.

6. The Development Office has also conducted an additional Tracer Study covering the AIT Graduates for the period 1976-1979. This second Tracer Study, in addition to a similar study conducted by Mr. W.P.J. Brandon on graduates from 1961-1975, provides very useful information on what is happening to our graduates after leaving AIT. The highlights are:

- (a) 93% are working in the region.
- (b) 87% are working in their home countries.
- (c) 20% are in the Government.
- (d) 25% are teaching in the universities.
- (e) 55% are with the private sector.

Faculty and International Staff Secondment Contributions

	1980/81	1981/82 Projections
ASIA & PACIFIC		
India	2(STS)	2(STS)
Japan	6+5(STS)	7+2(STS)
Republic of China	1	2
Australia	11	12
EUROPE & NORTH AMERICA		
Austria	-	1
Belgium	2	3
Canada	1	1+3(DH)
Denmark	3	2
Germany	3	6
France	5	5
Italy	1	1
Netherlands	3(ADH)+1(STS)	1+5(ADH)
Norway	-	4(ADH)+1(STS)
Switzerland	1	1
United Kingdom	5	5
United States of America	-	6
BUSINESS, INDUSTRIES, FOUNDATIONS		
AIT Foundation Inc. - (IBM/AFE)	5+7(ADH)	5+7(ADH)
Shell Int'l Petroleum Co.	-	1
Taiwan Power Co.	-	1
Total	44+10(ADH) +8(STS)	60+16(ADH) + 5(STS) + 3(DH)

ADH = Asian Direct Hire
 STS = Short-term Secondment
 DH = Direct Hire

ASIAN INSTITUTE OF TECHNOLOGY

Scholarship Contribution

DONORS	1979/80	1980/81	1981/82 Projections
I. Governments			
Australia	25	30	30
Belgium	12	15	15
Canada (HSD)	24	12	18
Rep. of China	12	12	15
Denmark	8	8	8
Fed. Rep. of Germany			
(DAAD)	15	16	16
(CDG)	17+3D	30	38
Energy Technology	10	10	—
France	—	—	5
Korea	—	—	10
Japan	12	12	15
Netherlands	24	25	25
New Zealand	8	8	10
Norway	15	—	15
Switzerland	6	6	6
Thailand (King's Scholarship)	15	15	20
United States of America			
USAID/Bangladesh	—	+1D	+3D
USAID/Ghana	—	+2D	—
USAID/Nepal	—	2	—
USAID/Philippines	+3D	—	—
USAID/ASEAN	18	32	50
USAID/Remote Sensing Program	—	—	+25D*
Sub-total	221+6D	233+3D	296+28D
II. Foundations			
KEIDANREN	3	9	10
Lee Foundation of Singapore	7	3	5
AIT Foundation Inc.			
Readers Digest	—	—	—
Starr Foundation	1	—	—
Agricultural Development Council	1	1	—
British Council	—	2	—
Commonwealth Secretariat	—	—	—
Ford Foundation	—	1	—
International Development Research Centre	+1D	+1D	—
Rockefeller Foundation	1	1	—
Sub-total	13+1D	17+1D	15

DONORS	1979/80	1980/81	1981/82 Projections
III. Industries			
BES Engineering Corporation	2	2	—
Caltex P. T. Indonesia	1	—	—
China Technical Consultant Inc.	2	2	2
Chinese Petroleum Corp.	2	2	2
Northrop Corp.	—	—	—
Ret-Ser Engineering Agency	2	4	5
Shell Int'l Petroleum Co.	2	5	5
Taiwan Cement Corp.	2	2	2
Taiwan Power Co.	3	3	3
Taiwan Water Supply Corp.	—	—	1
Kiso-Jiban Consultants	1	—	— ⁴
PUSRI (Indonesia)	—	1	—
Sub-total	17	21	20
IV. International Organizations			
Inter'l Labour Organization	—	1	—
Mekong Committee	—	—	—
United Nations Devel. Programme	+22D	+19D	+35D
World Health Organization	—	1	—
Sub-total	+22D	2+19D	+35D
V. Individuals and National Government Organization			
Dorothy Marden	—	1	—
George Marden	1	—	1
Hasanuddin University	—	3	5
Indonesian National Army	1	—	—
Mahidol University	1	—	—
Petra Christian University	—	2	—
Royal Thai Air Force	—	1	—
Royal Thai Navy	—	1	—
Department of Highways (Thailand)	—	—	—
Dept. of Technical & Economic Cooperation (Thailand)	—	—	—
Rubber Research Institute, Malaysia	—	—	—
Sub-total	3	8	6
Grand-total	254+29D	281+23D	337+63D

D = *Diploma*

*D** = *Diploma equivalent*

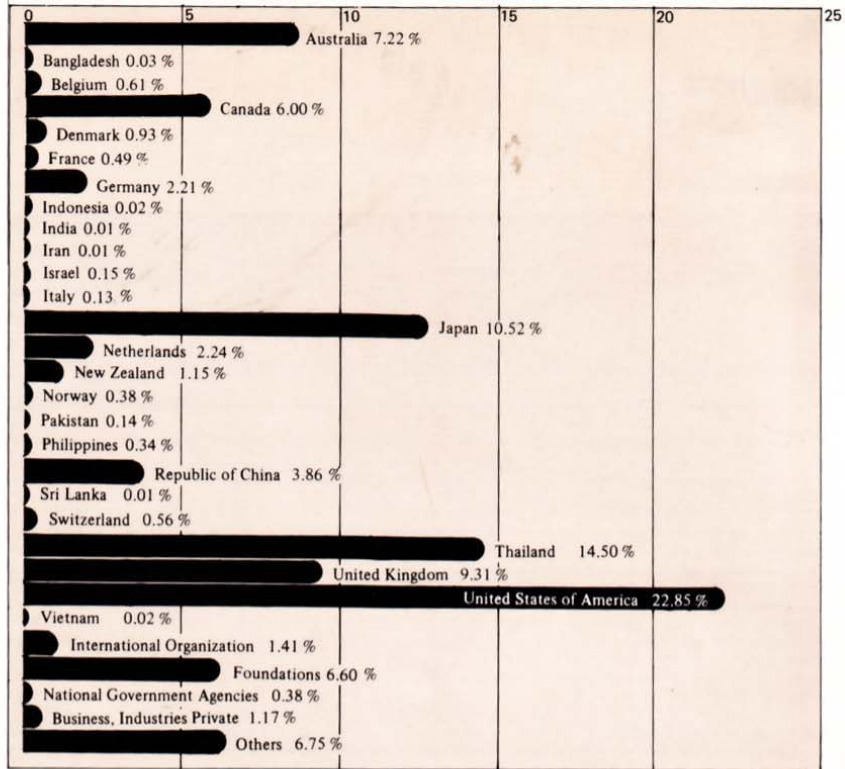
Asian Institute
Donors and Their A
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DONORS	Scholarships	Faculty & Staff Secondment	Asian Faculty Support	Capital Cost & Buildings Operation Cost	Endowment Fund	Equipment & Books	Conferences, Workshops, Seminars & Short Courses Info. Center	Local Funds & Others
GOVERNMENTS								
Australia	X	X	-	-	-	-	-	-
Bangladesh	-	-	-	-	-	-	-	X
Belgium	X	X	-	-	-	-	-	-
Canada	X	X	-	-	-	-	X	X
Denmark	X	X	-	-	-	X	X	-
France	-	X	-	-	-	X	-	-
Germany, Federal Republic of	X	X	-	-	-	-	X	-
India	-	-	-	-	-	X	-	-
Japan	X	X	-	X	-	X	-	-
Netherlands	X	X	X	-	-	X	-	-
New Zealand	X	-	-	-	-	-	X	-
Norway	X	-	-	-	-	-	-	-
Republic of China	X	X	-	-	-	-	-	-
Philippines	-	-	-	X	X	-	-	-
Switzerland	X	X	-	-	-	X	-	-
Thailand	X	-	-	X	-	-	X	X
United States of America	X	-	-	-	-	-	X	-
United Kingdom	-	X	-	-	-	-	X	-
INTERNATIONAL AGENCIES								
Commonwealth Fund-CFTC	X	-	-	-	-	-	-	-
Mekong Committee	X	-	-	-	-	-	-	-
WHO	X	-	-	-	-	-	-	-
UNESCO	X	-	-	-	-	-	-	-
USAID/ASEAN	X	-	-	-	-	-	-	-
USAID/Bangladesh	X	-	-	-	-	-	-	-
USAID/Philippines	X	-	-	-	-	-	-	-
USAID/RED	X	-	-	-	-	-	-	-
USAID/Thailand	X	-	-	-	-	-	-	-
UNDP/Bangladesh	X	-	-	-	-	-	-	-
UNDP/Indonesia	X	-	-	-	-	-	-	-
UNDP/Thailand	X	-	-	-	-	-	-	-

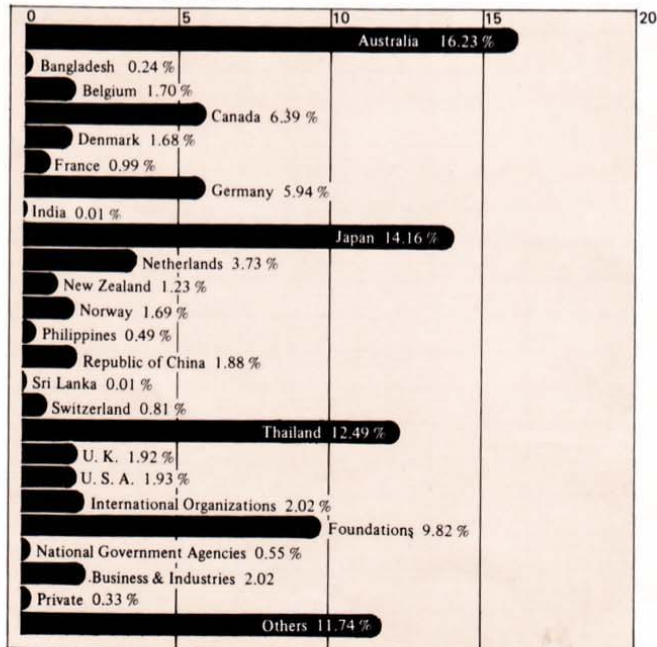
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DONORS	Scholarships	Faculty & Staff Secondment	Asian Faculty Support	Capital Cost & Buildings Operation Cost	Endowment Fund	Equipment & Books	Conferences, Workshops, Seminars & Short Courses Info. Center	Local Funds & Others
FOUNDATIONS								
AIT Foundation Inc. USA	X	--	--	X	--	--	--	--
Starr Foundation	X	--	--	--	--	--	--	--
The Agricultural Department Council, Inc.	X	--	--	--	--	--	--	--
Ford Foundation	--	--	--	--	--	--	X	--
IDRC, Canada	X	--	--	--	--	--	X	--
KEIDANREN, Japan	X	--	--	--	--	--	--	--
Lee Foundation-Singapore	X	--	--	--	X	--	--	--
Rockefeller Foundation, USA	X	--	--	--	--	--	X	--
NATIONAL GOVERNMENT AGENCIES								
Bank of Thailand	X	--	--	--	--	--	--	--
Department of Highways, Thailand	X	--	--	--	--	--	--	--
Dept. of Technical & Economic Cooperation, Thailand	X	--	--	--	--	--	--	--
Indonesian National Army	X	--	--	--	--	--	--	--
Mahidol University, Thailand	X	--	--	--	--	--	--	--
Min. of Education, Malaysia	X	--	--	--	--	--	--	--
Rubber Research Institute of Malaysia	X	--	--	--	--	--	--	--
BUSINESS & INDUSTRIES								
IBM A/FE	--	X	--	--	--	X	--	--
B. E. S. Engineering (ROC)	X	--	--	--	--	--	--	--
China Tech. Consultants, Inc. (ROC)	X	--	--	--	--	--	--	--
Chinese Petroleum Corp. (ROC)	X	--	--	--	--	--	--	--
Ret-Ser Eng. Agency (ROC)	X	--	--	--	--	--	--	--
Shell International Petroleum Co.	X	--	--	--	--	--	--	--
Taiwan Cement Corp. (ROC)	X	--	--	--	--	--	--	--
Taiwan Power Co. (ROC)	X	--	X	--	--	--	X	--
P. T. Caltex Co., Ltd. (Indonesia)	X	--	--	--	--	--	--	--
Kisojiban Consultants Co., Ltd.	X	--	--	--	--	--	--	--
PRIVATE								
John Marden Family	X	--	--	--	--	--	--	--

Donors to AIT FY 1959-60 to FY 1979-80



Donors to AIT 1979-1980

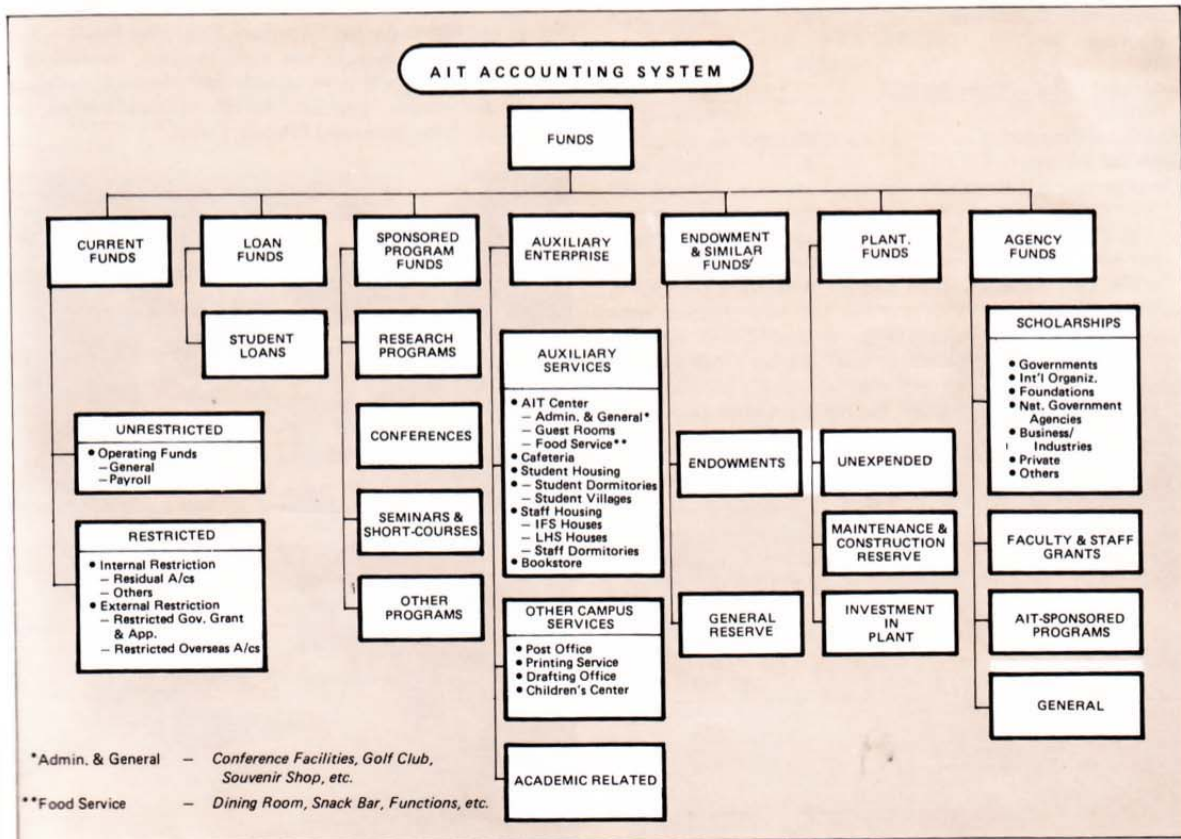


Note : Based on cash and in-kind services received during FY 1979-80.

Financial Review

Since its inception in 1967 as an independent, international, and non-profit educational institution, the Asian Institute of Technology has adopted the concept of "Fund Accounting System" principles, and has its financial year run from 1 July thru 30 June. This method of maintaining the Institute's accounts ensures observance of limitations and restrictions placed on the use of the resources available to the Institute. For accounting and reporting purposes, the resources are classified into various funds in accordance with activities or objects specified. The figures shown in this Financial Review are on cash basis.

The following chart demonstrates the group of funds presently maintained by the Institute.



UNRESTRICTED CURRENT FUNDS

(Operating Funds)

Cash Income FY 1979/1980

	US\$ '000	%
Tuition and Fees	2,138	73.5
Governmental Grants and Appropriations	188	6.4
Contract and Grant Research	183	6.3
Computer Center	107	3.7
Interest	273	9.4
Other Income and Transfers	20	0.7
TOTAL	2,909	100.0

The cash expenditures for the same period were US\$ 2,566,000. Hence, when comparing the cash income and cash expenditures, the Institute would have an excess of income over expenditures of US\$343,000.

These "Unrestricted Current Funds" are the funds available for general operating purposes without restrictions imposed by outside agencies.

RESTRICTED CURRENT FUNDS

Income FY 1979/80

	Cash US\$ '000	Kind US\$ '000	%
Governmental Grants and Appropriations	150	387	31.4
Gifts	399	—	23.3
Estimated Value of Contributed Services	—	660	38.6
Sponsored Programs	68	—	4.0
Sales and Services	42	—	2.5
Other Income and Transfers	4	—	0.2
TOTAL	663	1,047	100.0

The cash balance carried forward from FY 1978/79 was US\$734,000, and the cash expenditures and transfers were US\$789,000, leaving a balance in the funds of US\$608,000.

These "Restricted Current Funds" are the funds available subject to restrictions imposed either externally or internally, to specify the manner in which the funds are to be used in current operations.

LOAN FUNDS

The "Loan Funds" are the funds available for student loans.

SPONSORED PROGRAM FUNDS

Revenues FY 1979/80

	US\$ '000	%
Research Programs	710	56.1
Conferences	47	3.7
Seminars and Short-courses	198	15.6
Other Programs	312	24.6
TOTAL	1,267	100.0

The cash balance carried forward from FY 1978/79 was US\$49,000 and the cash disbursements for the same period were US\$1,238,000. Hence, when comparing the cash revenues and cash disbursements, the Institute would have an excess of revenues over disbursements of US\$78,000.

These "Sponsored Program Funds" are the funds available subject to restrictions by donors or other agencies, as a condition of gifts, that they must be used for research projects, conferences, seminars, short-courses, or any other programs.

AUXILIARY ENTERPRISE FUNDS

Financial Status FY 1979/80

Auxiliary & Other Campus Services

	Cash US\$ '000	Kind US\$ '000	%
Revenues	704	13	100.0
Cost of Goods Sold	289	—	40.3
Operational Costs	329	—	45.9
Estimated Value of Contributed Service	—	13	1.8
Assets	78	—	10.9
Reserve	8	—	1.1

The "Auxiliary Enterprise Funds-Auxiliary & Other Campus Services" are the funds provided to operate auxiliary and other campus services in support of academic and administration units with a non-profit making purpose. The "Auxiliary Enterprise Reserve" was established in 1980, and there was approximately US\$21,000 at the end of June 1980.

The "Continuing Education Center" was started at the beginning of 1980 under the "Auxiliary Enterprise Funds - Academic Related" with only one small program, however, it is anticipated that it will grow steadily and eventually will take over all conferences, seminars, workshops, short-courses, and symposiums from Sponsored Program Funds.



AIT 1980 ANNUAL REPORT

ENDOWMENT FUND

Cash Endowment FY 1979/80

	FY 1979/80 US\$ '000	Since FY 1976/77 US\$ '000
Governments :		
The Republic of China	—	500
The Republic of Indonesia	—	10
The Republic of the Philippines	10	30
Foundations :		
Education & Public Welfare Foundation	—	25
Lee Foundation	50	50
TOTAL	60	615

The Endowment Fund was established in 1976, and has been growing steadily ever since. There was US\$615,000 in this fund at the end of FY 1979/80, excluding interest earnings which are utilized for operating costs. The Institute anticipates the receipt of more support of this nature.

This "Endowment Fund" is the fund which donors or other agencies have stipulated, as a condition of gifts, that the principal is to be maintained inviolate and in perpetuity, and that only the income from the investments of the fund may be expended.

GENERAL RESERVE

Cash Status FY 1979/80

	FY 1979/80 US\$ '000	Since FY 1976/77 US\$ '000
Transferred from Unrestricted Current Funds	116	950
Net Interest Received	120	226
TOTAL	236	1,176

The General Reserve was established in 1976, in order to guarantee against calamity, by transferring from the Operating Funds and occasionally from the year-end balance of the Unrestricted Current Funds. The interest incurred from its principal is accrued in the fund, however, it is calculated on cash basis.

This "General Reserve" is the fund which the Board of Trustees has stipulated will be held in reserve for future use, and may be expended only by a resolution of the Board of Trustees.

PLANT FUNDS

FY 1979/80

Investment in Plant :

	FY 1979/80 US\$ '000	Since FY 1976/77 US\$ '000
Campus Development	19	549
Buildings	37	10,982
Construction in Progress	769	942
Equipment	662	3,762
Library Acquisitions	127	1,183
TOTAL	1,614	17,418

These are the total assets of the Institute at the end of FY 1979/80. At the end of FY 1979/80, US\$ 225,000 was
AIT 1980 ANNUAL REPORT

available for construction and equipment purchases, etc., and the reserve for maintenance and construction projects was US\$239,000.

"Investment in Plant" is the value of the Institute's properties and equipment; "Unexpended Plant Fund" is the fund to be used for the acquisition of physical properties; and "Maintenance and Construction Reserve" is the fund reserved for future use appertaining to maintenance and construction projects.

AGENCY FUNDS

Cash Revenues FY 1979/80

	US\$ '000	%
Scholarships :		
Governments	1,843	76.6
International Organizations	96	4.0
Foundations/Nat. Gov. Agencies	383	15.9
Business/Industries/Private	83	3.5
TOTAL SCHOLARSHIPS	2,405	100.0
Staff & Faculty Grants	634	
AIT-Sponsored Programs	30	
Others	22	
TOTAL	3,091	

These "Agency Funds" are the funds held in trust on behalf of donors and other agencies for scholarships and other various purposes.

SUMMARY OF CASH RECEIVED FROM DONORS

FY 1979/80

	US\$ '000	%
Governments	3,702	63.9
International Organizations	143	2.5
Foundations	1,190	20.5
National Government Agencies	554	9.6
Business and Industries	190	3.3
Private and Others	11	0.2
TOTAL	5,790	100.0



Auditor's Report

ACCOUNTANTS REPORT

THE ASIAN INSTITUTE

We have examined the accompanying balance sheet of the Asian Institute of Technology as at June 30, 1980 and the related statements of changes in fund balances and current funds revenues and expenditures for the year then ended. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

Asian Institute

Balance Sheet

ASSETS

	US\$
CURRENT FUNDS	
Unrestricted:	
Cash at banks	274,223.14
Investments, at cost	499,728.49
Accounts receivable and accrued income	418,259.40
Due from other funds	
- Maintenance replacement and operations funds	3,034.88
- Loan funds	1,000.00
- Auxiliary enterprise funds	97,853.54
- Agency funds	52,499.18
Restricted:	
Cash at banks	121,633.51
Investments, at cost	541,596.56
Accounts receivable	14,718.91
Due from other funds	
- Unrestricted current funds	13,813.41
# Total current funds	2,038,361.02
LOAN FUNDS	
Cash at banks	886.72
Accounts receivable	113.28
Total loan funds	1,000.00
ENDOWMENT FUNDS	
Investments, at cost	614,574.65
Total endowment funds	614,574.65

**TO THE TRUSTEES OF
OF TECHNOLOGY**

In our opinion, the aforementioned financial statements present fairly the financial position of the Asian Institute of Technology at June 30, 1980 and the changes in fund balances and the current funds revenues and expenditures for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

PRICE WATERHOUSE & CO.
Bangkok
November 30, 1980

**of Technology
of June 30, 1980**

LIABILITIES AND FUND BALANCES

	US\$
CURRENT FUNDS	
Unrestricted:	
Accounts payable and accrued expenses	112,804.58
Due to other funds	
– Restricted current funds	13,813.41
– General reserve funds	19,757.10
Deposits	14,649.23
Fund balances	1,185,574.31
Restricted:	
Accounts payable and accrued expenses	105,502.71
Due to other funds	
– Agency funds	29,273.39
Fund balances	
– Allocated	556,986.29
Total current funds	2,038,361.02
LOAN FUNDS	
Due to other funds	
– Unrestricted current funds	1,000.00
Total loan funds	1,000.00
ENDOWMENT FUNDS	
Fund balances	614,574.65
Total endowment funds	614,574.65

ASSETS

	US\$
GENERAL RESERVE	
Cash at banks	307.53
Investments, at cost	1,156,011.50
Accrued income	57,787.99
Due from other funds	
– Unrestricted current funds	19,757.10
Total general reserve	1,233,864.12
PLANT FUNDS	
Unexpended	
Cash at banks	1,012,538.48
Investments, at cost	120,574.50
Accounts receivable	10,902.03
Due from other funds	
– Auxiliary enterprise funds	27,964.79
– Maintenance replacement and operations funds	20,000.00
Maintenance replacement and operations funds	
Cash at banks	13,757.02
Investments, at cost	248,435.08
Net investment in plant, at cost	
Land development	548,660.65
Buildings	10,989,682.69
Furniture and equipment	3,763,605.79
Library acquisitions	1,182,953.24
Construction in process	1,828,687.80
Total plant funds	19,767,762.07
AUXILIARY ENTERPRISE FUNDS	
Cash at banks	55,041.47
Accounts receivable	33,132.13
Prepayments and deposits	85,324.66
Inventories	105,270.58
Due from other funds	
– Agency funds	7,020.28
Total auxiliary enterprise funds	285,789.12
SPONSORED PROGRAM FUNDS	
Cash on hand and at banks	56,965.88
Accounts receivable	33,416.23
Total sponsored program funds	90,382.11
AGENCY FUNDS	
Cash at banks	343,012.88
Investments, at cost	659,524.11
Accounts receivable	2,637.29
Due from other funds	
– Restricted current funds	29,273.39
Total agency funds	1,034,447.67

LIABILITIES AND FUND BALANCES

	US\$
GENERAL RESERVE	
Fund balances	1,233,864.12
 Total general reserve	 1,233,864.12
PLANT FUNDS	
Unexpended	
Accounts payable and accrued expenses	909,329.99
Fund balances	
– Unallocated	51,303.21
– Allocated	231,346.60
Maintenance replacement and operations funds	
Due to other funds	
– Unrestricted current funds	3,034.88
– Unexpended plant funds	20,000.00
Fund balances	
– Unallocated	239,157.22
Net investment in plant	
Fund balances – allocated	18,313,590.17
 Total plant funds	 19,767,762.07
AUXILIARY ENTERPRISE FUNDS	
Accounts payable and accrued expenses	47,855.04
Due to other funds	
– Unexpended plant funds	27,964.79
– Unrestricted current funds	97,853.54
Fund balances	
Auxiliary Services – unallocated	90,000.00
– reserve	20,715.36
Academic Related	
Computer Center – unallocated	1,187.68
Continuing Education Center	212.71
Total auxiliary enterprise funds	285,789.12
SPONSORED PROGRAM FUNDS	
Accounts payable and accrued expenses	4,742.62
Fund balances – allocated	85,639.49
Total sponsored program funds	90,382.11
AGENCY FUNDS	
Accounts payable	9.86
Due to other funds	
– Unrestricted current funds	52,499.18
– Auxiliary enterprise funds	7,020.28
Fund balances	
– Allocated	938,443.31
– Unallocated	36,475.04
Total agency funds	1,034,447.67

NOTES TO THE FINANCIAL STATEMENTS

JUNE 30, 1980



1. Summary of significant accounting policies

a) **Accrual basis :** The financial statements of the Asian Institute of Technology have been prepared on the accrual basis except for depreciation accounting as explained in note 1 (c) to the financial statements. The statement of current funds revenues and expenditures is a statement of financial activities of current funds related to the current reporting period. It does not purport to present the results of operations or the net income or loss for the period as would a statement of income.

b) **Fund accounting :** In order to ensure observance of limitations and restrictions placed on the use of the resources available to the Institute, the books of account of the Institute are maintained in accordance with the principles of "fund accounting". This is the procedure by which resources for various purposes are classified for accounting and reporting purposes into funds that are in accordance with activities or objects specified.

Within each fund group, fund balances that are restricted by outside sources are so indicated and are distinguished from unrestricted funds allocated to specific purposes by action of the governing board. Externally restricted funds may only be utilized in accordance with the purpose established by the source of such funds and are in contrast with unrestricted funds over which the governing board retains full control to use in achieving any of its institutional purposes.

Income derived from investments is accounted for as revenue in the unrestricted current funds, with the exception of general reserve fund and unexpended plant fund in which income is accounted for in the fund maintaining the investment.

All other unrestricted revenue is accounted for in the unrestricted current fund. Restricted gifts, grants, appropriations and other restricted resources are accounted for in the appropriate restricted funds.

c) **Physical plant and equipment** are stated at cost at date of acquisition or fair value at date of donation in the case of gifts. Depreciation on physical plant and equipment is not recorded.

2. Commitments

At June 30, 1980 the Institute had outstanding commitments US\$1,476,536.90 in respect to contracts for construction in progress at that date but not completed. These contracts are being financed by Government grants and appropriations.

Alumni Relations

Membership Record

As of the Thirty-First Graduation on 17 August 1980, the number of AIT Graduates totaled 2,052 from 28 countries.

A. Distribution by Country

Country	Number	Percentage
Afghanistan	12	0.59
Bangladesh	182	8.87
Brunei	2	0.10
Burma	1	0.05
Canada	1	0.05
China, Republic of	307	14.96
Hong Kong	45	2.19
India	126	6.14
Indonesia	24	3.12
Iran	7	0.34
Japan	6	0.29
Kampuchea	3	0.15
Korea, Republic of	21	1.02
Laos	1	0.05
Macao	5	0.24
Malaysia	93	4.53
Nepal	21	1.02
Pakistan	163	7.94
Papua New Guinea	2	0.10
Philippines	210	10.23
Singapore	16	0.78
Sri Lanka	114	5.56
Tanzania	1	0.05
Thailand	608	29.63
Turkey	6	0.29
United Kingdom	2	0.10
United States of America	2	0.10
Vietnam	31	1.51
TOTAL	2,052	100 %



Major Countries Represented	Percentage
Thailand	29.6
China, Republic of	15.0
Philippines	10.2
Bangladesh	8.7
Pakistan	8.0
India	6.1
Sri Lanka	5.6
Malaysia	4.5
TOTAL	87.7%

B. Distribution by Degree Received

Degree Received	No.	Percentage
Diploma	86	4.2
Master of Engineering	1,688	82.3
Master of Science	230	11.2
Doctor of Engineering	46	2.2
Doctor of Technical Science	2	0.1
TOTAL	2,052	100%



Alumni Chapters

The AITAA continues to have twelve active chapters with duly elected officers. These are located in:

Bangladesh	Republic of China
Hong Kong/Macao	India
Indonesia	Republic of Korea
Malaysia	Pakistan
Philippines	Singapore
Thailand	United States of America

Alumni Officers

The Executive Committee of AITAA serving during the 1980 year is as follows :

Dr Tongchat Hongladaromp President
Mr Prida Thimakorn Executive Secretary
Dr Ashim Das Gupta Finance Secretary
Mr Jugal Kishore Agarwalla Auditing Secretary
Mr Sommai Kornsakoo Business Secretary
Dr Mario T. Tabucanon Press Secretary

The Meeting of the Governing Board

The Ninth Meeting of the Governing Board of AITAA was held at the Olympic Hotel in Taipei, Republic of China on 9-10 May 1980. This meeting was attended by official representatives of the Executive Committee and of the following AITAA chapters: Indonesia, Korea, Malaysia, the Philippines, Republic of China and Thailand. The major results of the meeting were as follows:

1. Progress reports of the AITAA chapter activities, including seminars and AIT promotion events held on the occasion of the 20th Anniversary of AIT were made.
2. Local AIT Information Centers were established in Taipei, Republic of China, Singapore and the Philippines. All of these AIT information centers are located in office space donated by AIT graduates or employers of AIT graduates in each country.
3. The AIT Foundation, Inc. of U.S.A. challenge to the Alumni Association to raise matching scholarships was examined and a request was made for an extension of the challenge to raise scholarship funds. To date, the R.O.C. alumni have been successful in raising a scholarship grant for 1982 from Taiwan Water Supply Corporation.
4. The alumni participation in the Continuing Education Center activities at AIT was discussed at length and projects and plans for increased collaboration were established.
5. The Executive Committee was asked to seek the opinion of AIT graduates residing in India as to the need for revitalization of the AITAA-India chapter. This chapter has been inactive for several years. In addition, elections for the first set of office bearers for a new AITAA-Sri Lanka chapter were conducted, but the number of ballots returned did not reach the required minimum. Therefore, a new Sri Lanka chapter could not be established at this time.

Thailand and Indonesia Chapter to Host Alumni Meetings

The AITAA-Thailand chapter will host the Tenth Governing Board Meeting at Bhumipol Dam in Thailand on April 24-26, 1981. The AITAA-Indonesia will host the Eleventh Governing Board Meeting in Bandung or Bali in 1982, immediately before or after the Asian and Pacific Regional Division IAHR International Conference on Water Resources Development to be held in Indonesia.

Update of Alumni Addresses

The Association is assisting the AIT Development Office in updating the information on AIT graduates for the Directory of Alumni which was published recently.



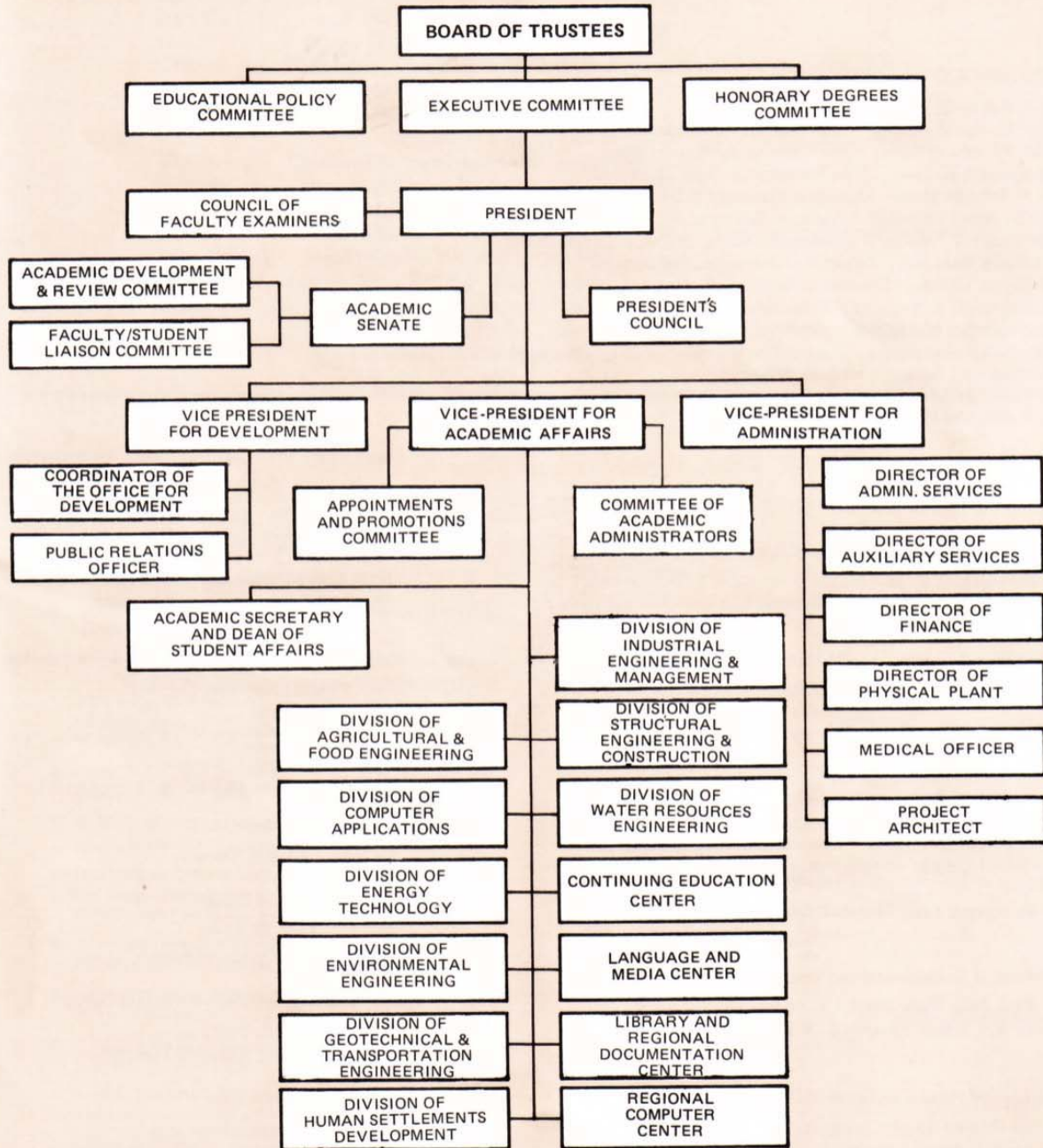
Election of Officers, Hong Kong.

The AITAA-Hong Kong Chapter had elected a new set of officers for 1980. The official address and other officers are listed below:

President	Mr. Poon Kee-Hoo AITAA-Hong Kong Management Information Unit Hong Kong Polytechnic Hung Hom, Kowloon Hong Kong	(CO75)
Vice President	Mr Tsai Ge-wah	(ST78)
Secretary	Mr Chan Ping-chiu	(CO75)
Treasurer	Mr Ho Ying-yeung	(WR70)
Social Convener	Mr Pao Wai-hong	(ST78)



ORGANIZATIONAL CHART OF THE ASIAN INSTITUTE OF TECHNOLOGY





Asian Institute of Technology
41 km Paholyothin Highway
P.O. Box 2754 Bangkok Thailand
Tel. 5168311-5 Cable:AIT Bangkok

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Prof. M. Nawaz Sharif, Vice President for Academic Affairs
Prof. Ricardo P. Pama, Vice President for Development
Mr Kenneth R. Long, Vice President for Administration
Mr F. John Stephens, Academic Secretary & Dean of Student Affairs
Mrs So-Jean Uathavikul, Assistant Academic Secretary
Mrs Emilie A. Ketudat, Coordinator of the Office for Development
Mr Nipon Masavisut, Director of Administrative Services
Mr Steven Molnar, Director of Auxiliary Services
Mr Pongsagdi A. Vejajiva, Director of Finance
Mr Noppadon Muangkroot, Director of Physical Plant
Mrs Mai Charoensupaya, Assistant to the Director of Continuing Education Center
Dr Sivaporn Chakorn, Medical Officer
Mr David L. Terry, Public Relations Officer
Mr Kriengkrai Phimolmas, Project Architect

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Division of Structural Engineering and Construction

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Dr Helmut Eggers, Chairman
Dr S. Selvalingam, Associate Chairman

Continuing Education Center

Dr N. C. Austriaco, Director

Language and Media Center

Mr A. J. Kidd, Director
Mr J. A. Kirk, Associate Director

Library and Regional Documentation Center

Dr Jacques Valls, Director
Ms Beverly Chan, Associate Director

Regional Computer Center

Prof. J. A. Kearns, Director
Dr Kanchit Malaivongs, Associate Director

Abbreviations

ASEAN	Association of South East Asian Nations
CDG	Carl Duisberg Gesellschaft e.V., Germany
CIDA	Canadian International Development Agency
DAAD	German Academic Exchange Services
DANIDA	Danish International Development Agency
EGAT	Electricity Generating Authority of Thailand
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
IBM A/FE	IBM World Trade Americas/Far East Corporation
IDRC	International Development Research Centre, Canada
NEB	National Environment Board, Thailand
NESDB	National Economic and Social Development Board, Thailand
NORAD	Norwegian Agency for International Development
ODA	Overseas Development Administration, U.K.
PAE-MEC	Pacific Architects and Engineering Consultants-Metropolitan Engineering Consultants
RID	Royal Irrigation Department, Thailand
SEATEC	South East Asia Technology Company Ltd.
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
USAID	United States Agency for International Development

Objectives of the Asian Institute of Technology

"The Asian Institute of Technology, as an international institution of higher learning, will engage in instruction and research in engineering, the sciences and closely related fields to serve the region. Its program will reflect the changing needs of the region and will provide:

- Educational opportunities at the master's and doctorate levels.
- Through post-graduate diploma courses and short-term workshops or seminars, give opportunities for practicing engineers in the region to keep abreast of technological developments and their application to the needs of the region.
- Stimuli for the development of research by the establishment of a major research center within AIT.
- A focus for the development of engineering education to meet the unique needs of the region.
- Mechanisms for the introduction into the region of the latest developments in technology and for the development of their application to its needs.
- A center for the development of equipment for research and instructional laboratories.
- An outstanding library to serve the needs of both AIT and the region.
- A major computing center, designed and operated to serve AIT and other institutions in the region.
- A regional focal point and catalyst for the development of professional activities, including conferences and seminars, and a center for the publication of technical information for the region."

For those who want to know more about AIT. Individuals who wish their name added to the mailing list for the Institute's quarterly review, or information brochures, or who desire information on other aspects of the Institute's activities should contact the:

Public Relations Officer
Asian Institute of Technology
P.O. Box 2754, Bangkok, Thailand

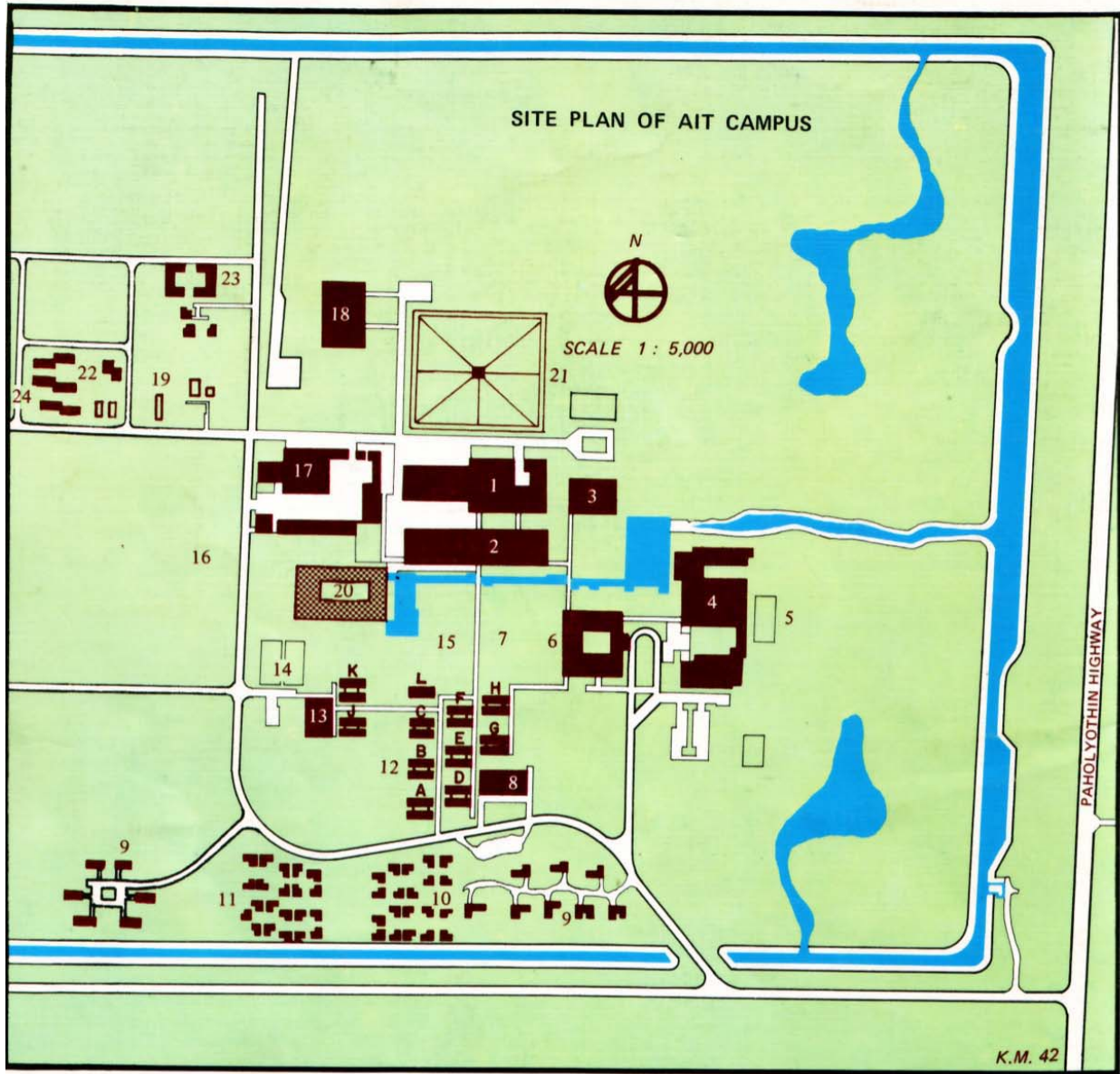
Telephone: 5168311, 5168321, 5168331

For potential program sponsors. Organizations or institutions interested in sponsoring a program should contact the:

Vice President for Development
Asian Institute of Technology
P.O. Box 2754, Bangkok, Thailand

For AIT publications. A list of AIT publications and order information is available from the:

Director
Library & Regional Documentation Center
Asian Institute of Technology
P.O. Box 2754, Bangkok, Thailand



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|----------------------------|--|
| 1 Academic Building North | 14 Tennis Courts |
| 2 Academic Building South | 15 Hockey Field |
| 3 Regional Computer Center | 16 Cricket Pitch |
| 4 AIT Center | 17 Physical Plant |
| 5 Swimming Pool | 18 Regional Engineering
Experimental Station |
| 6 Administration Building | 19 Plant Nursery |
| 7 Football Field | 20 Library |
| 8 Student Center | 21 Energy Technology Building
and Energy Park |
| 9 Faculty Houses | 22 Building Together Demonstration House |
| 10 Student Village I | 23 Staff Housing |
| 11 Student Village II | 24 Staff Dormitory Stage III |
| 12 Dormitories | |
| 13 Cafeteria | |

