

SIAN INSTITUTE OF TECHNOLOGY

ANNUAL REPORT



1993

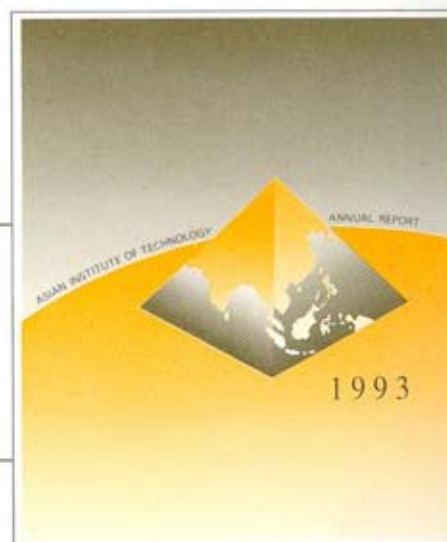
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Cover: The pyramid symbolizes the Institute's spirited pursuit of its mission, springing from an integrated vision of its role and supported by an ever-widening base of academic, research and outreach programs.



THE BENDER DREAM

Prof. Milton Bender, Jr., AIT's founding President, remembers people and events from the Institute's early years.

Prof. Bender served as Dean of the SEATO Graduate School from May 1963 to December 1967, joining the School from the Colorado State University where he was head of the civil engineering department. Prof. Bender guided the transition of the School into an independent, autonomous institution, serving as first President of the Asian Institute of Technology from January 1968 to February 1973, and for a second term from January 1975 to January 1977.

Accompanied by his wife, Letha, Prof. Bender visited AIT from 8 to 14 March 1993, marking his second "homecoming" since retiring in 1977. His recollections of those pioneering years speak of challenges and the triumph of making AIT, which was referred to historically and in jest as "the Bender Dream", a reality.

"Let me share some background here. The appellation, 'Bender Dream', was started by USAID and was used initially in a somewhat derogatory way. I was pushing the development of the Institute and the general feeling at that time was that my idea could never work. But when things did begin to move, the appellation changed from a 'dream' to a vision.

"It is indeed gratifying to see how the Institute so closely resembles my own vision of it. There are differences, of course, but all in all everything is going very nicely.

"This institution, I used to tell people, is going to be one of the world's greatest. I do realize that it has problems. These are sometimes unavoidable



"Thank you for AIT..." For the alumni and former staff of AIT, Prof. Bender's visit provided a rare opportunity to thank the Institute's Founding President for his good work. Photographed with Prof. Bender at a welcome party are Dr. Anat Arbhahirama (WRE '62), Dr. Za-Chieh Moh, former AIT Vice President and Provost, and Dr. Thongchat Hongladaromp (SEC '62).

and often they arise because people take a very short-term view of the Institute. The point is you've got to look at the Institute 30 years, even a hundred years, ahead.

"The main thing is to be patient and to keep trying. That's what we did. Remember, there is no such thing as absolute security.

"When we started, we had to educate countries about the validity of our programs, and that took time. People asked: 'Who is going to award the degree? You? You want to award the degree? You can't do that.' We also had to compete for scholarships. A common practice among donor countries at that time was to restrict the award of scholarships to their own universities.

"Before coming to Thailand, I was with the Colorado State University, which had a large number of Asian students in the graduate program in engineering. About 90 per cent of these students stayed on in the United States

after graduation.

"When I became Dean of the SEATO Graduate School, I saw an opportunity to build an institution that would keep Asian students in their home countries.

"I was committed to this idea because academic programs are essentially area-oriented. Students educated in programs tailored to their home areas are in effect better trained.

"Looking at what AIT has achieved, I would say that our efforts in those early years have paid off.

"My view of AIT is long range. It should always strive to improve its academic standards, promote the Doctoral program, and sustain its reputation as a center of excellence, without necessarily seeking to respond to all the needs of all countries in the Asian region. In time, I believe the reputation of this Institute will be such that students will try to get in at their own expense. AIT has indeed become a prestigious institution."

THE YEAR IN BRIEF

1993 LANDMARK EVENTS

February 16

A memorandum of understanding establishing the AIT Center in Vietnam was signed in Hanoi by AIT President Alastair North and Prof. Pham Minh Hac, First Vice-Minister of Education and Training of the Government of SR Vietnam.

May 17

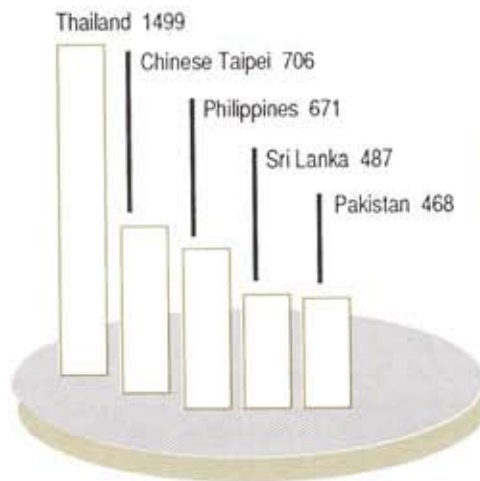
Opening of the Swiss-AIT Vietnam Management Development Project in Ho Chi Minh City, the Institute's first one-year academic program outside its campus.

July 1

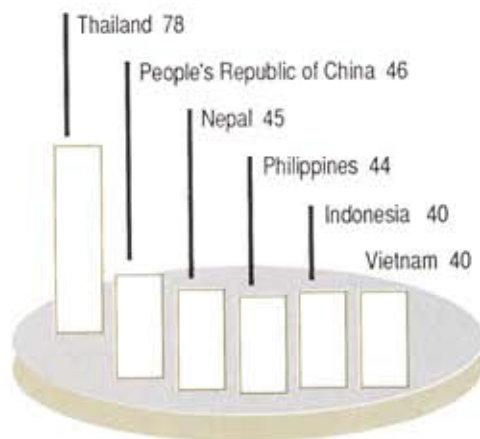
The amalgamation of the former academic divisions into four Schools - Civil Engineering, Advanced Technologies, Management, and Environment, Resources and Development - came into effect, following a rigorous restructuring of the Institute's academic programs.

STUDENTS AND ALUMNI

The five largest groups of alumni are from



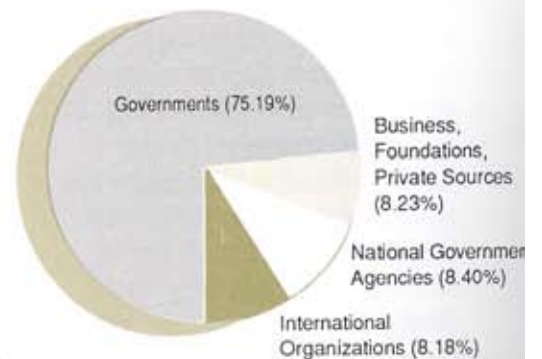
The six largest groups of graduates in 1993 are from



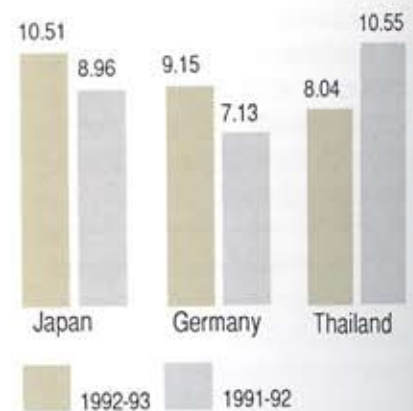
Total Alumni (1961-1993): 6537

PARTNERSHIPS AND COLLABORATIONS

Contributions Received in FY 1992-93 (%)



Three Largest Supporting Governments FY 1992-93 and FY 1991-92



Total Contributions Received in FY 1992-93 (Baht '000): 650,058

In 1993 the Institute received the largest grant ever presented by a private donor. Dr. Somsak Leeswadtrakul, Chairman and Chief Executive Officer of SSP Group of Companies, presented approximately 30 million Baht to support the construction of the Chalerm Pra Kiet Building (meaning "In Their Majesties' Honor").



The building will house the Computer Integrated Manufacturing Laboratory as well as offices and classrooms of the program in Industrial Engineering and Management.

Gen. Prem Tinasulanonda, former Prime Minister of Thailand, presided over the groundbreaking ceremony on 29 March. To the left of Gen. Prem is Dr. Somsak.

PRESIDENT'S MESSAGE

1993 - a year of coordination, consolidation, and continued successful progress.

The best description of 1993 for AIT would be "a year of consolidation".

On the academic front, the new Schools - Advanced Technologies, Civil Engineering, Management, and Environment, Resources and Development - came into existence and the divisions as administrative units passed into history.

The transition took place smoothly and work started immediately to develop the advantages potentially available through the amalgamation. The two most immediate of these, curriculum reform and more cost-effective utilization of employee resources, were already showing progress by the year end. A most encouraging feature has been the very positive way faculty and staff have set themselves to achieving the amalgamation objectives, and I express my own appreciation of this in warmest terms.

On the financial front, stability has been achieved by a significant increase of Thai support for student scholarships. This has come about by way of a well conducted strategy of building partnerships with universities, government agencies and private corporations in our host country. Scholarship support is, of course, vital in maintaining tuition fee income, and longer equilibrium does require new scholarship sources to balance the inexorable decline in what we call "internal" scholarships donated to the Institute by western donors as part of their overseas aid to the region. The Development Office, led by the Vice President for Development, is to be congratulated on its success in this activity. Of course, many other "external" scholarship sources have been tapped by



AIT's Vietnamese alumni were well represented at the historic signing of a memorandum of understanding establishing an AIT branch in their country. In the words of President North, "AITCV is a logical progression of AIT's service to Vietnam."

faculty and staff seeking support for their professional subject areas, so that the effort is truly Institute-wide.

1993 saw, too, the official opening of the program in Ho Chi Minh City, as well as the completion of building renovation of our premises in Hanoi. The AIT Center in Vietnam is, therefore, well and truly underway with the first program in Management Development three quarters completed and the first in Industrial Engineering and Management ready to start. The Center is exciting great interest in the donor community, as well as in other countries of the region which, too, would like a local AIT Center.

While Vietnam contains the only Institute Center outside Bangkok, a number of projects have offices in other locations. Significant among these are our aquaculture offices in Laos and Cambodia (supported mainly by Denmark, Sweden and the United Kingdom), and plans to construct a regional development project office in Baguio City, Philippines.

This report lists all the salient details of our academic activities and the associ-

ated donor support. The reader can see the ever broadening mix of student nationalities, the enlarged portfolio of partner agencies, and the steadily growing physical facilities, yet all coordinated into our clearly defined mission.

Overall, it is this clarity of purpose that established 1993 as a year of coordination, consolidation, and continued successful progress. For this I express my utmost appreciation of the endeavors of my colleagues, as well as of our Trustees and many supporters.

A handwritten signature in black ink, which reads "Alastair M. North".

Alastair M. North

BREAKTHROUGHS

The establishment of the AIT Center in Vietnam (AITCV) is a step forward in two respects. It fulfills AIT's commitment to the technological development of the countries of this region and contributes to the international experience and education of the young people of Vietnam.

The AITCV marks a breakthrough in AIT's expansion in Asia. Its establishment is contained in a memorandum of understanding signed on 16 February 1993. The Hanoi-based AITCV will be officially inaugurated in February 1994. Its product portfolio will be developed in response to existing/emerging needs in Vietnam, while taking into account AIT's areas of strength.



AIT President Alastair North and Prof. Pham Minh Hac, First Vice-Minister of Education and Training of the Government of SR Vietnam, shake hands following the MOU signing.

In Ho Chi Minh City, the three-term Swiss-AIT Vietnam Management Development Project commenced in May 1993 and was officially inaugurated later in September. The first group of 31 participants consisted of faculty members from four partner universities, namely the National University of Economics, Hanoi Polytechnic University, Ho Chi Minh City Economics University, and Ho Chi Minh City Polytechnic University, and six other universities.

"... a significant event in the history of tertiary education in Vietnam and at AIT..."

"The Hanoi branch is ideally placed to assist the move towards industrial, technological and economic parity between the north and the south. The Ho Chi Minh City branch brings the Center in close proximity to existing industrial and technological developments. Both programs will prepare certain of the trainee students to complete their degree programs at the AIT campus."

Prof. Alastair North
AIT President

The programs in the Hanoi and Ho Chi Minh City branches offer substantial service to Vietnam, both in the home environment and through enhanced entry to the degree programs at AIT. The programs parallel the Institute's introductory courses, and as with approved post-graduate courses in other universities, will qualify for credit transfer to AIT. Those who complete one year of studies but do not continue to a post-graduate degree at AIT will be awarded a special diploma.

"... a model of international standard for post-graduate education, curriculum development, and educational methodologies..."

"AITCV symbolizes the Vietnamese Government's recognition of AIT's contribution to regional growth and the demands in human resource development for the economic reform of Vietnam. We hope AITCV will closely cooperate with Vietnamese universities to improve and promote the institutional development process underway in the universities."

Prof. Pham Minh Hac
First Vice-Minister
Education and Training
Government of SR
Vietnam

BREAKTHROUGHS

While Vietnam contains the only Institute Center outside Bangkok, a number of AIT projects have offices in other locations, the most significant of these being aquaculture offices in Laos and Cambodia. These are supported by the Governments of Denmark, Sweden and the United Kingdom. Under study is a regional development project office in Baguio City, Philippines. These developments augur well for the Institute's pursuit of new strengths in various Asian countries.

BRIDGING PROGRAM

The "Bridging Program", a one-term pre-Master's program of education fundamental to the admission of students from weak educational backgrounds, will begin in January 1994 for students entering the School of Advanced Technologies in the May term. The Program, which will be conducted by the Center of Language and Educational Technology (CLET), covers deficiencies in fundamental science education and English language training. Places have been offered to six students from Laos, Mongolia, the People's Republic of China, and Vietnam.

THAILAND-BASED COLLABORATIONS

Major government and state enterprises and universities in Thailand are expected to support more than 60 staff development scholarships over the next four years. Scholarships under the Thai-AID Program will benefit students from Myanmar and Vietnam.



AIT is carrying out field surveys in southeast Cambodia to assess the potential for integrating fish ponds into rice-dominated agro-ecosystems.

COLLABORATION WITH PAKISTANI INSTITUTIONS

Attesting to the growing collaboration between AIT and the Islamic Commerce Educational Society is the increased enrolment of self-support students from Punjab College of Business Administration (PCBA) in the School of Management. In January 1994, 18 more will be joining the currently enrolled group of 22 students.

Last year the Regional Computer Center embarked on a partnership with the Punjab Institute of Computer Science (PICS), leading to the provision of RCC expertise and hardware support to PICS. Starting 1994, PICS will enrol up to 60 students annually in RCC's computer applications program.

FUTURE PROSPECTS

In 1993 AIT turned its attention to a new section of the region, namely the six Asian Republics of the Commonwealth of Independent States (CIS) and Mongolia.

Contact with Mongolia was renewed in late 1993 when a delegation from the Development Office and the Water Resources Engineering Program visited Ulan Bator. This followed contacts in previous years, which led to a memorandum of understanding with the Mongolian Academy of Sciences enabling short periods of study in energy technology by a small group of Mongolian scientists.

The 1993 mission is expected to pave the way for the enrolment of Mongolian students under the Institute's normal scholarship allocation.

In the case of the CIS, contacts were initiated in the second half of 1993. Negotiations with potential collaborating universities will be conducted in early 1994, with the objective of enrolling the first CIS students by late 1994 or early 1995. The Government of Japan will support 20 scholarships for students from these countries.

ACADEMIC AFFAIRS

The most significant academic development in 1993 was the amalgamation of the former academic divisions into four schools, bringing with it the rationalization of course combinations and introduction of greater interdisciplinarity in the Institute's course offerings.

RESTRUCTURING AND CURRICULAR REFORM

The most significant academic development in 1993, the amalgamation of the former academic divisions into four schools, one of which was pre-existing, came into effect by the end of June. The Deans were appointed shortly thereafter.

The restructuring brought about new administrative arrangements, which delineated the functions of the Deans and provided mechanisms for faculty participation in decisionmaking. Two structures were created to support the Dean's Office, namely an Advisory Panel of Program

Coordinators and a Faculty Forum. These structures will be modified as curricular reform and the reallocation of Faculty administrative responsibility get underway.

Along with the creation of the Schools, the Institute initiated moves to rationalize course combinations and to introduce cross-School interdisciplinarity. Thus, the Institute should be able to further strengthen its capacity to respond quickly and flexibly to changing market needs, and relieve the pressure to preserve tradi-

tional programs and fields.

The restructuring has created opportunities to change or terminate certain areas of specialization, and to introduce new ones that are more relevant to the needs of the Institute's target countries. Faculty response to the on-going curricular reform has so far been encouraging.

The evolution of a truly intra-school curricula will allow the students to pursue more interdisciplinary studies and research. It will also encourage more effective use of faculty resources.



The creation of the four Schools has rationalized course combinations and introduced greater interdisciplinarity in the Institute's course offerings.

ACADEMIC AFFAIRS

APPOINTMENT OF DEANS

School of Civil Engineering

Prof. Pisisdhi Karasudhi

Prof. Pisisdhi, an AIT alumnus, received his M.Eng. in Structural Engineering from the SEATO Graduate School of Engineering. He obtained his B.Eng. in Civil Engineering from Chulalongkorn University and Ph.D. in Civil Engineering from Northwestern University. Prof. Pisisdhi serves on the AIT Board of Trustees in his capacity as AIT Faculty Representative. He joined AIT in 1969.



Prof. Pisisdhi

School of Environment, Resources and Development

Prof. Karl E. Weber

Prof. Weber obtained his M.A. in Ethnology and Dr. phil. in Sociology from Ruperto Carola University, Heidelberg. He joined AIT in 1978. Prof. Weber has played key roles in the implementation of CIDA support programs at AIT and has been Project Manager of the CIDA/AIT-CUC Partnership Project.

The Associate Dean of the School of Environment, Resources and Development is Prof. Chongrak Polprasert.

Prof. Chongrak obtained his M.Eng. in Environmental Engineering from AIT in 1974. He attended the University of Washington in Seattle on a Fulbright scholarship, receiving a Ph.D. in Civil Engineering.

School of Advanced Technologies

Prof. A.B. Sharma

Prof. Sharma holds a B.Sc. (Hons.) in Physical Electronics from the University of Northumbria, UK, and a Licenciate of Technology (Ph.D.) in Applied Electronics from Helsinki University of Technology. He also obtained a D.Tech. in Communications from this University for his work on sub-optimum receivers for satellite-laser ranging. Prof. Sharma joined AIT in 1990.

The School of Management

is headed by a Director, Prof. Jyoti P. Gupta. Prof. Gupta obtained his Ph.D. from the University of Manchester, UK, and was Professor in Finance at *Ecole Supérieure de Commerce de Paris* before joining AIT. He is seconded by the Government of France.



Prof. Weber



Prof. Chongrak



Prof. Sharma



Prof. Gupta

INFORMATION TECHNOLOGY INITIATIVES

Proposed Master's Program

The concept for a Master's program in Information Technologies is under study by a working group representing the Library and Regional Documentation Center (LRDC), the Computer Science Program, the Regional Computer Center, and the School of Management. Definitive action on the proposed program is ex-

pected with the arrival by mid-1994 of the new Director of LRDC, Dr. Robert Stueart, former Dean and Professor of the Graduate School of Library and Information Science at Simmons College, Massachusetts.

Coordinated GIS Activities

The Institute has established a working group to study the coordination of geographic information systems (GIS)-related activities in the different academic programs, namely Natural Resources, Human Settlements Development, Computer Science, Agricultural and Food Engineering and Environmental Engineering, as well as the AIT-based GRID activity of UNEP.

STUDENT ENROLMENT

The average enrolment in the degree-awarding units during the three terms in 1993 increased by almost 4 per cent over the 1992 figure, with marked enrolment variations observed from program to program. While some programs, like Computer Science, kept pace with the overall rise in enrolment, others performed at the same levels as in recent years. The continued growth of the School of Management was a significant enrolment trend in 1993.

1993 Student Enrolment

Term	Schools	Centers*
Jan	945	28
May	933	29
Sept	970	46
Average	949	34

* Program in Computer Applications Development (PCAD) and Remote Sensing. (Not including Talkbase Program).

DOCTORAL ENROLMENT

The Doctoral program enrolment reached 13.9 per cent of total enrolment in the September 1993 term, but was still well below the 20 per cent target.

1993 Master's and Doctoral Enrolment

Doctoral	Jan	May	Sept	Master's	Jan	May	Sept		
D.Eng.	60	63	66	M.Eng.	450	438	415		
D.Tech.Sc.	51	53	34	M.Sc.	254	293	269		
Ph.D.	3	8	28	MBA	83	42	106		
	114	124	128		787	773	790		
Total No. of Degree Students				Jan	901	May	897	Sept	918
% Doctoral Students					12.7		13.8		13.9



INTERNATIONAL ENROLMENT

Forty-two countries are represented in the student body. The six largest nationality groups are from Thailand, the People's Republic of China, Vietnam, Nepal, the Philippines and Pakistan.

The Institute's international enrolment maintained a diverse yet consistent overall pattern. Further increases in enrolments from Laos and Cambodia are expected with the opening of the Pre-Master's Bridging Program.

1993 Student Enrolment by Program

	Jan	May	Sept
School of Advanced Technologies			
CS	54	104	101
IEM	53	91	91
TC	18	45	45
School of Civil Engineering			
GTE	97	57	99
IEM	40	46	19
SEC	76	40	79
WRE	48	47	29
School of Environment, Resources and Development			
AFE	122	120	81
ET	68	70	42
EE	81	45	44
HSD	87	113	123
NR	73	76	56
School of Management	86	46	112
Others*	42	33	49
PCAD	27	27	25
Remote Sensing	1	2	21
Pre-Master's English	19	20	15
Total	992	982	1031

* Special Program and Certificate students.

1993 Student Enrolment by Country

	Jan	May	Sept
Bangladesh	53	52	52
Belgium	3	2	3
Bhutan	13	6	2
Bolivia	1	1	1
Brunei	1		
Cambodia	6	6	5
Canada	2	5	2
Chinese Taipei	47	41	54
Finland	1	1	
France	5	3	3
Hong Kong	1		2
India	62	66	58
Indonesia	58	55	60
Japan	4	3	3
Kenya	1	1	1
ROK	7	5	10
Laos	5	11	11
Luxembourg			1
Macao	2		
Malawi	1	1	
Malaysia	9	8	15
Maldives			1
Mongolia	1	1	1
Myanmar	28	32	27
Nepal	89	90	73
Netherlands	1	1	2
Norway	1		1
Pakistan	55	52	71
PNG	1	1	1
Philippines	79	64	72
PRC	91	101	96
Spain			1
Sri Lanka	61	56	58
Sweden	3		1
Switzerland	1	1	1
Tanzania	1		
Thailand	182	199	234
Tonga	1	1	1
USA	4	5	4
UK	1	1	2
Vanuatu	2		
Vietnam	89	90	85
Stateless			1
Total*	973	962	1016

* Not including Pre-Master's English Program.

MARKETING EFFORTS

Measures to increase the enrolment of fee-paying students are under study. The proposals include the training of some Faculty as marketing agents and the appointment of a marketing representative in each School to coordinate the development and implementation of promotional plans in collaboration with the Office of Media and Information Services (OMIS) under the Office of the Vice President for Development. The AITAA Chapters have been approached for assistance and greater involvement in marketing the Institute.

Effective marketing would require thorough analysis of the following fac-

tors: AIT's country markets and their respective demands for technological expertise and graduate education, the trend towards beneficiary country-focused scholarship grants, and the growing number of students willing to take partial or full responsibility for their study costs.

As part of the marketing efforts carried out in 1993, promotional visits were made to Thai universities and government organizations. These contributed to student intakes in the three terms.

Under the new structure student intakes are scheduled as follows: January term for the School of Environment, Resources and Development (SERD), May term for the School of Advanced Tech-



The Development Office assisted by OMIS organized workshops and exhibitions to promote AIT.

nologies, and September term for the Schools of Civil Engineering and Management. Given that SERD has the most number of programs of the four Schools, the highest student intake is expected in the January term.

GRADUATION

The Institute awarded degrees to 466 students in 1993, compared with 442 in 1992. AIT now has 6537 graduates from 44 countries in Asia and other regions.



By following a high admission criteria, close monitoring of the students' progress, and strict implementation of a probational system, the Institute ensures the quality of its graduates.

1993 GRADUATION RECORD

by Degree

	Apr	Aug	Dec	Total
D. Eng.	5	5	2	12
D.Tech.Sc.	1		2	3
Ph.D.	1	1		2
M.Eng.	92	100	79	271
M.Sc.	28	44	62	134
MBA	41		1	42
Dip.AIT	1		1	2

by Country

	Apr	Aug	Dec	Total
Belgium		1		1
Bangladesh	8	9	7	24
Brunei	1			1
Cambodia		2		2
Canada			1	1
Chinese Taipei	10	4	8	22
Finland	1			1
Hong Kong	1			1
India	7	17	10	34
Indonesia	22	11	7	40
Japan	1		2	3
ROK	2		1	3
Laos			2	2
Macao	2			2
Malawi		1		1
Myanmar	4	2	3	9
Malaysia	2		1	3
Nepal	9	21	15	45
Philippines	19	13	12	44
Pakistan	12	11	9	32
PRC	11	18	17	46
Sri Lanka	14	8	8	30
Thailand	32	12	34	78
Tanzania	1			1
Vietnam	10	20	10	40

by Program

	Apr	Aug	Dec	Total
School of Advanced Technologies				
CS	1	3	32	36
IEM	1	2	43	46
TC			17	17
School of Civil Engineering				
GTE	37	2	3	42
IREM		22		22
SEC	35	1		36
WRE		23	2	25
School of Environment, Resources and Development				
AFE	2	44	3	49
EE	36	2		38
ET	1	30		31
HSD	14	1	31	46
NR	1	20	15	36
School of Management	41		1	42

GRADUATION AWARDS

JAMES A. LINEN III MEMORIAL PRIZE, in memory of Mr. James A. Linen, who was a Charter Founding Member and Life Member of the Board of Trustees.

CHIN FUNG KEE PRIZE, in memory of Prof. Chin Fung Kee, who was Vice-Chancellor, University of Malaya, and President of the Southeast Asian Geotechnical Society.

MAHESH VARMA PRIZE, established from funds provided by Prof. Mahesh Varma.

INSTITUTE PRIZE

Y.Y. KISHIDA PRIZE, established in 1992 by Mr. Yoshisuke Kishida, owner of the Shin Norinsha Co., Tokyo, in memory of his son, Yoshiyuke.

HISAMATSU PRIZE, awarded from funds provided by Prof. Yoshihiro Hisamatsu, former Dean of the Faculty of Engineering, University of Tokyo, and at present a Technology Adviser for Nisshin Steel Co. Ltd., Japan.

TELECOM-FINLAND PRIZE, awarded to the most outstanding Telecommunications Master's graduate.

TIM KENDALL MEMORIAL PRIZE, in memory of Mr. R. M. Kendall, an AIT Trustee from 1971 to 1981.

KEIDANREN AWARD, presented to the most outstanding female graduate.

Presented in April as the
YOHEI MIMURA PRIZE

Presented in August as the
AKIO MORITA PRIZE

Presented in December as the
EISHIRO SAITO PRIZE

April

Mr. Somkiat Suebsubanunt
(SOM), Thailand

Mr. I. C. R. Fernando
(GTE), Sri Lanka

Mr. Navaratnam Vaikunthan
(SEC), Sri Lanka

Mr. Muhammad Amjad
(SEC), Pakistan

Mrs. Fe Garcia Tetangco
(SOM), Philippines

August

Mr. Jay Prakash Sah
(NR), Nepal

Mr. R. M. A. Dayanarth
Rajapakse (ET), Sri Lanka

Mr. Dang Quoc Tuan
(AFE), Vietnam

Mrs. Nguyen Huong Thuy
Phan (WRE), Vietnam

Mr. Raghunath Jha
(IREM), Nepal

Mrs. Nguyen Huong Thuy
Phan (WRE), Vietnam

December

Mr. Mokbul Morshed Ahmad
(HSD), Bangladesh

Mr. Krishna Jee Pahari
(NR), Nepal

Mr. Shailesh Khanal
(CS), Nepal

Mr. Mohammad Shariful Islam
(TC), Bangladesh

Mr. Kesavan Sangaradas
(IEM), Sri Lanka

Ms. Devyani Subrahmanyam
Mani (HSD), India

FACULTY

STRENGTH

While the proportion of seconded Faculty rose to 46 per cent from last year's 40 per cent figure, it was still below the 50 per cent that is considered appropriate for the Institute's academic operations. An analysis of the overall Faculty count showed that none of the increase was in the full-time, long-term numbers, a result of the very strict semi-freeze on new full-time Faculty contracts, especially those supported from central funds. However, the significant rise in the number of Associated Faculty, referring to academics employed by another institution but hired by AIT on a paid consultancy basis to do specific teaching and/or research duties, should be monitored to ensure the cost-effectiveness of the Institute's teaching staff structure.

A more efficient distribution of Faculty is envisaged once cross-School interdisciplinarity and curricular reform come into full effect. The target of 9 to 1 student-to-Faculty ratio may well be a long-awaited consequence of this.



Faculty and Staff Secondments FY 1992-1993

Country/Organization	Man Months
Governments	
Canada	85.0 ²
PRC	24.0 ⁶
Chinese Taipei	12.0
Finland	43.0 ³
India	19.0
Japan	167.5 ¹
ROK	22.0 ⁷
Norway	19.5
Sweden	35.0 ⁴
Switzerland	8.5
USA	27.5 ⁵
European Economic Community	
Belgium	36.5
CEC	22.0
Denmark	30.0
France	84.0
Germany	62.0
United Kingdom	77.0
International Organizations	
ADB	12.0
ESA	12.0
IUCN	12.0
UNEP	6.0
Government Agencies	
IDRC, Canada	11.5
UCLES, UK	1.0
Business and Industry	
	14.0
Foundation	
Fulbright Foundation	4.0
Total	847.0

The international character of the AIT Faculty has created a unique strength for the Institute.

DEVELOPMENT AND SUPPORT

As with previous years, the Institute was ably supported by a stable community of core direct-hire Faculty, with a significant proportion recognizing AIT as their career institution. Nearly all Faculty departures in 1993 were of visiting academics who were contracted only for a limited, pre-specified period.

The pattern of academic ranks confirms the Institute's role in the career development of Faculty. An abiding tradition at AIT is the award of promotions in recognition of the professional reputations of Faculty and their growing experience and expertise.

The now firmly-established Curriculum Innovation Grant and Research Initiation Grant provide important incentives to Faculty development.

PUBLICATIONS

1993 showed a continuing strength in the Institute's publication performance, with last year's average of 3.6 journals or conference papers per Faculty being maintained.



RESEARCH AND OUTREACH

RESEARCH POLICY AND STRUCTURE

The establishment of the four Schools brought wide-ranging implications for Institute research. The most evident was the greater coherence in research policy and structure and the re-invigoration of research activities as a result of the reformed curricula, the increased authority of the Schools and the improved incentives for sponsored research projects. Research functions previously undertaken by the former Regional Research and Development Center have been delegated to the four Schools.

The *ANNUAL REPORT OF RESEARCH for 1992* covers 208 projects that were completed during the year or continued in 1993. The wide range of research activities carried out demonstrates the Institute's conviction that independent research, in combination with a rigorous coursework program, presents the most appropriate and effective means of fulfilling AIT's educational mission.

OUTREACH

Outreach activities have taken a firm place as one of the Institute's three main scholarly pursuits, alongside teaching and research. A feature of 1993 was the growth of short course training and conference activities conducted by the Schools and the Outreach Centers.

A significant result of the Institute's expanding outreach activities was the creation of several focal points outside Thailand. The agriculture/aquaculture program has opened project offices in Laos and Cambodia, as well as in Northeast Thailand. The School of Environment, Resources and Development will shortly open a regional development project office in the Philippines. To-date the Institute's most ambitious project outside Thailand is the establishment of the AIT Center in Vietnam.

A historic outreach activity carried out in 1993 was the Queen Sirikit Environment and Development Seminar, which was conducted in December by the Continuing Education Center in cooperation with the Royal Development Project Board, the United Nations Environment Program and the Economic and Social Commission for Asia and the Pacific. Prof. Dr. Her Royal Highness Princess Chulabhorn graciously opened the three-week seminar, which was held in commemoration of Her Majesty the Queen's 60th birthday and in recognition of her commitment to improving the quality of life of the people of Thailand.

The seminar participants visited the Royal projects to examine their approaches, methodologies and environmental aspects, with a view to applying them in the most appropriate manner in their respective countries. The

Development can be achieved without destroying the environment, Prof. Dr. HRH Princess Chulabhorn said in her Royal address at the opening of the Queen Sirikit Environment and Development Seminar. She urged the "pursuit of development strategies and alternative lifestyles that are more conserving and caring and have minimum consequences on the environment."



Above: Prof. Dr. Her Royal Highness Princess Chulabhorn. Below: A group photo of the seminar participants.



seminar was attended by 27 participants from various Asian countries.

In October 1993, the Asian Disaster Preparedness Center conducted a disaster management course (DMC) in Manila, the first of its first semi-annual, six-week course to be held outside the AIT campus since the Center's establishment in 1986. Through this activity, ADPC was able to demonstrate the real meaning of "outreach assistance".

PARTNERSHIPS AND COLLABORATIONS

In fiscal year 1992-93 negotiations with the Institute's long-term supporters resulted in the renewal of five cooperation agreements valued at over 7.6 million US dollars. The renewals provided grants for Master's and Doctoral scholarships, faculty secondments, equipment, Institute operations, program support, and French scholarships for AIT faculty and staff. Proposals for nine new collaborations valued at 24.2 million US dollars were initiated.

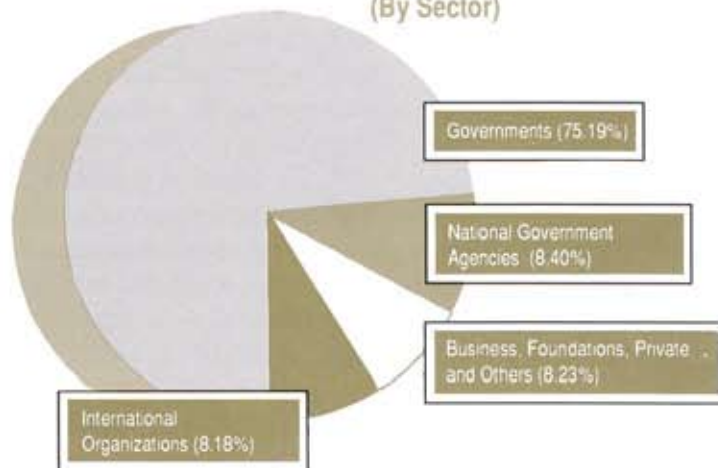
Collaborations Renewed
in FY 1992-93

Austria	US\$	1,064,000
Belgium	US\$	144,000
Finland	US\$	4,300,000
France	US\$	767,188
Japan	US\$	1,339,600

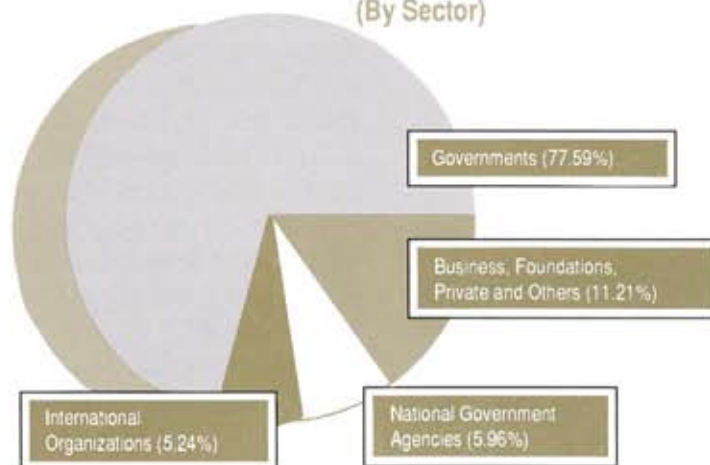
Prospective Renewals
For FY 1993-94

	For the period
Belgium	1994-98
Denmark	1994-98
France	1994
Republic of Korea	1994
Netherlands	1993-95
Norway	1994-96
Sweden	1993-95
Switzerland	1994-96
United Kingdom	1993-96

Total Contributions Received
FY 1992-93
(By Sector)



Total Contributions Received
FY 1959-60 to FY 1992-93
(By Sector)



PARTNERSHIPS AND COLLABORATIONS

THAILAND-BASED COLLABORATIONS

In 1993 six Thai government agencies and state enterprises signed agreements to support a total of 53 scholarships over the next four years as part of their staff development and staff recruitment programs. The collaborators included the Electricity Generating Authority of Thailand, Telephone Organization of Thailand, Communications Authority of Thailand, the Royal Thai Navy, Petroleum Authority of Thailand and Airports Authority of Thailand. Three Thai educational institutions, namely Naresuan University, Thammasat University and the Rajmangala Institute of Technology, pledged eight scholarships.

Collaborations with the private sector yielded 825,625 US dollars from three Thai companies. The grants will support the construction of the Chalerm Pra Kiet Building, student research, and the acquisition of equipment for the environmental engineering laboratory.

Thailand's accelerated human resource development efforts have placed AIT at a prime advantage as an academic partner. By the end of 1993, collaborations were being finalized with the Ministry of University Affairs, the Ministry of Science, Technology, and Environment, and the Securities and Exchange of Thailand. These will provide scholarships for the Master's program and grants for short-term training.

ISSUES AND RECOMMENDATIONS

A strength that is unique to AIT is its effectiveness as an institution for third country education and training, and as a partner for the developed countries in implementing development assistance policies and priorities. To sustain this strength, the Institute should constantly seek to address the needs of national educational institutions in science and technology in the region. This would require the Institute to link up and dialogue with both its target beneficiary countries and donor countries. To this end, the expansion of collaboration programs, initiated through contacts made in 1993 with Indonesia, Brunei, Malaysia, the Republic of Korea, the People's Republic of China, and Chinese Taipei should be pursued.

The plateauing of internal or AIT-nominated scholarships should be balanced by increases in the number of externally supported and self-support students. The implications of this target market shift are seen in the need for marketing campaigns and new financing schemes. These would require policy support complemented by the establishment of infrastructure to undertake these functions.

The Institute's promotional and information activities are only at the threshold of what can be achieved, but they provide a solid foundation for an Institute-wide, systematic marketing and information dissemination program with the Office of Media and Information Services, supported by policy guidelines and resource allocations, playing a key role.

PROSPECTS

The expanding involvement of European and North American countries in Asia's continuing economic growth has created a demand for "home-grown" management and technical experts required by the growing number of multinationals and local businesses. AIT is well placed to assist Asia's human resource development needs.

By maximizing the potential of the AIT Center in Vietnam as an effective platform to meet large-scale national needs for education and training, AIT could generate greater interest among donor agencies to support similar centers in other Asian countries.

Through education and training, AIT could assist in the economic transformation of least developed countries in other parts of Asia. Initial contacts have been established with Mongolia and the Commonwealth of Independent States and proposals for future collaborations are being explored, based on a systematic assessment of needs and existing capabilities.

Bilateral aid with large components for education and training constitutes a rich prospect for AIT as a viable institution for training and education outside aid-recipient countries. The Institute's participation in new bilateral aid programs should be closely studied.

Constant dialogues with donor and beneficiary countries provide a means for systematic coordination of HRD and institutional development efforts. The first in a series of such dialogues is scheduled in early 1994 and should be followed by similar exercises in the future.

SUMMARY OF CONTRIBUTIONS (CASH AND KIND) FY 1992-93

Governments		National Government Agencies			
Austria	0.15	<i>Austria</i>		Malaysian High Commission in Thailand	0.07
Brunei	0.10	Austrian Academy of Science	0.04	Mara Institute of Technology	0.02
Canada	5.33	International Atomic Energy Agency	0.02	Ministry of Education	0.16
People's Republic of China	0.28	<i>Bangladesh</i>		Sarawak Agricultural Development Project	0.01
Chinese Taipei	4.59	International Center for		University Sains	0.01
Finland	2.30	Diarrhoeal Disease Research	0.03	Urban Development Authority	0.01
Hong Kong	0.02	National Environment Secretariat	0.04	<i>Nepal</i>	
India	0.25	<i>Belgium</i>		Dept. of Agriculture and Development	0.03
Japan	10.51	Rijksuniversitair Centrum Antwerpen	0.11	Koshi Hills Development Program	0.02
Republic of Korea	0.26	<i>Bhutan</i>		WECS/NEA Institutional Support Program	0.06
Malaysia	0.28	Ministry of Social Services	0.06	<i>Netherlands</i>	
Nepal	0.04	Ministry of Trade and Industry	0.02	Agriculture University of Wageningen	0.04
New Zealand	0.32	<i>Cambodia</i>		Delft Hydraulic Laboratory	0.25
Norway	2.70	Quaker Services Australia	0.01	Netherlands Development Organization	0.02
Pakistan	0.48	<i>Canada</i>		University of Twente	0.01
Philippines	0.32	CUC	0.09	<i>Pakistan</i>	
Sweden	3.35	IDRC	0.58	Fisheries Dept. - Punjab	0.08
Switzerland	3.82	Oceans Institute of Canada	0.08	Punjab College of Business Administration	0.03
Thailand	8.04	<i>Denmark</i>		<i>Papua New Guinea</i>	
United States of America	3.95	Danish Hydraulic Institute	0.03	Division of Health	0.01
<i>European Community</i>		<i>Ethiopia</i>		<i>Philippines</i>	
CEC	4.15	Agricultural Extension Dept.	0.19	Adventist Development and Relief Agency	0.01
Belgium	1.03	<i>Finland</i>		Dept. of Science and Technology	0.05
Denmark	1.92	Integrated Rural Development Project	0.01	Mandala Agricultural Development	
France	4.81	<i>France</i>		Cooperative	0.05
Germany	9.15	Groupment Pour le Developpement		Manila Observatory	0.01
Netherlands	1.36	de la Teledection Aerospatale	0.04	PNOC Energy Development Corp.	0.01
Spain	0.41	<i>Germany</i>		<i>Singapore</i>	
United Kingdom	5.27	German IHP/OHP National Committee	0.11	Public Works Dept.	0.01
Sub-total	75.19	<i>Hong Kong</i>		<i>Sri Lanka</i>	
<i>International Organizations</i>		Auxiliary Medical Science	0.01	Central Bank of Sri Lanka	0.04
ADB	3.67	Civil Aid Services	0.04	Central Environmental Authority	0.02
Commonwealth Secretariat	0.15	<i>Indonesia</i>		Diversified Agricultural Research Project	0.04
ESCAP	0.15	Center for Science, Documentation		Halton National Bank	0.02
ESA	0.22	and Information	0.08	Institute for Construction Training and	
FAO	0.16	Dalhousie University	0.03	Development	0.02
ICIMOD	0.01	Dept. of Education and Culture	0.05	Institute of Workers Education	0.01
ILO	0.41	Eastern Indonesian University		Janasaviya Trust Fund	0.01
IMO	0.04	Development Project	0.16	Ministry of Finance	0.01
IRRI	0.02	Private Universities and Colleges	0.08	Ministry of Higher Education	
ITU	0.02	Stmix Budiluhur	0.02	Implementation	0.01
IUCN	0.19	Aima Jaya University, Yogyakarta	0.07	Ministry of Policy Planning	0.02
Mekong Secretariat	0.17	<i>Japan</i>		Ministry of Reconstruction, Rehabilitation	
UNCHS	0.30	National Space Development Agency	0.02	and Social Welfare	0.02
UNDES	0.10	<i>Laos, PDR</i>		Rural Development Training	
UNDP	1.32	Dept. of Forestry and Environment	0.05	and Research Institute	0.01
UNDRO	0.02	National Polytechnic Institute	0.14	Rural Water Supply Sanitation Project	0.01
UNEP-GRID	0.88	<i>Malaysia</i>		Sarvodaya Management Training Inst.	0.01
UNESCO	0.07	Malaysian Agricultural Research			
UNICEF	0.07	and Development	0.01		
UNIDO	0.09				
WHO	0.01				
World Bank	0.11				
Sub-total	8.18				

		Business, Foundations, Private and Others	
Social and Economic Development Center	0.01	Argonne National Laboratory	0.11
Upper Mahaweli Watershed Management Project	0.02	Atiami Project - Padang, Indonesia	0.01
Sweden		ATT Consultants Co. Ltd.	0.02
National Resources Management Division	0.07	B.P. Exploration, Bangkok	0.03
Uppsala University	0.09	Babcock Enterprise, France	0.05
Thailand		Bang Pa-in Paper Mill Industry Co.	0.01
Airports Authority of Thailand	0.24	Bangkok Airways Co. Ltd.	0.02
Bank of Thailand	0.08	B+B Ground Treatment Ltd.	0.01
Bangkok Mass Transit Authority	0.05	Brunei Shell Petroleum Co.	0.01
Chiangmai University	0.05	Carr & Donald Associates, Bangladesh	0.04
DTEC	0.50	Charoen Pokphand Feedmill Co. Ltd.	0.08
EGAT	0.51	CPAC Concrete Products Co. Ltd.	0.02
KU	0.06	Coffey International Ltd., Australia	0.03
KMIT	0.01	Deloitte and Touche	0.11
Metropolitan Waterworks Authority	0.08	Dutch-Assisted Water Supply Sanitation and Drainage	0.01
Ministry of Foreign Affairs	0.81	DPU DKI, Jakarta	0.01
Ministry of Public Health	0.03	Enfants et Development	0.01
Ministry of Science, Technology and Environment	0.32	Environmental Resources Ltd.	0.02
National Energy Administration	0.10	Ecumenical Scholarship Program	0.09
National Research Council of Thailand	0.03	Ericsson Telecom Corp. Far East	0.29
Rajamangala Institute of Technology	0.05	Fudo Construction Co. Ltd., Japan	0.02
Telephone Organization of Thailand	0.08	Fuji Xerox Co. Ltd.	0.02
Thammasat University	0.18	International Development Consultancy Service, Sweden	0.05
Tanzania		Japan Engineering Consultants Co. Ltd.	0.17
Fish Farming Project	0.02	Kajima Corp., Japan	0.01
Ministry of Health	0.02	Kinjo Rubber Co. Ltd., Japan	0.03
United Kingdom		Kiso Jiban Consultants Co. Ltd., Japan	0.05
Agricultural and Food Research Council	0.16	Mahachai Land Development Co. Ltd.	0.01
UCLES	0.15	Mott MacDonald Hong Kong Ltd.	0.44
University College of Swansea	0.02	Nippon Koei Co. Ltd.	0.05
University of London	0.02	Nishihara Environmental Sanitation Research Corp.	0.09
University of Stirling	0.15	Norconsult International A.S.	0.09
United States		Northwest Hydraulic Consultants Ltd.	0.16
Academy for Educational Development	0.39	Okumenisches Studienwerk E.V.	0.08
Institute of International Education	0.06	P.T. Amatha Widya Consultants	0.01
Peace Corps	0.14	P.T. Arun Ngi Co., Indonesia	0.01
University of Michigan	0.20	P.T. Hanfarm Dian Konsultan, Indonesia	0.40
Vietnam		P.T. Pupuk Kalim, Indonesia	0.02
Development Cooperation Office	0.02	P.T. Telkom, Indonesia	0.01
Indevelop Program Office	0.04	People's Bank, Sri Lanka	0.01
Ministry of Health	0.04	Petron Corp., Philippines	0.02
National Information and Documentation Center for Science and Technology	0.06	Piancenter Ltd., Nepal	0.07
Petrovietnam	0.08	Polyfelt Geosynthetics (Thailand) Ltd.	0.26
Vietnam Red Cross	0.02	Procter & Gamble Manufacturing (Thailand) Ltd.	0.14
Sub-total	8.40	Rangsit Plantation Management Co. Ltd.	0.01
		Renown Co. Ltd.	0.01
		Sahaviriya OA Group, Thailand	0.02
		Saint Louis Hospital, Thailand	0.01
		Samart Project Consultant Co. Ltd.	0.02
		San Miguel Corp. Philippines	0.01
		Sarangani Agriculture Co. Ltd., Phil.	0.01
		Scot Counsel	0.05
		Seagate Technology (Thailand) Co. Ltd.	0.01
		SGS Stewart Project Management Services	0.07
		Shell Co. of Thailand Ltd.	0.01
		Shimizu Corporation Co. Ltd.	0.11
		Shin-Norinsha Co. Ltd. Japan	0.01
		Siam Cement Co. Ltd.	0.08
		Siam DHV Ltd.	0.01
		Siam Tone Co. Ltd.	0.06
		Sindhu Pulsirivong Consultant Co. Ltd.	0.04
		Sinotech Engineering Consultant Inc.	0.08
		Smash, Paris, France	0.19
		Soletanche (Thailand) Ltd.	0.01
		Southeast Asia Foundation Co. Ltd.	0.01
		Super Max Engineering Enterprise Co.	0.08
		Suratip Co. Ltd.	0.08
		Spot Asia Pte. Ltd.	0.03
		Techniques Geosystem Sdn Bhd.	0.01
		Technofairs Corp. Pte. Ltd.	0.02
		Telkom Malaysia	0.01
		Tenega Nasional Bhd., Malaysia	0.01
		Terre Des Hommes	0.01
		Thai Farmers Bank	0.02
		Thai Master Builders Co. Ltd.	0.02
		Thunders & Associates Inc., Bhutan	0.01
		Total Exploration and Production Co.	0.01
		WS Atkins International, UK	0.03
		Aeon Group Environmental Foundation, Japan	0.36
		Asia Foundation	0.02
		Education and Public Welfare Foundation	0.02
		Ford Foundation Inc.	0.24
		Fulbright Foundation	0.05
		John F. Kennedy Foundation of Thailand	0.62
		Keidanren (CBCC)	0.36
		Ramon Aboliz Foundation Inc., Philippines	0.01
		Sasakawa Peace Foundation	0.27
		Winrock International	0.18
		AEEMTRC	0.02
		AIT Alumni Association (Thailand)	0.08
		Asean-EEC Aquaculture Development	0.06
		Bangladesh-Canada Agriculture Sector Team	0.06
		Bhutan-Swiss Association for Development and Cooperation	0.03
		Canada-Tanzania Kiwani Irrigation Project	0.01
		Care-Bangladesh	0.03
		Care-Philippines	0.01
		Eraba Hatakeyama Memorial Fund	0.01
		Halvetas, Bhutan	0.03
		Helpage Intervelimal	0.03
		India-Canada Cap. Office (OICC)	0.08
		International Center for Ethnic Studies	0.01
		Japan-Indonesia Science and Technology Forum	0.43
		Laos-Swedish Forestry Project	0.01
		Mennonite Central Committee	0.01
		Pakistan-German Technical Training Program	0.02
		Presbyterian Fellowship, Bangladesh	0.03
		RHUDO/Asia	0.01
		Save the Children Fund	0.03
		Dr. Somsak Leeswadtrakul	0.12
		South Pacific Commission	0.02
		Sri Lankan-German Integrated Rural Development	0.01
		Sweroad-Laos, PDR	0.04
		Technical Cooperation Facility	0.19
		Vietnam-Sweden Forestry Cooperation Program	0.08
		World Seismic Safety Institute	0.04
		World Vision International	0.03
		World Wildlife Fund, USA	0.04
		Others	0.16
		Sub-Total	8.23
		TOTAL	100.00

CENTRAL ADMINISTRATION

Developments in computerization and international communications highlighted central administration achievements in 1993.

MIIGRATION FROM MAINFRAME TO MINICOMPUTERS

The campus-wide shift from the mainframe computer to 2 VAX minicomputers was completed in 1993, with the migration of the financial system virtually problem-free. Computerized systems for payroll, personnel and personal income tax were also installed. Inventory accounting records were brought up-to-date. Concerned staff underwent training in the computerized financial system. Further training will be conducted in 1994.

The migration, supported by a minor re-organization of ASDU and Finance operations, facilitated data input, financial closings and report production.

Underway are the computerization of investment control, redesigning of the budget control system, and development of an account receivable program. An effective account receivable collection function, particularly with regard to donors and their respective MOUs, will also be developed.

General and project accounting and report production following specific formats, as well as the inputting of internal charges, will be improved.

INTERNATIONAL NETWORKING

The deployment of information technology resources and telecommunications infrastructure at the Institute significantly improved information access covering a wide range of topics. The Regional Computer Center put in place an efficient campus network, linking 750 computers. Faculty, staff and students now have full access to Internet resources worldwide, including e-mail, e-journals, academic discussion groups, public databases, and directory services. Particularly important is access to library systems world-wide, as well as to professional bulletin boards and other university information databases.

EXPANSION OF INTERNATIONAL COMMUNICATIONS SERVICE

In cooperation with the Communications Authority of Thailand (CAT), improved post and telegraph/international communication gateway services were made available on campus. Further improvements are being planned, based on the volume of after hours long distance calls and fax transmissions.

CAT is expected to build its own post and telegraph office building on campus. This will pave the way for the integration of the campus post office and the communications center.



In 1993 the campus-wide migration from the mainframe computer to 2 VAX minicomputers was completed.

ORGANIZATIONAL RESTRUCTURING

Major changes in central administration functions in 1993 resulted from the re-organization of Administrative Services, with the Director of Administrative Services transferred to the Development Office as Director for Development Planning, reporting to the Vice President for Development.

Related to the re-organization was the revision of certain functions in the offices for Human Resources Development, Government Relations, and Purchasing, which was given responsibility for travel and insurance administration.

CENTRAL ADMINISTRATION

CAMPUS DEVELOPMENT

Academic Buildings

At AIT the construction of new academic buildings takes into account not only the Institute's current needs but also the future expansion of teaching, research and outreach activities.

To accommodate the complete move of the Industrial Engineering and Management Program from Academic Building 1 to the Chalerm Pra Kiet Building, an extension to the building will be built using the annual construction grant from the Royal Thai Government. The vacated space in Academic Building 1 will be used to accommodate a new field of study in the School of Management.

New offices and laboratories for the Water Resources Engineering Program will soon rise on the north side of the hydraulics laboratory, creating a more symmetrical and aesthetically pleasing land-

scape along the east-west road from the Energy Technology to the Agricultural and Food Engineering buildings. The project is being supported by the annual construction grant from the Royal Thai Government.

Also under construction is a biotechnology laboratory.

Housing

Adequate supply of residential accommodation for students in the next few years is assured with the opening of ST7 and ST8, two apartment blocks which provide more than 90 units, and the construction of Dormitory P Block for self-paying students.

Construction of the squash court was completed in 1993.

HUMAN RESOURCES DEVELOPMENT

Staff development and training programs carried out in 1993 included English and Thai language courses and training in computer applications. Seminars on topics of professional interest to the staff were conducted.

A standard overtime policy was established and studies on compensation for international and local staff were carried out.

Updating of job descriptions for direct-hire and local-hire staff is underway.

A goal for 1994 is the publication of a personnel manual and implementation of exit interviews with employees completing their service with the Institute. A special benefits scheme available to members of the Thai Social Security System is under study.



Over the years the development of the AIT campus has always been guided by the need to create a symmetrical and aesthetically pleasing landscape that will provide a convivial environment for study and leisure.

DISTRIBUTION OF AIT ALUMNI

Southeast Asia and Pacific

1.	Brunei	9
2.	Cambodia	5
3.	Fiji	1
4.	Indonesia	330
5.	Laos	9
6.	Malaysia	259
7.	Maldives	1
8.	Myanmar	104
9.	Papua New Guinea	6
10.	Philippines	671
11.	Singapore	28
12.	Thailand	1499
13.	Vietnam	216

South Asia and West Asia

1.	Afghanistan	26
2.	Bangladesh	429
3.	Bhutan	2
4.	Egypt	1
5.	India	459
6.	Iran	12
7.	Nepal	325
8.	Pakistan	468
9.	Sri Lanka	487
10.	Turkey	6

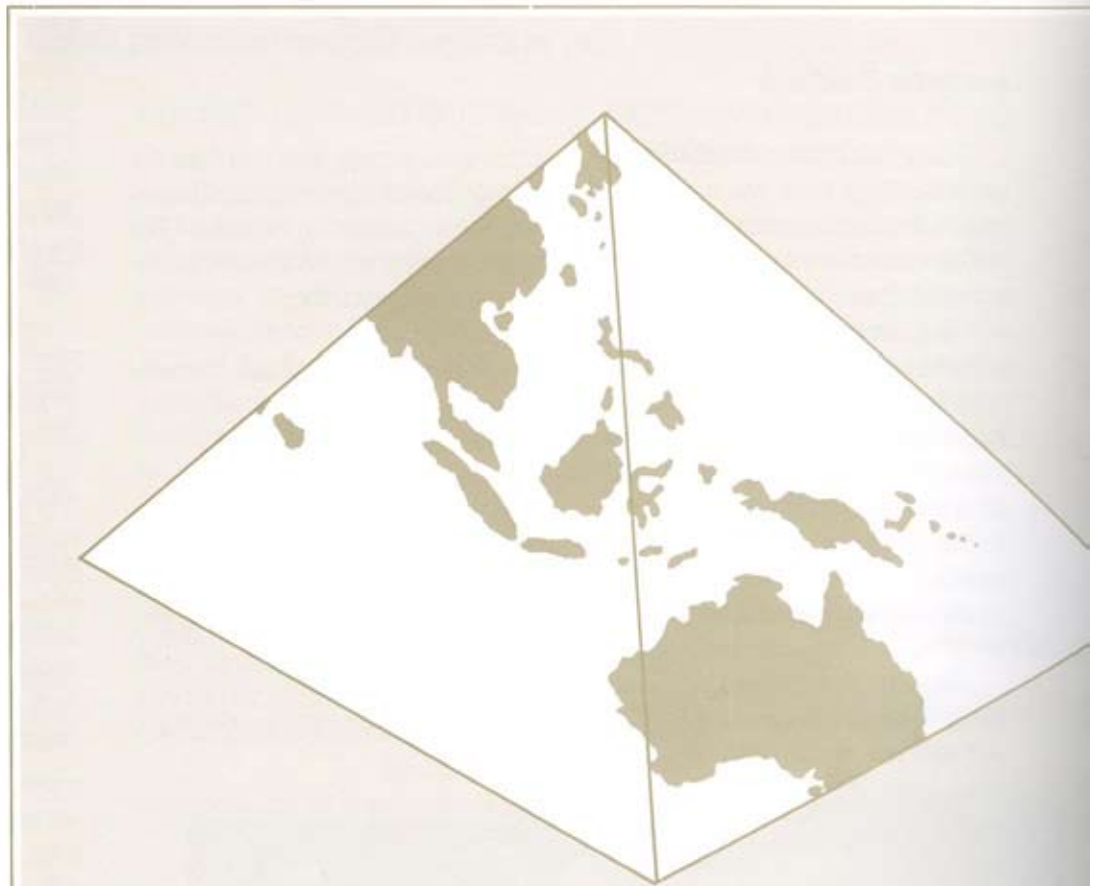
East Asia

1.	PRC	195
2.	Chinese Taipei	706
3.	Hong Kong	85
4.	Japan	52
5.	Republic of Korea	99
6.	Macao	7

North America, Europe and Africa

1.	Belgium	1
2.	Canada	5
3.	Ethiopia	1
4.	Finland	1
5.	France	3
6.	Germany	1
7.	Ghana	2
8.	Honduras	1
9.	Kenya	1
10.	Malawi	3
11.	Netherlands	1
12.	Sweden	1
13.	Tanzania	8
14.	UK	2
15.	USA	7

Stateless 1



AITAA Chapter Presidents

AUSTRALIA

Dr. Victor A. Pulmano (SEC '62)
Professor, School of Civil Engineering
University of New South Wales
New South Wales

BANGLADESH

Dr. Md. Nazrul Islam (WRE '71)
Associate Professor
Institute of Appropriate Technology
Bangladesh University of Engineering
and Technology
Dhaka

BRUNEI

Mr. Yong Foh Fui (EE '75)
District Water Engineer
Water Section, Public Works Department
Brunei Darussalam

CHINESE TAIPEI

Mr. George S. Y. Chen (CRD '72)
Director General, Highway Bureau
Taiwan

HONG KONG/MACAO

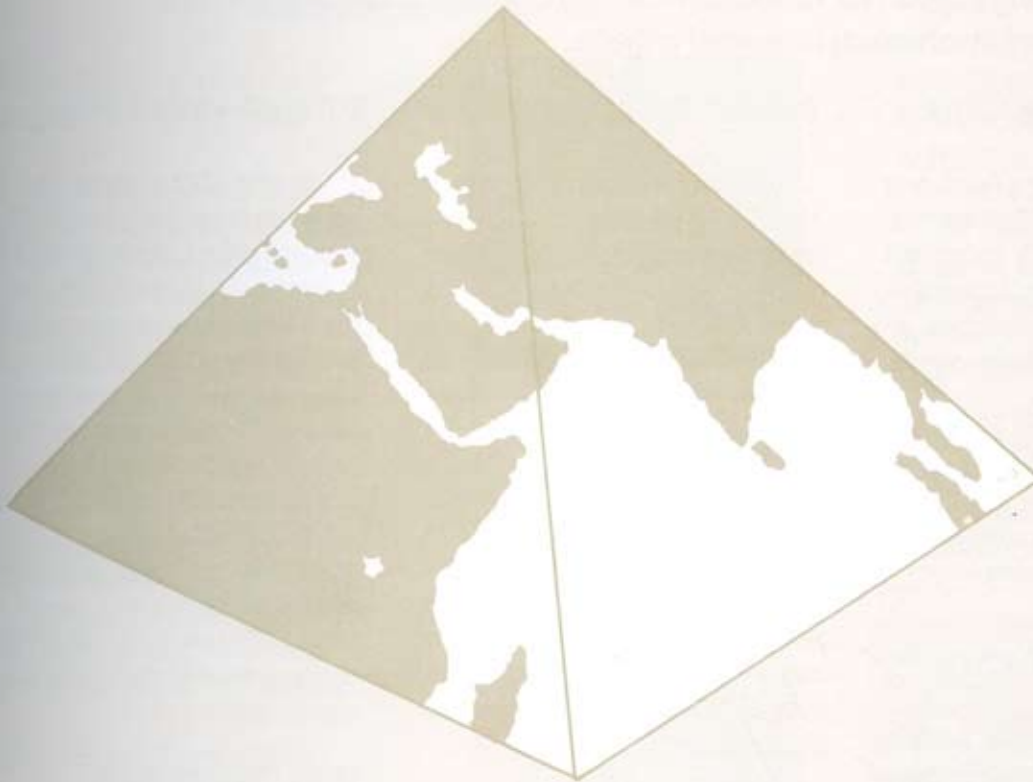
Mr. Ted T.C. Chan (CRD '76)
Managing Director, TESCO
Causeway Bay, Hong Kong

INDIA

Dr. Ashok Kumar Gupta (CRD '71)
Professor and Coordinator
Center of Transportation Engineering
University of Roorkee
Roorkee

INDONESIA

Mr. Martsanto Dirdjosoeparto
(WRE '90)
Deputy Head Officer
Riau Development Coordinating Office
Ministry of Public Works
Jakarta



AITAA National Chapters have been established in 17 countries. Over the years, AITAA membership has been increasing. Up to 70 per cent of the total AIT alumni body belong to the Association.

JAPAN

Mr. Yoshiaki Shimura (EE '87)
Pipeline Engineering Department, E/D
Kawasaki Steel Corporation
Tokyo

REPUBLIC OF KOREA

Dr. Seung-Hwan Lee (IEM '75)
Professor
Department of Transportation
Engineering, Ajou University
Suwon, Kyungki

MALAYSIA

Mr. Mah Lok Abdullah (IEM '84)
Assistant Director
National Productivity Center
Selangor

NEPAL

Mr. Pramod Sagar Singh Pradhan
(CS '82)
MENRIS, ICIMOD
Kathmandu

PAKISTAN

Mr. Iqtidar A. Chaudhri (WRE '64)
Managing Director
Delta Tyre and Rubber Co., Ltd.
Rawalpindi

PHILIPPINES

Mr. Edgar Ortega (WRE '76)
Vice President
DCCD Engineering Corporation
Metro Manila

SINGAPORE

Mr. Ho Siew-Koon (WRE '71)
Senior Principal Engineer
Housing and Development Board
Singapore

SRI LANKA

Mr. W.J.S. Fernando (ET '82)
Deputy General Manager
(Generation Planning)
Ceylon Electricity Board
Colombo

THAILAND

Dr. Somchet Thinaphong (WRE '80)
Governor
Industrial Estate Authority of Thailand
Bangkok

USA

Dr. Rakesh Sarman (GTE '80)
Consulting Engineering Geologist
Woodward-Clyde Consultants
Livonia, Michigan

November 1993

ALUMNI AFFAIRS

In 1993 the Executive Committee of the AIT Alumni Association (AITAA) sought to strengthen student interest in the Association, generate funding support for AITAA activities and operations, and promote alumni involvement in special projects.

SUPPORT TO THE INSTITUTE

The AITAA Governing Board, at its annual meeting in May 1993, passed resolutions in support of AIT's institutional marketing and student recruitment activities. The AITAA Chapters have been approached to assist in the implementation of these activities.

The AITAA-organized gift drive to benefit the Institute marked its second year in 1993, raising over 20,000 Baht from various fund-raising activities conducted by the three graduating classes.

AITAA PRESIDENCY

Postal balloting for the election of a new AITAA President was carried out in 1993 to formalize the election of Mrs. Chuanpit Dhamasiri, President of AITAA-Thailand Chapter, who was unanimously nominated to the post. The new President will succeed Prof. Srisakdi Charmonman. Mrs. Lilia Austriaco was re-elected for a second term as Executive Secretary.



Mrs. Chuanpit Dhamasiri

SUPPORT TO ALUMNI

To strengthen alumni interest in AITAA and to encourage contact between individual alumni, the AITAA Chapters conducted seminars by prominent/senior alumni and organized field visits to places of professional interest. Under study is a proposed AIT alumni consultancy service.

Endowment Fund

In 1993, contributions to the AITAA Endowment Fund reached 340,245 Baht. Pledges amounting to 56,000 Baht were received. An intensified campaign to promote the Endowment Fund, which supports AITAA operations and research grants, is underway.

AITAA Induction Ceremonies

AITAA induction ceremonies, which are held every term for each graduating class, have increased AITAA membership, now accounting for 70 per cent of the total number of alumni. These ceremonies also provide an opportunity to welcome honorary members and to recognize deserving alumni.

Other Projects

The criteria and nomination procedures for the Distinguished Alumni Award have been finalized and requests for nominations forwarded to individual Chapters. The first Awards are expected to be made in 1994.

A campaign to promote alumni participation in the AITAA Who's Who was launched among the AITAA Chapters.

SUPPORT TO STUDENTS

In 1993 AITAA established a special project in honor of former AIT President, Prof. Milton E. Bender, Jr. The Milton E. Bender, Jr. Research Grant will be supported by an endowment fund for which an initial target of 150,000 Baht was set. The grant is intended to support one award annually. The first fund-raising event, a golf tournament held during Prof. Bender's visit in March 1993, raised 50,000 Baht.

In 1993 AITAA research grants, valued at 8,000 to 15,000 Baht each, were awarded to nine students to augment research funds provided by AIT. Four recipients speak about their research on the opposite page.

Career Placement Service

AITAA assisted in the recruitment of AIT graduates by Bangkok Bank, Acer Computer (South Asia) Pte. Ltd., Acer-Sahaviriya, BisNews Asia, and other local companies. As further assistance, a special video produced by AITAA on career planning and development was made available to interested students.

ALUMNI AFFAIRS

1993 AITAA research grant recipients, Doctoral student Nguyen Tang Ton, and Master's degree candidates from the School of Civil Engineering, Hoang Van Chin, A. A. J. K. Gunatileke and Emil Ray Tirona, speak about the relevance of their research to the development of their countries.

SMALL SCALE DAIRY PRODUCTION IN VIETNAM

Mr. Ton's Doctoral thesis in Agricultural and Food Engineering is on the feasibility of incorporating small-scale dairy production systems into existing farming systems in Ho Chi Minh City as a way of augmenting farm incomes. The study covers rainfed and irrigated farms in upper paddy land and upland areas. In rainfed farming two cows fed mainly with farm-grown forage and crop by-products can increase a farm's gross income by 60 to 65 per cent, with minor changes in the cropping pattern and the deployment of hired labour. In irrigated farming, the corresponding increase is 56 per cent.



EARTHQUAKES AND DAMS

Mr. Chin and Mr. Gunatileke are doing research in Geotechnical and Transportation Engineering.

Mr. Chin is investigating seismic hazards in North Vietnam, with particular attention given to Hanoi. "Vietnam is situated in the vicinity of two earthquake belts: the Mediterranean and West Pacific belts," says Mr. Chin, recalling the severity of the country's most recent earthquake in June 1983.

Mr. Chin has been collecting pertinent seismic data from three main sources: the National Geophysical Data Center in Colorado, the International Seismological Center in London and the Hanoi-based Seismological Department of the Vietnamese Institute of Geophysics. "Seismic zoning maps are indispensable to earthquake prediction and the design of

earthquake-resistant structures," Mr. Chin points out. He hopes to produce such maps at the end of his research.

Mr. Gunatileke, 30, is studying the reservoir leakage problem of the Samanalawewa hydroelectric power project, which is located in the foothills of the central mountain range of Sri Lanka. The 450 meter-long dam is at the

INFORMATION TECHNOLOGY IN THE CONSTRUCTION INDUSTRY

Mr. Tirona, 24, is studying the application of strategic IT to promote competitiveness and productivity in the construction industry. IT is a principal force in the growth and prosperity of any country, says Mr. Tirona, who has adopted a strategic planning framework used by Stanford Research Institute International for his Master's thesis in Structural Engineering and Construction.

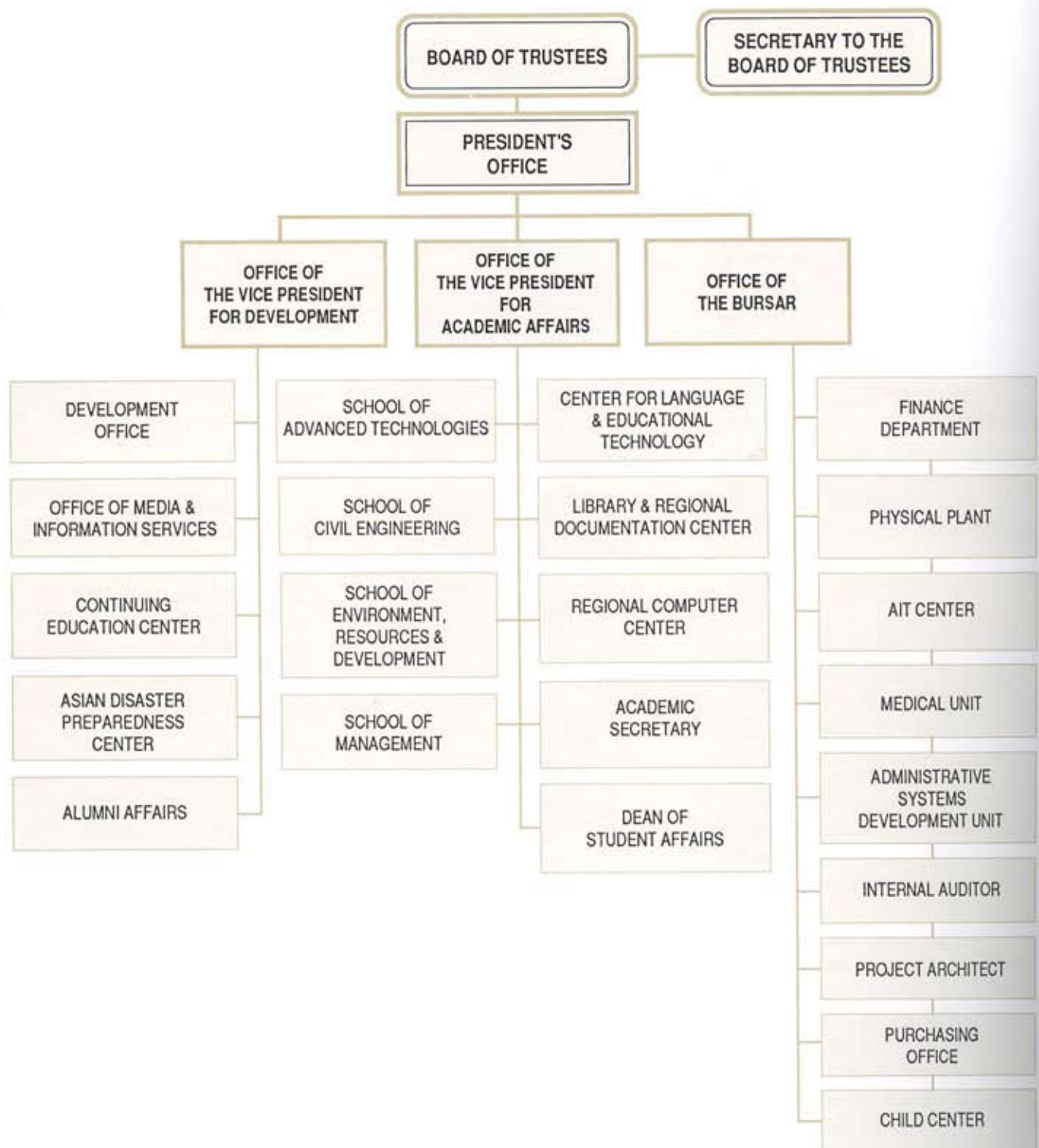
Researching for their countries. Left photos, from top: 1993 AITAA research grant recipients, Nguyen Tang Ton, Emil Tirona, Hoang Van Chin and A.A.J.K. Gunatileke.

confluence of Walawe Ganga and its tributary, Belihul Oya, and has a net storage capacity of 300 cu.m. Constructed in early 1987, the dam suffered a severe leakage problem during the initial filling of the reservoir.

Mr. Gunatileke is investigating the reservoir's existing and potential leakage paths. His research will evaluate the effectiveness of remedial measures that have been adopted as well as those that are being proposed. Detailed field investigation will precede a geological mapping program and analysis of data collected from the project's consultants, contractors and design engineers.

Appendix

ORGANIZATIONAL CHART OF THE ASIAN INSTITUTE OF TECHNOLOGY



1993 INSTITUTE ADMINISTRATION

SENIOR ADMINISTRATIVE OFFICERS	President	Prof. Alastair M. North
	Vice President for Academic Affairs	Prof. Ricardo P. Pama
	Vice President for Development	Dr. Suvit Yodmani
	Bursar	Mr. Edward Mayer
	Academic Secretary	Dr. Roger Hawkey
DEANS OF SCHOOLS	Advanced Technologies	Prof. A.B. Sharma
	Civil Engineering	Prof. Pisidhi Karasudhi
	Environment, Resources and Development	Prof. Karl E. Weber
	Management	Prof. Chongrak Polprasert (Associate Dean) Prof. Jyoti P. Gupta (Director)
PROGRAM COORDINATORS		
School of Advanced Technologies	<i>Computer Science</i>	Prof. Shunji Murai
	<i>Industrial Engineering and Management</i> <i>Telecommunications</i>	Prof. P.C. Pandey Mr. Tapio Erke
School of Civil Engineering	<i>Geotechnical and Transportation Engineering</i>	Dr. Yordphol Tanaboriboon
	<i>Irrigation Engineering and Management</i>	Dr. Yasuyuki Kono
	<i>Structural Engineering and Construction</i>	Prof. Yukio Aoyagi
	<i>Water Resources Engineering</i>	Prof. Ricardo Harboe
School of Environment, Resources and Development	<i>Agricultural and Food Engineering</i>	Prof. Gajendra Singh
	<i>Environmental Engineering</i>	Prof. Dr. Wei-Han Su
	<i>Energy Technology</i>	Prof. R.H.B. Exell
	<i>Human Settlements Development</i>	Mr. H.D. Kammeier
	<i>Natural Resources</i>	Dr. Apisit Eiumnoh
CENTER DIRECTORS	Asian Disaster Preparedness Center	Mr. Terry Jeggle
	Continuing Education Center	Dr. Nicanor C. Austriaco
	Library and Regional Documentation Center	Ms. Daruna Somboonkun (Acting)
	Regional Computer Center	Dr. Charoon Chirapaisarnkul
	Center for Language and Educational Technology	Mr. William Savage (Chairman)
STUDENT AFFAIRS	Dean of Student Affairs	Dr. Roger Hawkey
	Student Union President	Mr. Shaunake Ashaputre (Jan-Sept 1993)
		Mr. Induruwage Rohitha Silva (Sept-Dec 1993)

Appendix

1993 BOARD OF TRUSTEES

- EC H. E. Mr. C. Christian W. Adams CMG (1995)
Ambassador Extraordinary and Plenipotentiary
The British Embassy
Bangkok, Thailand
- Mr. Robert C. Bodden (1995)
President
AIT Foundation, Inc.
USA
- FC Mr. Pin Chakkaphak (1995)
President and Director
Finance One Public Company Limited
Bangkok, Thailand
- Mr. Arthur Y. Chen (1996)
President
Ret-Ser Engineering Agency
Chinese Taipei
- Dr. Chow Chowkwanyun (1995)
Founder
Education and Public Welfare Foundation
Bangkok, Thailand
- Dr. Salsuree Chutikul (1996)
Advisor (CIDA) on Women, Children, Youth,
Education and Social Development
Office of the Permanent Secretary
Prime Minister's Office
Royal Thai Government
Bangkok, Thailand
- Mr. John Gunther Dean (1995)
Former US Ambassador to Thailand
Paris, France
- Mrs. Chuanpit Dhamasiri (*Ex-officio*)
Deputy Governor (Engineering)
Metropolitan Waterworks Authority
Bangkok, Thailand
- H. E. Mr. Willy Johan Fredriksen (1996)
Ambassador Extraordinary and Plenipotentiary
The Royal Norwegian Embassy
Bangkok, Thailand
- EC H. E. Mr. Hiroaki Fujii (1995)
Ambassador Extraordinary and Plenipotentiary
The Embassy of Japan
Bangkok, Thailand
- EC Prof. D. W. George, AO (1996)
PPC *Vice Chairman*
SRC Former Vice-Chancellor
University of Newcastle
NSW, Australia
- H. E. Mr. Blaise Godet (1996)
Ambassador Extraordinary and Plenipotentiary
The Embassy of Switzerland
Bangkok, Thailand
- EC H. E. Ms. Eva Heckscher (1996)
Ambassador Extraordinary and Plenipotentiary
The Swedish Embassy
Bangkok, Thailand
- Prof. Wilhelm Hill (1996)
Principal
Institute for Economic Management
Basel, Switzerland
- EC The Hon. Cheng Hon-Kwan, OBE (1996)
Member
Executive and Legislative Council
Hong Kong
- Dr. John A. Hrones (*Life Member*)
Provost Emeritus
Case Institute of Technology
USA
- HDC H. E. Mr. Mogens Knud Isaksen (1994)
Ambassador Extraordinary and Plenipotentiary
The Royal Danish Embassy
Bangkok, Thailand
- EC Prof. Pisidhi Karasudhi (1995)
PPC Faculty Representative
Asian Institute of Technology
- Prof. Musharrif Husain Khan (1994)
Member
University Grants Commission of Bangladesh
Dhaka, Bangladesh
- Prof. S. K. Khanna (1996)
Vice Chairman
University Grants Commission of India
Ministry of Human Resource Development
New Delhi, India
- EC Dr. Thanat Khoman (1996)
PPC *Chairman*
HDC Former Deputy Prime Minister
FC Royal Thai Government
Bangkok, Thailand
- Mr. Kiyooki Kikuchi (1996)
Advisor
Matsushita Electric Industrial Co., Ltd.
Tokyo, Japan
- Mr. Jeffrey L. S. Koo (1995)
Chairman and Chief Executive Officer
China Trust Co., Ltd.
Chinese Taipei
- EC Prof. B. Krol (1994)
PPC Professor
SRC University of Utrecht
Science of Food and Animal Origin Dept.
The Netherlands
- SRC Prof. Dina M. Lavoie (1994)
Professor
School of Advanced Commercial Studies
University of Montreal
Canada
- Dr. Nguyen Huu Le (1996)
Director, Global R & D Planning
Bell Northern Research Ltd.
Ottawa, Canada
- SRC Dr. Sang-Soo Lee (1996)
President
Korea Advanced Institute of Science
and Technology
Seoul, Korea
- Dr. Somsak Leeswadtrakul (1996)
Chairman and Chief Executive Officer
SSP Group of Companies
Bangkok, Thailand
- Hon. Dr. Ram Sharan Mahat (1996)
Vice Chairman
National Planning Commission of Nepal
Kathmandu, Nepal
- Dr. Oscar B. Mapua (*Life Member*)
President
Mapua Institute of Technology
Manila, Philippines

H. E. Mr. John Philip McCarthy (1995) Ambassador Extraordinary and Plenipotentiary The Australian Embassy Bangkok, Thailand	SRC Dato Dr. Mohd Mansor Salleh (1994) Director and Associate Professor MARA Institute of Technology Selangor, Malaysia	EC Dr. Snoh Unakul (1994) Former Deputy Prime Minister Royal Thai Government Bangkok, Thailand
EC Mr. Sukum Navapan (1995) FC Chairman Navatance Group of Companies Bangkok, Thailand	H. E. Mr. Eero Kalevi Salovaara (1995) Ambassador Extraordinary and Plenipotentiary The Embassy of Finland Bangkok, Thailand	Dr. Puey Ungphakorn (<i>Life Member</i>) Former Governor Bank of Thailand London, UK
PPC H. E. Mr. Jean-Marie Noirfalisse (1995) Ambassador Extraordinary and Plenipotentiary The Belgian Embassy Bangkok, Thailand	PPC Dr. Noranit Setabutr (1995) Rector Thammasat University Bangkok, Thailand	Prof. Zhong Lie Wang (1994) Director State Education Commission Beijing, People's Republic of China
EC Prof. Alastair M. North (<i>Ex-officio</i>) PPC President HDC Asian Institute of Technology FC	EC Prof. Hiroyoshi Shi-igai (1995) PPC Professor SRC Institute of Engineering Mechanics University of Tsukuba, Japan	Prof. Dayantha Wijeyesekera (1995) Vice Chancellor The Open University of Sri Lanka Nugegoda, Sri Lanka
EC Prof. Ricardo P. Pama (<i>Ex-officio</i>) PPC Vice President for Academic Affairs SRC Asian Institute of Technology	SRC Dr. Soedjatmiko (1996) Director Institute of Agricultural Engineering Ministry of Agriculture Indonesia	Dr. Haydn Williams (1995) Former President Asia Foundation USA
EC Mr. Anand Panyarachun (1996) Former Prime Minister of Thailand Royal Thai Government Bangkok, Thailand	Mr. Jean-Marcel Soulier (1995) Chairman of the French Steering Committee for AIT in Paris Landes, France	Secretary : Dr. Roger A. Hawkey Asian Institute of Technology
EC H. E. Mr. Arthur C. Perron (1995) PPC Ambassador Extraordinary and Plenipotentiary FC The Canadian Embassy Bangkok, Thailand	PPC Prof. Charas Suwanwela (1995) FC President Chulalongkorn University Bangkok, Thailand	
EC H. E. Baron Berthold von Pfetten-Arnabach FC (1994) Ambassador Extraordinary and Plenipotentiary The Embassy of Germany Bangkok, Thailand	Dr. Aran Thamano (1996) Permanent Secretary Ministry of Finance Royal Thai Government Bangkok, Thailand	
Mr. Earl N. Phillips, Jr. (1995) President First Factors Corporation North Carolina, USA	EC Dr. Vichai Tunsiri (1995) Secretary-General Office of the National Education Commission Prime Minister's Office Royal Thai Government Bangkok, Thailand	Note () End of current term of office EC Executive Committee SRC Student Relations Committee FC Finance Committee PPC Policy and Planning Committee HDC Honorary Degrees Committee FRC Faculty Relations Committee
PPC Dr. Wolf Preuss (1995) Deputy Director General (Asia) Federal Ministry for Economic Cooperation Germany	EC Dr. Phaichitr Uathavikul (1994) Former Minister of Science, Technology and Energy Royal Thai Government Bangkok, Thailand	
H. E. Mr Jacques Rummelhardt (1996) Ambassador Extraordinary and Plenipotentiary The French Embassy Bangkok, Thailand		December 1993

Appendix

1993 LIST OF FACULTY MEMBERS

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M.Eng, Lic. Tech. (Ph.D.),
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Assistant Professor, TC

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Associate Professor, HSD

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B.Sc.; D.E.U.G., D.E.A., Paris VII;
Ph.D., Ecole Pratique des Hautes Etudes en
Sciences Sociales.
Assistant Professor, NR

Yukio Aoyagi

B.Eng., M.Eng., D. Eng., Univ. of Tokyo.
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B.A. (Hons), Sydney; M.R.A.P.I.
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B.Sc., Ceylon; Ph.D., Cambridge.
Professor, GTE

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B.S.C.E., Mindanao State; M. Eng., AIT;
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B.Eng., UNSW; M.Eng.Sc., Monash;
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Assistant Professor, CLET

R.H.B. Exell

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HONORARY FACULTY

Her Royal Highness Princess
Maha Chakri Sirindhorn is an
Honorary Faculty Member of the Institute.
Her Royal Highness is associated with the
Natural Resources Program and with the
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Appendix

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Alastair M. North

B.Sc., Aberdeen; Ph.D., Birmingham.
Chair Professor in Applied Science

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Graduate School; Ph.D., St. Andrews.
Professor, SEC

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B.Sc.Eng., Banaras Hindu;
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Professor, IEM

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Ph.D., Washington.
Professor, EE

K. Ramanathan

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Post Grad. Dip. in Applied Stats., Colombo;
M.Eng., D.Eng., AIT.
Associate Professor, SOM

Lars B. Reutergardh

B.Sc., M.Sc., Ph.D., Stockholm.
Associate Professor, EE

J.K. Routray

B.Sc. (Hons), M.Sc., Utkal;
M.R.P., IIT, Kharagpur; Ph.D., Utkal.
Associate Professor, HSD

R. Sadananda

B.E., Mysore; M.E., Roorkee;
Ph.D., IIT, Kanpur.
Associate Professor, CS

Khalid Saeed

B.Sc.Eng., U.E.T., Lahore; M.Eng., AIT;
Ph.D., MIT.
Professor, NR

Vilas M. Salokhe

B.Tech., Mahatma Phule; M.Eng., Sukhadia;
D.Eng., AIT.
Associate Professor, AFE

William Savage

B.S.Eng., Texas A&M; M.A., Hawaii.
Assistant Professor, CLET

Hans Schroder

M.Sc., Technical Univ. Denmark.
Associate Professor, EE

Tian Ho Seah

B.Sc., London; Sc.D., MIT.
Assistant Professor, GTE

N. Sharif

B.Sc., BUET; M.E.A., George Washington;
Ph.D., Texas A & M.
Professor, SOM

A.B. Sharma

B.Sc. (Hons.), Newcastle-upon-Tyne, UK;
Lic.Tech., D.Tech., Helsinki.
Professor, TC

Jonathan Shaw

LLB., London; Dip.Ed., Manchester.
Assistant Professor, CLET

Toshikazu Shimazaki

B.Eng., M.Eng., D.Eng., Tokyo;
M.Sc., Stanford.
Associate Professor, GTE

R.M. Shrestha

B.E., M.S.U., Baroda;
B.L., Tribhuvan; M.Eng., D.Eng., AIT.
Associate Professor, ET

Gajendra Singh

B.Sc.A.E., Pantnagar; M.S., Rutgers;
Ph.D., California (Davis).
Professor, AFE

Uwe Stoll

Dip.-Ing., Technical Univ. of Darmstadt;
Dr.-Ing., Univ. of Bochum.
Assistant Professor, EE

Mitsutaka Sugimoto

B.Eng., M.Eng., D.Eng., Tokyo.
Associate Professor, GTE

Toshiyuki Sugiyama

B.Eng., M.Eng., D.Eng., Tokyo.
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ASIAN INSTITUTE OF TECHNOLOGY
BALANCE SHEETS
AS AT 30th JUNE, 1993 AND 1992

ASSETS	Note	Unrestricted Current Fund		Restricted Fund		Capital Fund		Sponsored Program Fund		Agency Fund		Total	
		1993 BAHT	1992 BAHT	1993 BAHT	1992 BAHT	1993 BAHT	1992 BAHT	1993 BAHT	1992 BAHT	1993 BAHT	1992 BAHT	1993 BAHT	1992 BAHT
Cash at banks		9,569,339	10,125,446	13,927,825	6,231,470	20,882,707	8,043,115	10,338,188	48,508,065	45,457,777	34,413,359	100,172,833	107,221,455
Investments	2	17,344,135	16,233,852	261,411,198	278,189,109	62,698,718	43,013,241	61,749,707	28,357,984	21,066,823	5,990,412	424,690,581	371,600,798
Advance duties and taxes	3	11,066,103	10,837,450	-	-	-	-	-	-	-	-	11,066,103	10,837,450
Accounts receivable and accrued income		2,981,119	3,391,648	6,841,047	7,873,305	202,703	226,636	4,994,025	4,994,013	570,617	534,643	15,169,541	17,011,145
Deposits		819,593	822,593	(41,326)	160,407	-	-	-	-	-	-	798,267	983,000
Investments		-	-	967,059	863,413	-	-	-	-	-	-	967,059	863,413
Due from other funds		-	-	98,000,000	27,502,094	-	-	-	-	-	-	98,000,000	27,502,094
Fixed assets	4	-	-	-	-	1,410,782,196	1,319,041,201	-	-	-	-	1,410,782,196	1,319,041,201
TOTAL ASSETS		42,200,289	41,410,989	381,105,803	320,719,998	1,494,546,234	1,370,324,193	76,678,917	81,760,962	67,115,247	40,944,414	2,061,646,490	1,855,160,556
LIABILITIES AND FUND BALANCES													
LIABILITIES													
Accounts payable and accrued expenses		2,920,258	2,209,886	5,674,809	2,836,969	5,224,011	2,387,752	2,205,142	1,170,817	651,000	651,377	16,675,220	9,256,801
Deposits		765,316	685,800	1,159,246	956,982	-	-	-	-	-	-	1,924,562	1,642,782
Due to other funds		-	588	98,000,000	27,502,094	-	-	-	-	-	-	98,000,000	27,502,682
TOTAL LIABILITIES		3,685,574	2,896,274	104,834,055	31,296,045	5,224,011	2,387,752	2,205,142	1,170,817	651,000	651,377	116,599,782	38,402,265
FUND BALANCES	6	38,514,715	38,514,715	276,271,748	289,423,953	1,489,322,223	1,367,936,441	74,473,775	80,590,145	66,464,247	40,293,037	1,945,046,708	1,816,758,291
TOTAL LIABILITIES AND FUND BALANCES		42,200,289	41,410,989	381,105,803	320,719,998	1,494,546,234	1,370,324,193	76,678,917	81,760,962	67,115,247	40,944,414	2,061,646,490	1,855,160,556

The accompanying notes are an integral part of the financial statements.

Arsh. L. D.
PRESIDENT

ASIAN INSTITUTE OF TECHNOLOGY
STATEMENTS OF REVENUES AND EXPENDITURES – UNRESTRICTED CURRENT FUND AND RESTRICTED FUND – GENERAL
FOR THE YEARS ENDED 30th JUNE, 1993 AND 1992

	Unrestricted Fund		Restricted Fund		Total	
	1993	1992	1993	1992	1993	1992
	BAHT	BAHT	BAHT	BAHT	BAHT	BAHT
REVENUES :						
Tuition and fees :						
Academic unit	192,138,563	190,821,890	-	-	192,138,563	190,821,890
Computer center	5,749,605	6,164,281	-	-	5,749,605	6,164,281
	197,888,168	196,986,171	-	-	197,888,168	196,986,171
Gifts and contributions :						
Cash	10,100,595	7,826,991	87,287,120	46,627,528	97,387,715	54,454,519
In kind (Note 5)	-	-	68,069,647	72,675,117	68,069,647	72,675,117
	10,100,595	7,826,991	155,356,767	119,302,645	166,357,362	127,129,636
Grants and contracts	14,533,662	9,539,564	6,016,223	6,773,146	20,549,889	16,312,710
Sales and services :						
Educational activities	65,341	269,349	57,405,673	62,418,313	57,471,014	62,687,662
Others	26,834	-	1,298,874	1,300,840	1,325,708	1,300,840
	92,175	269,349	58,704,547	63,719,153	58,796,722	63,988,502
Income from investments	14,368,254	19,473,017	-	-	14,368,254	19,473,017
Auxiliary services	8,207,144	9,251,033	89,656,587	76,137,443	76,137,443	76,137,443
Recovery of indirect costs	-	-	-	-	8,207,144	9,251,033
AIT sponsored programs	-	-	8,997,540	10,621,151	8,997,540	10,621,151
Physical plant support	-	-	22,779,688	36,123,032	22,779,688	36,123,032
Exchange stabilization	-	-	2,642,412	5,236,111	2,642,412	5,236,111
Miscellaneous	-	26,689	8,621,626	9,341,247	8,621,626	9,367,936
TOTAL REVENUES	245,189,998	243,372,814	353,675,391	327,753,928	598,865,392	571,126,742
EXPENDITURES :						
Salaries and associated costs						
Cash	155,303,830	140,119,751	9,857,163	8,525,881	165,160,993	148,645,632
In kind (Note 5)	-	-	68,969,647	72,675,117	68,969,647	72,675,117
	155,303,830	140,119,751	78,826,810	81,200,998	234,130,640	221,320,749
Academic units operating costs	26,405,256	26,094,280	104,312,430	87,051,689	130,717,686	113,145,969
Student related costs	1,321,129	1,195,873	6,417,995	6,147,982	7,739,134	7,343,855
Administrative support costs	4,124,106	3,765,583	128,190	84,323	4,252,296	3,849,906
Capital purchases	7,222,666	9,043,798	9,711,865	1,074,750	16,935,331	10,118,528
Campus wide services	49,890,499	55,701,204	-	-	49,890,499	55,701,204
Physical plant support costs	-	-	40,658,544	49,265,749	40,658,544	49,265,749
AIT sponsored programs	-	-	5,916,083	9,641,231	5,916,083	9,641,231
Auxiliary services costs	-	-	63,796,744	86,310,921	63,796,744	86,310,921
Exchange stabilization	-	-	5,316,170	2,572,840	5,316,170	2,572,840
Other costs	-	-	27,427,775	14,446,318	27,427,775	14,446,318
TOTAL EXPENDITURES	244,268,496	235,920,480	341,912,600	337,901,781	586,181,102	573,822,270
EXCESS OF REVENUES OVER EXPENDITURES	921,502	7,452,334	11,762,788	(10,147,853)	12,684,290	(2,695,528)
(EXPENDITURES OVER REVENUES)						

The accompanying notes are an integral part of the financial statements.

ASIAN INSTITUTE OF TECHNOLOGY
STATEMENTS OF CHANGES IN FUND BALANCES
FOR THE YEAR ENDED 30th JUNE, 1993 (WITH COMPARATIVE TOTAL FOR 1992)

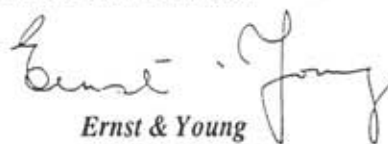
	RESTRICTED FUND		CAPITAL FUND										Total				
	Unrestricted Current fund	General Reserve	Endowment Reserve	General Reserve	Fixed Assets		Liquid Assets		Liquid Assets Allocated		Repairs and Maintenance Reserve		Sponsored Program Fund		Agency Fund	1993	1992
					BAHT	BAHT	BAHT	BAHT	BAHT	BAHT	BAHT	BAHT	BAHT	BAHT			
ASSETS																	
Balances, 1 July 1992 (Note 6)	38,514,715	52,947,813	59,861,252	1,319,041,201	10,392,298	30,586,585	7,916,357	80,590,145	40,293,037	1,816,758,291	1,655,077,420						
Adjustments:																	
Amount due to other fund	-	(65,000,000)	-	-	-	-	-	-	-	-	(65,000,000)	-	-	-	-	-	-
Disposal of assets	-	-	-	(13,208,231)	-	-	-	-	-	-	(13,208,231)	-	-	-	-	-	(4,090,929)
Amount due from capital fund to be recorded as restricted fund	-	27,502,094	-	-	-	-	-	-	-	-	-	-	-	-	27,502,094	-	-
Additions:																	
Excess of revenues over expenditures (expenditures over revenues)	921,502	11,762,788	-	-	-	-	(6,271,141)	(6,116,370)	26,171,210	26,171,210	26,467,787	12,180,399					
Investment income	-	-	1,200,248	14,731,050	-	-	-	-	-	-	15,931,298	21,761,324					
Government grants and appropriations	-	-	932,685	-	-	29,849,758	-	-	-	-	30,782,473	47,626,529					
Gain (loss) on rate of exchange	-	-	(20,000)	(241,343)	-	-	-	-	-	-	(261,434)	(787,614)					
Miscellaneous income and contributions	-	-	-	-	4,838,284	61,397,258	-	-	-	-	66,235,542	82,896,623					
Contribution in kind	-	-	-	-	-	19,672,519	-	-	-	-	19,672,519	21,836,951					
Amount due from other fund	-	-	-	35,727,906	-	-	-	-	-	-	35,727,906	-					
	39,436,217	27,212,695	61,974,185	226,832,410	15,230,582	141,506,180	1,645,014	74,473,775	66,464,247	1,960,608,245	1,837,600,703						
Deduction:																	
Inter-fund transfer from (to)																	
- Unrestricted Current Fund	-	-	-	-	-	307,167	-	-	-	-	921,502	1,452,325					
- Restricted Current fund	-	-	-	-	-	-	307,167	-	-	-	-	-	58,000,000				
- General	(307,167)	-	-	-	-	-	-	-	-	-	(307,167)	(23,484,108)					
- General Reserve	-	-	-	-	-	-	-	-	-	-	-	-	(307,168)				
- Liquid assets capital fund	-	-	-	-	-	-	-	-	-	-	-	-	(307,167)				
- Allocated	-	-	-	-	-	-	-	-	-	-	-	-	(307,167)				
- Repairs and Maintenance Reserve	-	-	-	-	-	-	-	-	-	-	-	-	(307,167)				
Expenditures for plant facilities	-	-	-	-	-	(16,945,061)	-	-	-	-	80,929,367	117,379,714					
- Cash	-	-	-	-	-	(19,672,519)	-	-	-	-	(19,672,519)	(21,836,951)					
- Kind	-	-	-	-	-	(3,539,108)	-	-	-	-	(43,818,385)	(116,385,174)					
Other cost	-	-	-	-	-	-	-	-	-	-	-	-	(33,000,000)				
- General	-	-	-	-	-	-	-	-	-	-	-	-	(15,561,537)				
- Amount due to other fund	(921,502)	(33,000,000)	-	(6,247,542)	104,929,137	(76,889,689)	307,167	-	-	-	(15,561,537)	(20,842,411)					
	38,514,715	(5,787,305)	61,974,185	220,084,868	1,410,762,107	41,691,474	1,952,181	74,473,775	66,464,247	1,945,046,708	1,816,758,292						
Balances, 30 June 1993 (Note 6)																	

NOTES TO FINANCIAL STATEMENTS

TO THE BOARD OF TRUSTEES
ASIAN INSTITUTE OF TECHNOLOGY

We have examined the balance sheets of Asian Institute of Technology as at 30th June, 1993 and 1992, the statements of revenues and expenditures of unrestricted current fund and restricted fund-general and the related statements of changes in fund balances for the years then ended. Our examinations were 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.

In our opinion, the aforementioned financial statements present fairly the financial position of Asian Institute of Technology as at 30th June, 1993 and 1992, the revenues and expenditures of unrestricted current fund and restricted fund-general and changes in fund balances for the years then ended, in conformity with generally accepted accounting principles appropriate for non-profit organisation as set out in Note 1 to the financial statements, applied on a consistent basis.



Ernst & Young
Bangkok
22 October 1993

NOTE 1 -
SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

1.1 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 which are in accordance with activities of objects specified. Within each fund group, fund balances which are restricted by outside sources are so indicated and are distinguished from unrestricted fund allocated to specific purposes by action of the governing board. As for unrestricted fund, the governing board retains full control to use in achieving any of its institutional purposes.

Investments income are recognised as income in the unrestricted current fund except for endowments, general reserve and capital funds which are accounted for in the fund to which it is restricted.

Other unrestricted revenues are recognised as income in the unrestricted current fund.

Restricted contributions, grants, appropriations and other restricted resources are accounted for in the appropriate restricted funds.

1.2 Accrual basis

The financial statements have been prepared on an accrual basis except for depreciation of fixed assets and contributions.

Depreciation of fixed assets is not recorded in accordance with the fund accounting concept.

Contributions are recognised on a cash basis due to the uncertainty in receiving contributions which are at the discretion of the donors.

The statement of revenues and expenditures of unrestricted current fund and restricted general fund is a statement of financial activities of current fund related to the current reporting period. It

Appendix

does not purport to present the results of operations for the period as would an earnings statement.

1.3 Contributions in kind

Contributions in kind are reflected in the financial statements on a fair value basis at the time of receipt.

1.4 Inventories

Inventories are valued at the lower of cost (first-in, first-out basis) and net realisable value.

1.5 Fixed assets

Fixed assets are stated at cost at the time of acquisition or fair value at the time of donation in the case of contributions in kind.

1.6 Foreign currencies

Exchange rates adopted:-

Foreign currency transactions during the year
- at the rates ruling on
the transaction dates.

Assets and liabilities in foreign currency outstanding on
the balance sheet date - at the rates ruling on
the balance sheet dates.

Exchange gains and losses are recognised as revenue and expenditure and taken up in the statement of changes in fund balances.

NOTE 2 - INVESTMENTS

	1993 BAHT	1992 BAHT
Time deposits with banks	151,049,058	187,939,433
Deposits with finance companies	273,641,523	183,661,365
	<u>424,690,581</u>	<u>371,600,798</u>

The investments of each fund as at 30th June, 1993 and 1992 are as follows:

	1993 BAHT	1992 BAHT
Unrestricted current fund	17,744,135	16,233,853
Restricted fund		
General	79,016,720	71,518,415
Endowment	61,743,108	59,562,588
General reserve	120,651,370	147,008,306
	261,411,198	278,089,309
Capital fund		
Liquid assets	60,746,536	35,096,883
Repairs and Maintenance reserve	1,952,182	7,916,357
	62,698,718	43,013,240
Sponsored program fund	61,749,707	28,267,984
Agency fund	21,086,823	5,996,412
	<u>424,690,581</u>	<u>371,600,798</u>

Time deposits with banks amounting to Baht 17 million (1992 : Baht 12.8 million) of the restricted general reserve fund has been pledged with a bank as a collateral against outstanding letter of guarantee issued by the bank (see Note 8).

**NOTE 3 -
ADVANCE DUTIES AND TAXES**

This represents advance duties and taxes payments to the Government of Thailand which will be subsequently refunded to the Institute in accordance with the letter of the Office of the Secretary-General to the Cabinet dated 16th July, 1985. The refund of the advance is for non Thai faculty and staff and is subject to the annual government budget of the Government of Thailand.

The details of advance duties and taxes as at 30th June, 1993 and 1992 are as follows:

	1993 BAHT	1992 BAHT
Employees personal income tax	8,986,595	10,000,000
Import and tax duty		
-Automobile	1,330,024	357,990
-Wine and spirits	769,484	471,856
-Other	-	7,604
	<u>11,086,103</u>	<u>10,837,450</u>

**NOTE 4 -
FIXED ASSETS**

	1993 BAHT	1992 BAHT
Campus development	23,570,117	22,031,502
Buildings	624,267,020	491,864,096
Furniture and equipment	636,730,774	587,199,727
Library acquisitions	84,323,129	78,175,811
Construction in progress	41,871,066	139,770,065
	<u>1,410,762,106</u>	<u>1,319,041,201</u>

Depreciation for the year amounting to Baht 64,355,245 (1992 : Baht 61,598,143) has not been recorded in accordance with the fund accounting concept.

**NOTE 5 -
CONTRIBUTIONS IN KIND - SERVICES**

This represents services donated to the institute in the form of seconded faculty or staff of which the value is estimated on a basis in accordance with the approved Institute professional salary scale. The amounts are recognised as revenues and expenditures in the restricted general funds.

**NOTE 6 -
FUND BALANCES**

	1993 BAHT	1992 BAHT
Restricted fund		
General	(5,787,305)	52,947,813
Endowment	61,974,185	59,861,252
General reserve	220,084,868	176,614,888
	<u>276,271,748</u>	<u>289,423,953</u>
Capital Fund		
Fixed assets	1,410,762,106	1,319,041,201
Liquid assets - Unallocated	11,691,474	10,392,298
Liquid assets - Allocated	64,916,461	30,586,585
Repairs and Maintenance	1,952,182	7,916,357
	<u>1,489,322,223</u>	<u>1,367,936,441</u>

**NOTE 7 -
CAPITAL COMMITMENTS**

As at 30th June, 1993, the Institute had capital commitments in respect of building construction amounting to approximately Baht 31 million (1992 : Baht 9 million).

**NOTE 8 -
BANK GUARANTEES**

As at 30th June, 1993, there were outstanding bank guarantees of approximately Baht 12.5 million (1992 : Baht 1.2 million) issued by the bank on behalf of the Institute in respect of certain performance bonds as required in the normal course of activities of the Institute.

Appendix - Abbreviations

ADB	Asian Development Bank
AEEMTRC	ASEAN-EC Energy Management Training and Research Center
CEC	Commission of the European Communities
CIDA	Canadian International Development Agency
CUC	Canadian University Consortium
DTEC	Department of Technical and Economic Cooperation, Thailand
EC	European Community
EGAT	Electricity Generating Authority of Thailand
ESA	European Space Agency
ESCAP	Economic and Social Commission for Asia and the Pacific
FAO	Food and Agriculture Organization
GRID	Global Resources Information Database
ICIMOD	International Center for Integrated Mountain Development
IDRC	International Development and Research Center, Canada
IMO	International Maritime Organization
ILO	International Labour Organization
INDEVELOP	International Development Consultant Services, Vietnam-Sweden Health Cooperation Program
ITU	International Telecommunications Union
IRRI	International Rice Research Institute
IUCN	International Union for the Conservation of Nature
KEIDANREN	Federation of Economic Organizations, Japan
KU	Kasetsart University, Thailand
KMIT	King Mongkut's Institute of Technology, Thailand
PNOC	Philippine National Oil Company
RHUDO	Regional Housing and Urban Development Office, USAID
UCLES	University of Cambridge Local Examinations Syndicate
UNCHS	United Nations Commission for Human Settlements
UNIDO	United Nations Industrial Development Organization
UNDP	United Nations Development Program
UNDRO	United Nations Disaster Relief Organization
UNEP	United Nations Environment Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
WECS/NEA	Water and Energy Commission Secretariat/Nepal Electricity Authority
WHO	World Health Organization

SCHOOLS, PROGRAMS, AND CENTERS IN THE INSTITUTE

SCHOOLS

SAT	School of Advanced Technologies
SCE	School of Civil Engineering
SERD	School of Environment, Resources and Development
SOM	School of Management

PROGRAMS

AFE	Agricultural and Food Engineering
CS	Computer Science
EE	Environmental Engineering
ET	Energy Technology
GTE	Geotechnical and Transportation Engineering
HSD	Human Settlements Development
IEM	Industrial Engineering and Management
IREM	Irrigation Engineering and Management
NR	Natural Resources
SEC	Structural Engineering and Construction
TC	Telecommunications
WRE	Water Resources Engineering

CENTERS

ADPC	Asian Disaster Preparedness Center
CEC	Continuing Education Center
CLET	Center for Language and Educational Technology
LRDC	Library and Regional Documentation Center
RCC	Regional Computer Center
RERIC	Regional Energy Resources Information Center
ENSIC	Environmental Sanitation Information Center
IFIC	International Ferrocement Information Center
AGE	Asian Geotechnical Engineering Information Center
MOTIC	Management of Technology Information Center

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