

ASIAN  
INSTITUTE  
OF  
TECHNOLOGY

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**ANNUAL REPORT  
2019**



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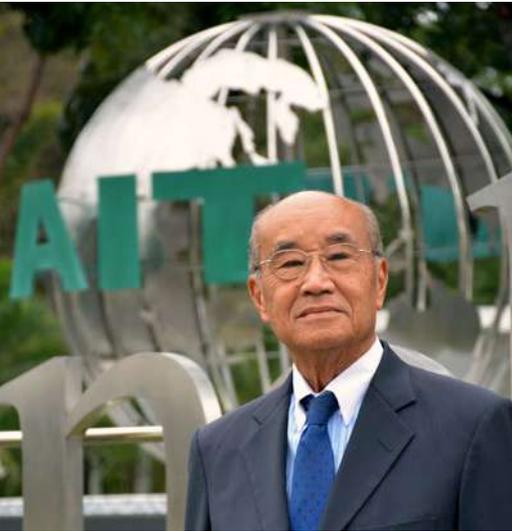
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## CHAIRMAN'S STATEMENT



This year is the 60th anniversary of AIT and a milestone in the history of this Institute, which has contributed immensely to human and institutional capacity building of the region. The celebrations were marked with an array of events, with Her Royal Highness Princess Maha Chakri Sirindhorn gracing the inauguration ceremony on the AIT campus on 24 October. In conjunction with celebrations, AIT honored distinguished alumni who have made contributions to society and to AIT, by inducting the second batch of AIT Hall of Famers. It was also equally befitting to have Professor Joyce McConnell, President of AIT's founding university, Colorado State University, deliver the keynote address at the event.

I was part of the first batch of students to graduate from AIT, and my life and career have been intertwined with that of the Institute itself. Therefore, the 60th anniversary celebrations were very meaningful for me personally, and I owe a great debt of gratitude to AIT for giving me a scholarship for my Masters degree, the opportunity to study abroad for my doctoral studies, and a teaching career for many years. I subsequently became a developer, investor, and businessman and had the opportunity to re-engage with AIT as a Board member and later Chairman. Therefore, I am indebted and have always strived to give back to AIT in whatever form I can contribute.

This is just my story, but there are similar success stories from among our 24,000 alumni spread across more than 100 countries. One such individual is distinguished AIT alumnus and 2010 Hall of Fame inductee Dr. Tongchat Hongladaromp, who will be taking over the Chairmanship of the Board from next year. Dr. Tongchat has had a stellar career in government and the private sector as well as academia, and I am confident that all of you will extend to him the same level of support I have been fortunate to receive over the years.

I will be stepping down knowing that the future of AIT is looking very good after passing through so many challenges. As it charts its future course under the slogan "Transforming AIT," the Institute remains committed to contributing to the development of Asia, and AIT President Dr. Eden Y. Woon has already embarked on key strategies to take AIT to the next level with greater global recognition.

In conclusion, I wish to once again thank all our Trustees and partners for their strong and continued support to the Institute.

A handwritten signature in blue ink, which appears to read "Subin Pinkayan". The signature is fluid and cursive.

**Dr. Subin Pinkayan**

Chairman

Board of Trustees

Asian Institute of Technology (AIT)



## PRESIDENT'S MESSAGE



By the time you get this Annual Report 2019, the world would be embroiled in the COVID-19 Pandemic. But in the year of 2019, even at year's end, there was little hint of what was to come in 2020. At AIT, it was the same. 2019 was a great year for AIT! It was our 60th Anniversary Year; and it was the first full year of the new AIT vision of  $I^2E^2S^2$  (*Innovation, Internationalisation, Enterprise, Entrepreneurship, Stakeholders, Support*). Therefore, our work in 2019 revolved around these two tasks—to celebrate our anniversary, and to put in place a Roadmap for us to work towards our vision.

On the first task, an Organising Committee worked all year on disparate events which highlighted our anniversary, and on a gala week in late October to formally celebrate our 60th Birthday. All this was possible because of the tremendous support of AIT Alumni in all the different countries. Many of the alumni came home during the week of October 21 and spent four days going to the Gala Dinner, a Formal Ceremony presided over by HRH Princess Sirindhorn, a Presidents' Forum for twenty university presidents attending from all over the world, and a Homecoming Day for all the alumni. Details can be found inside this Report.

For the first time in AIT history, this Annual Report includes a Sustainability Report, and it can be found in the Appendix. Also in this Report you will find the detailed work we did all year to get ourselves on the road to Transforming AIT. Whether it is in introducing more innovation in our research and in our course offerings, whether it is in re-establishing the global footprint of AIT once again, in 2019 we made significant progress. We also now have a new Vice President for Knowledge Transfer who oversaw our work in forging closer ties with the private sector, and to help launch AIT's very first Entrepreneurship Centre in September 2019. On the vision of engaging more with stakeholders and supporters, we devoted a great deal of resources and time to improve student life and campus operations. We cultivated the alumni on a more regular and deeper basis, and we are making some inroads in bringing in donations for AIT. As AIT moves smartly transforming itself, we would expect more donors to want to help us along that road.

All in all, 2019, our 60th Anniversary Year, was a good year for AIT. I hope you enjoy reading about our accomplishments and our events. Thank you very much for your support! But as I said at the outset, when you read this, the world will be in a different place. AIT, however, will go forward "Without Missing a Beat" with your support!



**Edén Y. Woon**

President

Asian Institute of Technology (AIT)

## AIT 60TH ANNIVERSARY

### HRH PRINCESS MAHA CHAKRI SIRINDHORN GRACES AIT'S 60TH ANNIVERSARY CELEBRATIONS



From the small batch of students who began studying engineering in a quaint corner of Bangkok in 1959, over the past six decades, the Asian Institute of Technology (AIT) has emerged as a premier international institution, focusing on engineering, environment, and management. Honoring AIT's success story on the occasion of its 60th anniversary was Her Royal Highness Princess Maha Chakri Sirindhorn, who graciously presided over the celebrations on 24 October 2019.

Princess Sirindhorn is AIT's first royal alumna, having obtained a certificate in Remote Sensing Technology from AIT in 1984. She was greeted by Dr. Subin Pinkayan, Chair, AIT Board of Trustees; Dr. Sahas Bunditkul, Chair, AIT Executive Committee; Dr. Eden Y. Woon, President, AIT; and Mrs. Maria Fe Nuestro Ferriols, President, AIT Alumni Association.

As the first inductee into AIT's Hall of Fame, Princess Sirindhorn awarded certificates of appreciation to nine new inductees into the Hall of Fame: Prof. Worsak Kanok-Nukulchai, Dr. Somchet Thinaphong, Dr. Lon-Gyi Chen, Dr. Prasarn Trairatvorakul, Dr. Bindu Nath Lohani, Mr. Somprasong Boonyachai, Mr. W. J. L. S. Fernando, Dr. Tong-Ki Woo, and Prof. Kam-Tim Chau, in whose honor a Hall of Fame exhibition was organized.

Given the critical role Colorado State University (CSU) played in the formation of the SEATO Graduate School of Engineering, AIT's precursor, befittingly, CSU President Prof. Joyce McConnell delivered the keynote address.

President Woon said: "Every organization must move forward, and no organization will succeed in a sustainable manner by standing still and basking in past glory." He stated that Innovation, Internationalisation, Enterprise, Entrepreneurship, Stakeholders, and Support (I<sup>2</sup>E<sup>2</sup>S<sup>2</sup>) are the Strategic Focus as we "Transform AIT."



AIT 60TH ANNIVERSARY CELEBRATION CEREMONY: 24 OCTOBER 2019



## AIT PRESIDENTS FORUM EXPLORES SOCIAL IMPACT WITH INNOVATION

How have universities injected innovation into their research into social impact? How do university collaborate globally with academia, governments, multinationals, and non-profit organisations in social impact research? How do university maintain a sustainable campus in both teaching and campus operations?

These three core questions relating to innovation, globalisation, and sustainability were the focus of the 20 University Presidents and Vice Chancellors who assembled at AIT to share their thoughts in the Presidents Forum held on 24 October 2019. As the Asian Institute of Technology (AIT) celebrates 60 years of existence, it realizes the tectonic shifts taking place in the field of higher education. These global changes make it mandatory for universities to change and transform themselves.

Transforming AIT under the overarching umbrella of Social Impact with Innovation was the topic posited before the speakers by AIT President Dr. Eden Y. Woon. Continuing with traditional ways can no longer ensure sustainability, and universities must be entrepreneurial in nature, President Woon stated, emphasizing that interconnectedness part of innovation in social impact research, and internationalisation and sustainable campus were key to the success of higher education institutions in the 21st century.

“How university collaborates globally with academia, governments, multinationals, and non-profit organisations in social impact research” was the first theme with the session chaired by Prof.



Bundhit Eua-arporn, President, Chulalongkorn University. Sharing their thoughts in this session were Prof. Zhou Yu, President, Harbin Institute of Technology; Prof. Kazuya Masu, President, Tokyo Institute of Technology; Prof. Umrans S. Inan; President, Koç University; and Prof. Mahmoud Nili Ahmadabadi, President, University of Tehran.

Dr. Denis Simon, Executive Vice Chancellor, Duke Kunshan University, chaired the second panel on “How university collaborates globally with academia, governments, multinationals, and non-profit organisations in social impact research.” He was joined by an illustrious panel comprising of Prof. Julia Buckingham, Vice-Chancellor and President, Brunel University; Prof. Ram Kantha Makaju Shrestha, Vice-Chancellor, Kathmandu University; Prof. Kil-Choo Moon, Presi-

dent, University of Science and Technology, South Korea; Prof. Hideo Ohno, President, Tohoku University; and Prof. Mohamed Ibrahim bin Abdul Mutalib, Vice Chancellor, Universiti Teknologi Petronas.

Following innovation and collaboration, which were discussed in the first two sessions, sustainability was the theme of the third session, the topic being: “How university maintains a sustainable campus in both teaching and campus operations?” Chaired by Prof. Jaak Aaviksoo, Rector, Tallinn University of Technology, the panel included Dr. Roger Chen, President, I-Shou University; Prof. Tan Eng Chye, President, National University of Singapore; Datin Dr. Anita B. Z. Abdul Aziz, Vice-Chancellor, Universiti Brunei Darussalam; and Prof. Kyosuke Nagata, President, University of Tsukuba.



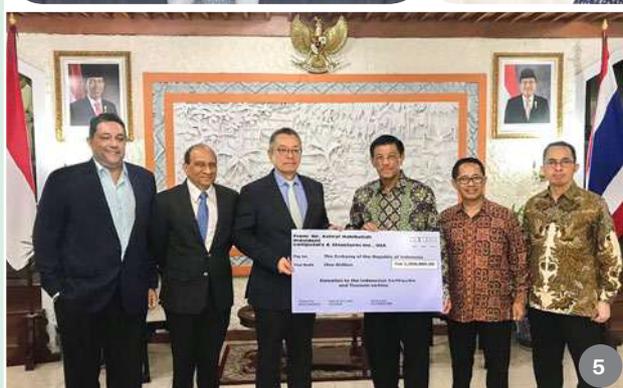
AIT 60TH ANNIVERSARY THAI-STYLE GALA DINNER: 23 OCTOBER 2019



AIT ALUMNI OPEN HOUSE: 25 OCTOBER 2019



YEAR IN REVIEW



1. Students from 23 countries enroll at AIT on 4 January 2019 2. Ambassador of India to Thailand, H.E. Mrs. Suchitra Durai pays her first visit to AIT on 11 January 2019 3. President Eden Woon visits four universities in China in mid-January 2019 4. Three AIT Vice Presidents approved by the Board of Trustees 5. The one-million-baht donation for victims of the Sulawesi disaster is handed over to the Ambassador of Indonesia to Thailand H.E. Mr. Ahmad Rusdi by AIT President on 11 January 2019 6. AIT Alumnus Appointed CEO of Mekong River Commission.

life • FEATURE

8 | TUESDAY, FEBRUARY 26, 2019 | Bangkok Post

# A HIGHER VISION

AIT's president wants the university to be an academic player regionally and worldwide

STORY: YVONNE BOHWONGPRASERT

**E**den Y. Woon's impressive portfolio that has seen him through stints in the military, the private sector and academia make him a perfect candidate to lead the Asian Institute of Technology (AIT) to greater heights as it celebrates its 60th anniversary this year.

Established six decades ago, the institute has been known as a leading regional postgraduate institution for students, near and far — a melting pot for multinational and multicultural experiences for both its students and teachers.

According to the Chinese-American who took up the AIT's presidency last September, AIT has several interesting elements. Founded in 1959, the mission was to develop professionals who would play an integral part in development of the region and its assimilation into the global economy.

In the first couple of decades, the institute was extremely successful. Due to this, AIT has some very significant alumni not just from Thailand but also abroad who hold titles in the government, academics and other prominent fields. All of them have contributed to the economic growth of the region where they reside.

The fields of study included construction, civil engineering, infrastructure, water resources, waste management and the likes, in short, issues that a developing country needs to make progress. Of course, besides these subjects, students get to pick from a slew of other courses.

Woon, previously vice-president for Institutional Advancement at Hong Kong University of Science and Technology, said AIT had not foregone its core strengths, which are capacity building and working on issues that help develop the region.

Regional problems seen today are also worldwide problems, he said, including climate change, energy shortage, scarcity of water resources, waste treatment, infrastructure and transportation.

"I want to take our core strengths and really modernise it in several ways. One, I want to re-establish a global footprint of AIT. Students are mainly from Southeast Asia and South Asia and I think we need to bring back more students from

**RIGHT**  
AIT president Dr Eden Y. Woon's vision is to work towards making the institute an attractive option for both Thais and foreign students alike.

**BELOW**  
AIT president Dr Eden Woon, fourth right, speaks with members of AIT'S multinational and multicultural student body.



come for three or four months to join us. This will also allow our students to go out into the world. This will really add to both the diversity of the campus and also the diversity of the learning."

Secondly, his desire is to inject more innovation into AIT's core strengths.

For one, he desires to see more research done on answering such questions like how artificial intelligence impacts the research in earthquake prediction? Or how robotics apply to agriculture.

"I also want to bring in more innovation into education and the curriculum. We have students that come here for four semesters, for a master's degree. They spend one year in the classroom and one year in research. I want to do a little mix and match. I want some of the students to go away for a semester to get work experience abroad.

"Perhaps if they don't choose that option, they could intern at a company. This will give them more relevant experience and also this will serve to tie AIT more with industry. I think AIT now has tremendous relationships with governments and NGOs, but its relationship with industry is not as developed as it should be."

Woon also stressed the need to become well-known among the masses, not just among specific groups.

"In downtown Bangkok, young adults would probably not know about AIT. That is why having a niche is not sufficient. To make more of an impact, we need to work closely with industry. When they share what their needs and wants are, we will be able to develop our curriculum in a more constructive and attractive manner."

"There is also a high chance for them to send us students that will be able to self-fund their education."

Woon said the biggest challenge in all this is resources, and also building up the brand, because at the moment they have a very good, very niche brand. And to get recognised at a global university level, one needs to be good at research.

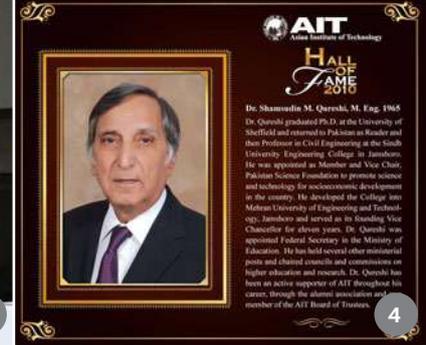
"They [faculties] have to continue to do the research and publish the papers so people will get to know us better. Secondly, we have to look at globalisation in terms of branding, in terms of diversity and exchanges, in terms of collaboration, we need to get the name



"So right now China, Japan and Korea are sending much fewer students than they should. The reason for this is largely because many of their own universities have come up, while Chinese students have preferred to go abroad — especially the US, UK and Australia — for higher education, unlike before when they opted to study in Asia," said Woon, who served in the US Air Force until 1993.

He is adamant that AIT has a niche, and still has much to offer. He has been to China twice in the last five months to revisit some of his former university contacts to inform them about what AIT has to offer.

"Regular students by and large will be Asians, but I am looking to encourage exchange students and professors



1. President Eden Y. Woon shares his thoughts about A HIGHER VISION with the Bangkok Post that is published on 26 February 2019
2. New School of Engineering and Technology Dean appointed.
3. AIT Signs Academic Exchange Agreement with UNU-IAS on 5 February 2019.
4. Condolences: AIT Hall of Fame Inductee Prof. S. M. Qureshi passed away on 17 February 2019.



1. INDEX International offers three scholarships to AIT students on 19 March 2019 2. AIT Students Win 2019 International Day of Forests Debate on 21 March 2019 3. AIT Champions League Cricket Tournament launched on 16- 17 March 2019 4. 145 participants from 62 universities based in 19 countries participated International Symposium on Disaster Resilience and Sustainable Development at AIT on 7 - 8 March 2019.

April



1. AIT alumna Ms. Dulani Chamika Withanage stars in Sri Lanka’s first satellite launch on 18 April 2019. 2. AIT at 60 years: Photography Competition by AIT Students Union 3. Dr. Bui Trung Thanh, AIT Alumnus is the President of Hung Yen University of Technology and Education 4 Dr. Roger Levermore named New Dean of School of Management.

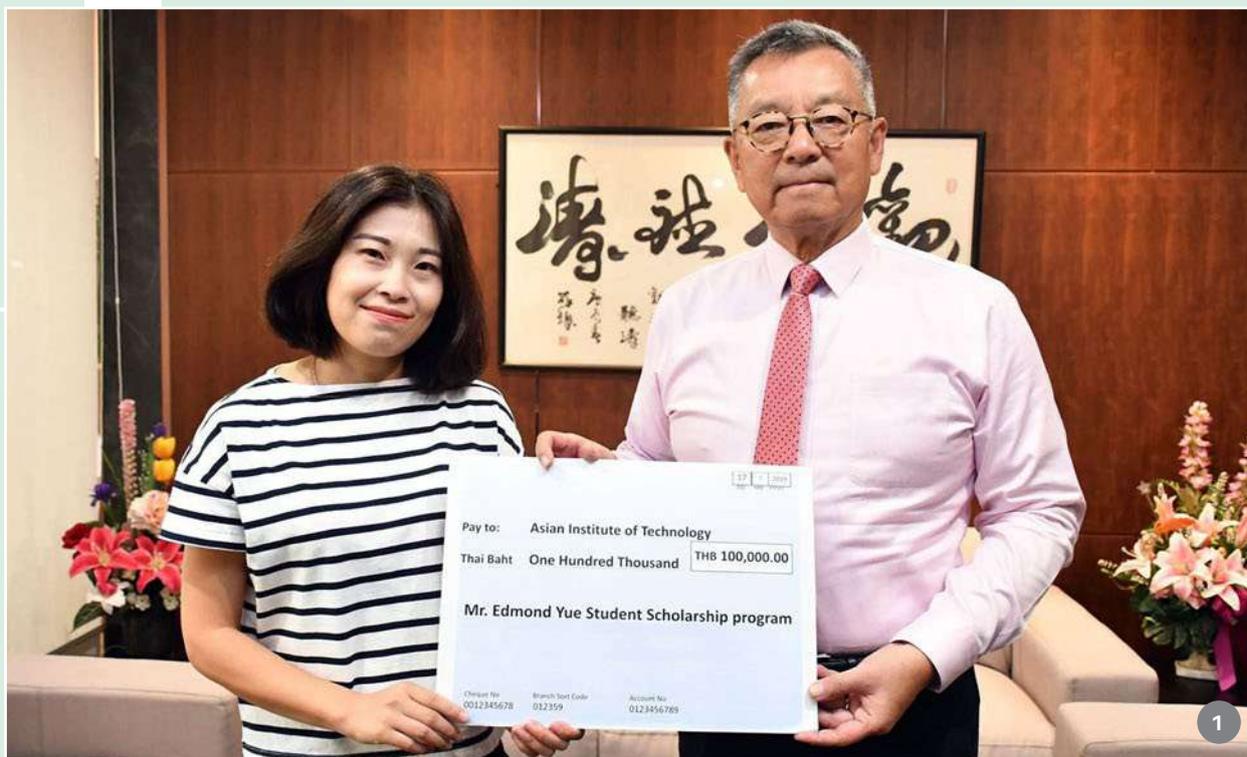


1. Four lessons for graduates from distinguished 60th Anniversary Graduation Speaker on 17 May 2019 2. AIT Scales Up to the Next Level of Knowledge Management with the launch of AIT Share on 24 May 2019 3. SCG collaborates with AIT to unveil Thailand's first Reinvented Toilet on 3 May 2019 4. AIT re-establishing its brand in Europe; AIT President visits 11 universities from 2 - 14 May 2019 5. AIT Publications presents a New Paradigm for Sanitation 4.0 6. AIT alumnus appointed Acting Minister of Higher Education in Afghanistan.

# June



1. AIT co-hosts biggest-ever social business day on 28 - 29 June 2019 2. 10 New Scholarships for masters Degree Programs by SCG at AIT for the August 2019 semester 3. Mr. Tatsuya Kanai, Senior Advisor, Asian Development Bank (ADB) visits AIT on 6 June 2019 4. Delegation from Brunel University, London at AIT on 19 June 2019 5. Ambassador of South Africa to Thailand visits AIT on 7 June 2019 6. MoU with Yangon University of Economics on 13 June 2019 7. Ambassador of Pakistan to Thailand visits AIT on 19 June 2019 8. AIT celebrates World Environment Day 5 June 2019.



1. Ms. Chen Ying, Master Student in SOM, the first AIT Mr. Edmond Yue Student Exchange Scholarship 2. AIT signs MoU with Construction Development Corporation Limited (CDCL), Bhutan on 17 July 2019 3. AIT and Chiang Mai University co-host Ostrom Conference on 11 - 15 July 2019 4. Dr Salin Elected as Director, World Aquaculture Society-Asia Pacific Chapter 5. AIT Team selected as finalist in S-Booster.

# August



1. First Day@AIT on 5 August 2019 2. Dr. Subin Pinkayan Student Exchange Scholarship Program 3. Five AIT students attend International Summer School on Geo-informatics Serve the Belt & Road 4. Three AIT students attend Ochanomizu Summer Program 2019 5. MoU signing on Double Degree Program with the University of Iowa on 27 August 2019.



1. The AIT Entrepreneurship Center is launched at the 100 Innovations X Entrepreneurs conference on 27 September 2019 2. The AIT Entrepreneurship Center 3. RRC.AP Celebrates its 30th Anniversary on 11 September 2019 4. Three AIT students attend Summer Program at Tongji University, Shanghai, China from 21-30 August 2019 5. AIT Cultural Show on 13 September 2019.

# October



1. AIT Alumni Association China Chapter contribute toward the AIT Belt & Road Research Center on 25 October 2019 2. MoU signing with Tra Vinh University, Vietnam on 15 October 2019 3. MoU signing with Beijing Institute of Technology, China on 18 October 2019 4. MoU signing with University of Wollongong, Australia on 21 October 2019 5. MoU signing with Brunel University on 23 October 2019 6. MoA signing with Kathmandu University, Nepal on 24 October 2019 7. MoU signing with Tallinn University of Technology, Estonia on 24 October 2019 8. Visit to University of Science and Technology (Beijing, China) on 18 October 2019 9. MoU Signing with University of Tehran on 23 October 2019 10. AIT celebrated its 60th Anniversary in October details of which are highlighted in pages 4-7



1. AIT inaugurates the Belt & Road Research Centre on 28 November 2019 2. Nepal government donates USD 60,000 on 5 November 2019 3. Renowned Chinese entrepreneur Wang Shi delivers the Inaugural Distinguished Entrepreneur Address on 27 November 2019. 4. Book Launch: "Infrastructure Financing in Asia" 25 November 2019.

# December



**DDS Alumni**

Congratulations to  
**The Winner of  
The 2019 N-Peace Awards**



**Ms. May Sabe Phyu**  
Gender and Development Studies (GDS),  
Department of Development and Sustainability (DDS),  
School of Environment, Resources and Development (SERD)

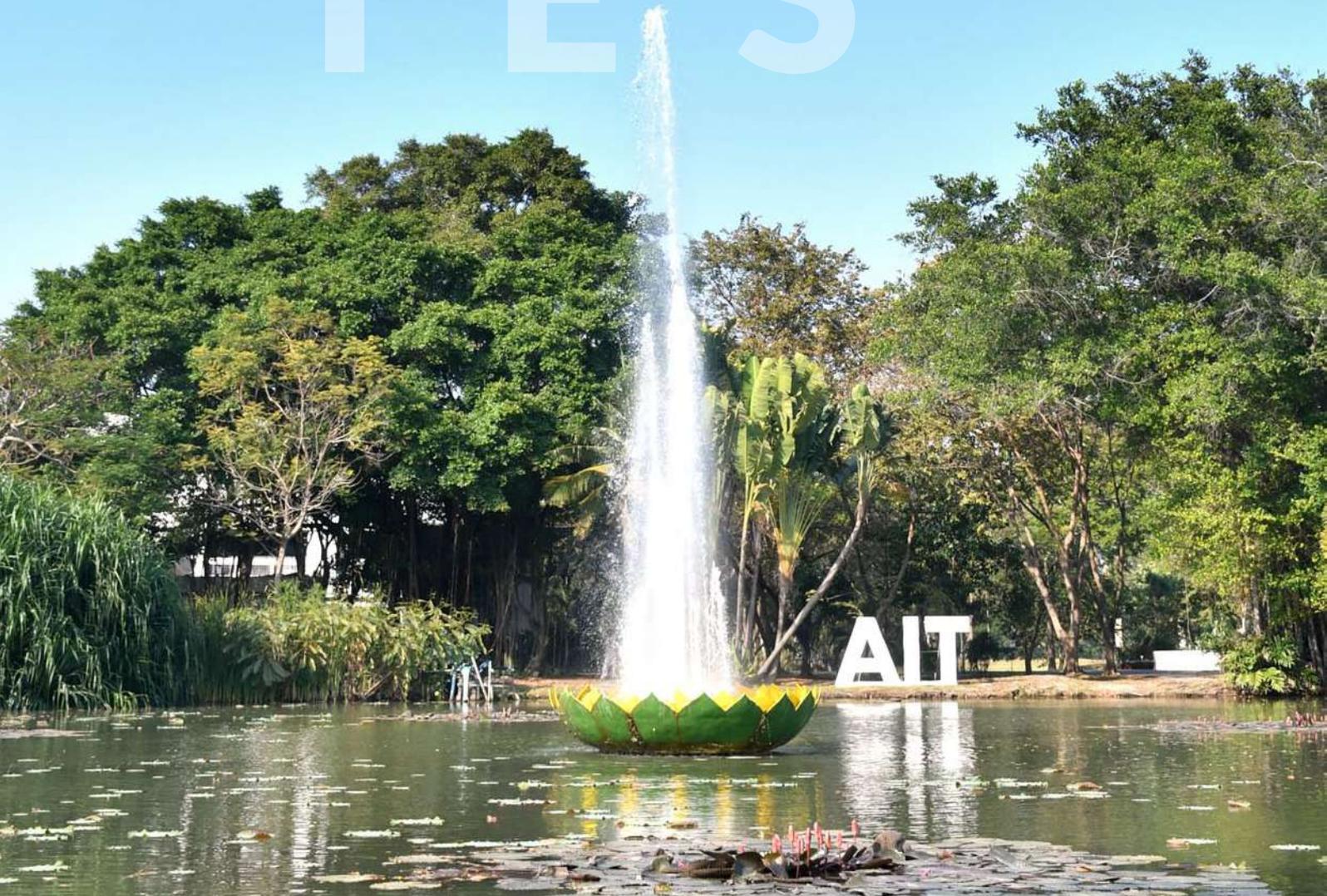


1. AIT'S 132nd Graduation Ceremony on 13 December 2019 2. President Woon addresses Kathmandu University's 25th Convocation Ceremony on 25 December 2019 3. MoU with Tokyo University of Science on 9 December 2020 4. AIT congratulates alumna Ms. May Sabe Phyu-Winner for receiving the 2019 N-Peace Award 5. AIT-Japan Cooperation 50th Anniversary celebration on 9 December 2019.

**SOCIAL  
IMPACT  
WITH  
INNOVATION**

—  
A  
ROADMAP TO  
TRANSFORM  
AIT

I2E2S2



In his inaugural address to the AIT community on 5 September 2018, President Eden Y. Woon unveiled his vision for the Institute as it moves beyond 60 years. "AIT needs to be a relevant, respected, global, and well-known technological and entrepreneurial institution serving Asia and the world," President Woon told a packed house in AIT's Robert B Banks Auditorium, and introduced the concept of I<sup>2</sup>E<sup>2</sup>S<sup>2</sup>, namely: Innovation, Internationalisation, Enterprises, Entrepreneurship, Stakeholders, and Support.

The President referred to the start of his tenure at AIT as the beginning of AIT 3.0, AIT 1.0 being the first few decades after the Institute's founding in 1959, when AIT had more widespread support and engagement, and AIT 2.0 as the past two decades or so, when resources became more constrained and various issues limited the growth of the Institute. But all through AIT 1.0 and 2.0, many of AIT's graduates spread out across the world and contributed to the social and economic development of many communities, and the Institute's research into social impact fields became well known. It is a fact that other academic institutions globally in the past two decades grew faster with more resources, exposing the critical need for AIT to be more competitive and more relevant.

The I<sup>2</sup>E<sup>2</sup>S<sup>2</sup> strategic focus has been incorporated in the new AIT Roadmap, which underpins AIT 3.0. Following extensive deliberations, the leadership team, including deans, faculty, and senior staff, put together the AIT Roadmap for the next three years (2019-2021), which was acknowledged by the AIT Board of Trustees at its 25 July 2019 meeting. "Transforming AIT" was the slogan for the AIT 60th anniversary and key aspects of the strategy outline how AIT is going to transform itself by embracing innovation, being international, working with enterprises, nurturing entrepreneurship, caring for stakeholders, and broadening support. AIT research disciplines are critical to the societies of Asia, and the Institute will continue these studies but with more innovation; thus the new motto for AIT is "Social Impact with Innovation."

## VISION

Transforming AIT to be a respectable international graduate institution whose research and education contribute to the development of Asia, by making AIT more global, more innovative, more entrepreneurial, and more economically relevant--while leveraging on its social impact core strengths.



<p style="text-align: center; font-weight: bold; font-size: 1.2em;">INNOVATION</p> <p>By Embracing <b>INNOVATION</b></p> <ul style="list-style-type: none"> <li>■ Apply innovative technology to existing research strengths</li> <li>■ Introduce selected new leading-edge and emerging research areas to facilitate applications into our core strengths</li> <li>■ Engage in more inter-discipline research, with new Grand Challenge Research Centers as one way forward</li> <li>■ Institute modern education techniques</li> <li>■ Encourage innovative thinking in our degree programs, including more “topical” programs and “out of the box” thinking on degree requirements</li> </ul>	<p style="text-align: center; font-weight: bold; font-size: 1.2em;">INTERNATIONAL</p> <p>By Being <b>INTERNATIONAL</b></p> <ul style="list-style-type: none"> <li>■ Expand global network to benefit faculty and students</li> <li>■ Forge a few significant university partnerships in education and research</li> <li>■ Participate in selected international forums</li> <li>■ Engage in multi-party collaboration, using our regional expertise</li> <li>■ Broaden recruitment within Asia</li> </ul>	<p style="text-align: center; font-weight: bold; font-size: 1.2em;">ENTERPRISES</p> <p>By Working with <b>ENTERPRISES</b></p> <ul style="list-style-type: none"> <li>■ Pursue more research contracts and collaboration with enterprises</li> <li>■ Increase short courses and degree programs wanted by industry</li> <li>■ Involve practitioners from enterprises in AIT education</li> <li>■ Solicit internship, co-op, and job placement with industry</li> <li>■ Be known as being economically relevant to the community by applying new knowledge from AIT to help businesses in Thailand and region</li> </ul>
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The Roadmap is what guides the Institute in AIT 3.0, and progress is being made on all fronts. The tasks accomplished in 2019 under the I<sup>2</sup>E<sup>2</sup>S<sup>2</sup> strategic focus areas are highlighted below.

## Innovation (Academic Programs and Teaching, Research, Outreach)

Identified six new degree programs for August 2020 and developed new program structure

AIT’s three schools – School of Environment, Resources, and Development (SERD); School of Engineering and Technology (SET); and School of Management (SOM) – were asked to identify six new degree programs (two each) for introduction in the August 2020 semester. The following programs were identified and approved by the Academic Senate:

- SERD** - Sustainable Energy Transition  
Food Innovation, Nutrition and Health
- SET** - Internet of Things  
Bio-Nano Material Science and Engineering
- SOM** - International Finance  
Business Analytics and Digital Transformation

Additionally, SERD’s three new 1-Year Masters programs were approved: Masters in Marine Plastic Abatement; Masters in Re-

generative Sanitation, and Masters in Urban Sustainability Planning and Design; and one new Professional Masters in Environmental and Social Sustainability Assessment and Management. SET will also be offering a new program in Data Science and Artificial Intelligence.

### NEW PROGRAM STRUCTURE

With the view to providing enhanced educational opportunities to students and to ensure structural consistency across programs, a streamlined system of degree structures and credit requirements was approved by the Academic Senate. This included the introduction of a credit structure for 1-Year Masters (course-based) and MPhils (research-based) in addition to existing PhD, DBA, MSc, MEng, MBA, and Professional Masters programs. The new program structure also makes provision for integrating a semester-long Minor, Internship, or Exchange into the Masters degree structure, thus augmenting the richness of the programs being offered.

### REVAMPING ADMISSIONS PROCESSES

Admissions processes were thoroughly reviewed and several improvements were made, leading to expeditious turnaround of applications, better integration of the School and Admissions Office websites, better facilitation of information provided by applicants via the online application system, enhanced engagement including follow-up with applicants during the entire process (from application to enrolment), provision of new payment options for applicants, and better coordination and streamlining of scholarship announcements and decisions on offers.

## ENTREPRENEURSHIP

### By Nurturing ENTREPRENEURSHIP

- Establish an AIT Entrepreneurship Center— with co-working space, seminars, VC introductions, mentorships, incubation
- Initiate Minor program in entrepreneurship
- Promote knowledge transfer of faculty research to start companies
- Create a spirit of start-ups at AIT by students and faculty
- Aspire to be known as a regional center of innovation and entrepreneurship

## STAKEHOLDERS

### By Caring for STAKEHOLDERS

- Place students at a high priority
- Cultivate alumni relations more broadly and deeply—to include lifelong learning opportunities
- Realize a sense of pride in working for AIT by faculty and staff—integrity, responsibility, and accountability with good governance
- Adopt a service and welcoming and positive and problem-solving and flexible mind-set all through campus—Can Do! in a cost efficient manner
- Contribute to community welfare via technology transfer or social entrepreneurship or being an example of a green campus

## SUPPORT

### By Broadening SUPPORT

- Expand government and NGO support
- Increase Outreach to business communities, working with VPAA and VPKT and OIA and OTA
- Create naming opportunities— infrastructure, scholarships, chairs, and research focus centers
- Seek donations from enterprises for research support
- Solicit donations from private individuals, including alums, and foundations
- Launch a 60th Anniversary Fund Raising Campaign

### ESTABLISHED TWO NEW RESEARCH CENTERS (AI CENTER; BELT & ROAD RESEARCH CENTER)

**AI Center** - Artificial Intelligence (AI) technologies and the automation they enable stand poised to transform economies worldwide, but as yet as most countries in the Asian region have been slow to adopt AI technology. This situation presents an opportunity for AIT, which has been a concentration of research expertise in AI for over 20 years. The AIT Artificial Intelligence Technology Research Center (AIT2) has been established as a platform for concentrating the R&D capacity of AIT in AI technologies and to help accelerate the adoption of AI technology in the Southeast Asian region. One of the important goals of the Center is to adapt AI technology to local needs in critical areas such as agriculture, transportation, and law enforcement and to build capacity in the region for the development of new products and services incorporating AI technology.

**AIT Belt & Road (B&R) Center** - The AIT B&R Center was established in November 2019, and its vision is to serve as an international hub for collaborative and innovative research toward robust economic growth and sustainable development in the Belt & Road region. The Center's mission covers enhancing AIT's Belt & Road projects, promoting collaboration with China and other Belt & Road countries' universities and organizations, supporting young scholars and students' research, study in the region with Belt & Road fellowships and scholarships, and disseminating the outputs of collaborative efforts to the wider community through regional and international B&R conferences. As an international educational and research Institute with diversified students and researchers from all over the world, AIT is well connected in Belt & Road countries and has established excellent networks that provide great advantages in supporting the B&R Center to fulfill its goals in the future.

### REVISED RESEARCH INCENTIVE SCHEME

Efforts to improve the quality of research processes and outcomes continued through the year. A notable development was the introduction of a new, simplified, research-incentivizing scheme for undertaking externally supported research, training, consulting, and other developmental activities.

### SUBMITTED DATA FOR TIMES HIGHER EDUCATION IMPACT RANKING

AIT participated for the first time in the Times Higher Education (THE) Impact Rankings 2020, which looks at global universities' commitment and performance in furthering the Sustainable Development Goals (SDGs). AIT took part in the 12 SDGs below plus the mandatory SDG17 Partnership for the Goals:

- SDG1 No Poverty
- SDG2 Zero Hunger
- SDG4 Quality Education
- SDG5 Gender Equality
- SDG6 Clean Water and Sanitation
- SDG7 Affordable and Clean Energy
- SDG8 Decent Work and Economic Growth
- SDG11 Sustainable Cities and Communities
- SDG13 Climate Action
- SDG14 Life Below Water
- SDG15 Life on Land
- SDG16 Peace, Justice and Strong Institutions

## International (Global Network, New University Partnerships, International Forum, Multi-party Collaboration)

### GLOBAL NETWORK

New university international association affiliations

- (2) Times Higher Education (THE), International Association of Universities (IAU)

New strategic partners for international organizations

- (2) SEARCA and Asia-Europe Foundation (ASEF)

New relationships with governments / re-vitalizing government / bilateral relationships

- (7) Japan / China / South Africa / Hungary / Ireland / Bhutan / Nepal

- Engaging with private sector through executive education in Bangkok, with governments and ODA agencies in Africa, and through short courses with clients from developed countries.

### NEW UNIVERSITY PARTNERSHIPS

37 agreements with top-ranked universities around the world

17 MOUs and MOAs with top-ranked universities in China

2 (1+1) Masters double degree

- (2) = University of Iowa and University of Wollongong (Australia)

2 Erasmus+ Mobility agreements

- (2) = University of Minho (Portugal) and Vilnius Gediminas Technical University (Lithuania)

3 Additional Unified Program partners

- (3) = Beijing Institute of Technology (China), Kathmandu University (Nepal), Shanghai Ocean University (China)

### INTERNATIONAL FORUM

(Attended / President as Speaker): 7th ASEF Rectors' Conference for the 7th ASEM Education Ministers' Meeting, May 2019, Romania / AIT 100 Innovations & Entrepreneurs (Supported) / AIT 60th Anniversary Presidents Forum (Organized) - 16 university presidents from 12 countries attended as speakers, 4 university presidents attended as guests.

### MULTI-PARTY COLLABORATION

#### IMPACT RANKING

Multilateral / Bilateral Funding bids with: USA/UK/Canada/EU/EURAXESS: (USA) (1) USAID AHEAD project: USD 50-million project bid to support higher education in Afghanistan with American NGO partner FHI360 and 3 university partners; (2) World Bank, Washington, DC: Submission to the Joint Japan-World Bank Graduate Scholarship Program.

EU/Erasmus - Proposal (2018) for "Improving Access to Science and Technology Higher Education in Resource-Poor Institutions through an Open Platform for Technology-Enabled Active Learning Environment" - selected for funding in 2019. The total budget was Euros 999,000 shared by 8 partners from 3 Asian countries.

EURAXESS - European Research Day 2019 organized at AIT.

Japan - Submitted Concept Note to the Government of Japan in July 2019 for the project "Empowering New Generation Leaders in Marine Plastic Abatement" worth USD 3.5 million. The proposal is for scholarships, training programs, and other activities related to ocean plastic litter abatement.

AIT signed 47 agreements, Memorandums of Understanding (MoU), Memorandums of Agreement (MoA), and Letters of Agreement (LoA) with globally-ranked universities in Europe, the United Kingdom, the USA, Australia, and Asia as well as other strategic partners.

REGION	NAME OF UNIVERSITY / PARTNER	AGREEMENT TYPE	
Europe	Tallinn University of Technology, Estonia	MoU	
	Emlyon Business School, France	MoU and MoA (Dual Degree / Student Exchange)	
	Skema Business School, France	MoU / MoA (Student Exchange)	
	Bauhaus Universitat Weimar, Germany	Agreement for Academic Cooperation and Exchange	
	Vilnius Gediminas Technical University, Lithuania	MoU & Agreement (Student Exchange)	
	University of Twente, Netherlands	MoU (R&D and Student Exchange)	
	Eindhoven University of Technology, Netherlands	MoU	
	University of Minho, Portugal	Mobility for learners and staff	
	University Politehnica of Bucharest, Romania	MoU	
	KTH Royal Institute of Technology, Sweden	MoU	
United Kingdom	Brunel University London	MoU	
USA	University of Iowa	MoU /MoA (Dual Degree Masters Program)	
Australia	University of Newcastle	MoU	
	University of Wollongong	MoU	
Asia	Yunus Center, Dhaka, Bangladesh	MoU	
	Dhaka Power Distribution Company Limited, Bangladesh	MoU	
	Ministry of Public Administration, Bangladesh	LoA	
	Construction Development Corporation Ltd., Bhutan	MoU	
	Institute for Management Studies Ltd. and Royal Society for Protection of Nature, Bhutan	MoU	
	Indian Institute of Technology, Kanpur	MoU	
	O.P. Jindal Global University, India	MoU	
	Vishwakarma University, Pune, India	MoU	
	United Nations University, Institute for Advanced Study of Sustainability, Japan	MoU	
	Eight-Japan Engineering Consultants Inc., Japan	MoU and MoA	
	Tokyo Institute of Technology, Japan	MoA (Student Exchange)	
	Graduate School of Science and Technology, Tokyo University of Science, Japan	MoU (Academic Cooperation)	
	Universiti Teknologi Petronas, Malaysia	MoU	
	Multimedia University, Malaysia	MoU (R&D and B-M Program)	
	Yangon University of Economics, Myanmar	MoU	
	Myanmar Geosciences Society	MoU	
	United Network-Management and Business Center, Myanmar	MoA (SRA)	
	Kathmandu University, Nepal	MoA (Unified B-M Program)	
	LAARH Agro Industry Pvt. Ltd., Pakistan	MoA	
	University of Science and Technology, Republic of Korea	MoU / (Student Exchange and Internships)	
	Institute of Bankers of Sri Lanka, Sri Lanka	MoA	
	Chung Yuan Christian University, Taiwan	MoU and MoA (Student Exchange)	
	National Academy of Civil Service (ROC), Taiwan	MoU	
	Koc University, Turkey	MoU	
	Tra Vinh University, Vietnam	MoU and MoA (Professional Masters Program)	
	South Africa	University of Johannesburg	MoU

AIT signed 18 agreements (MoU and MoA) with top-ranked universities in China and other partners.

REGION	NAME OF UNIVERSITY / PARTNER	AGREEMENT TYPE
P.R. China	Beijing Institute of Technology	MoA (Unified Program)
	Beijing Normal University	Agreement of Academic Exchange
	Chinese Academy of Sciences, Research Center for Eco-Environmental Sciences	MoU
	Kunming University of Science and Technology	MoU
	Kunming University of Science and Technology	Agreement of Academic Exchange
	North China Electronic Power University	MoU
	Northwestern Polytechnical University	Agreement of Academic Exchange
	Shanghai Ocean University	MoA (Unified Program)
	Shanghai Ocean University	MoA
	Shanghai Ocean University	MoA (International Internship)
	Shanghai University	MoU
	Shenzhen Dorabot Inc.	MoU
	University of Chinese Academy of Science	MoU
	University of Science and Technology of China	MoU
	Wuhan University	MoU
	Xi'an Jiaotong University	Agreement of Academic Exchange
	Xidian University	MoU
	Zhejiang Institute of Freshwater Fisheries	MoA

### HIRED NEW AIT CENTER VIETNAM DIRECTOR TO BEGIN NEW STRATEGY AND POSITIONING FOR THIS CENTER

Dr. Dong Van Phung was appointed new Director of AIT Center in Vietnam (AITCV) with effect from 1 February 2020. A Vietnamese national, Dr. Dong was the Director of the Department of R&D Software Solutions for Smart Cities, Technology Group, where he oversaw projects invested by government ministries across many provinces and cities in Vietnam. He has held an academic position at Hanoi University. Dr. Dong received his

Ph.D. from the University of Technology Sydney in the area of Information Systems. He also holds a Masters of Science degree in Information System Design from the University of Central Lancashire (UK), a Master of Arts degree in Education Management from the National Institute of Education Management, Vietnam, and a Bachelor of Science degree from the University of Sciences, Vietnam. As AITCV Director, Dr. Dong will be responsible for promoting the AIT mission in Vietnam, positioning AITCV with respect to the Vietnamese higher education and professional training marketplace, and developing a mutually beneficial relationship with the main AIT campus in Thailand.

## Enterprises (Knowledge Management and Sharing, Strategic Planning, Offices / Centers Setup, Enterprise Engagement)

### ESTABLISHED AIT SHARE AND INTELLECTUAL PROPERTY SUPPORT OFFICE (IPSO)

Launched on 24 May 2019, AIT Share is an e-Learning platform aimed at educators, executives, students, or anyone interested in furthering their knowledge. The platform allows participants to acquire new knowledge, improve their skills, take certificate courses, and obtain professional masters-level degrees.

Launched in June 2019, the Intellectual Property Support Office (IPSO) was established to ensure that all AIT research work has received legal authority to become Intellectual Property (IP) for AIT as well as transferring this technology from lab scale to global production scale. In 60 years, AIT successfully registered 47 patents. In 2019 alone, 5 patents and 6 trademarks were registered.

### LAUNCHED SOM EXECUTIVE MASTER CLASS SERIES

Seven Executive Master Classes were conducted in SOM from October to December 2019. Topics and speakers included: How to make better business decisions, by Chris Lobello; Innovation in healthcare, by Susie A. Ruff; Digital transformation: The future of financial services, by Benjamin Quinla; Strategies for new products and markets (Blue Ocean Strategy), by Mitya New; Stepping up to the boardroom: How to communicate effectively at more senior levels, by Andrew Macintosh; Managing change to maximize strategy execution effectiveness, by Sam Hanna; and Digital growth strategies in China, by Jeff Towson.

### FORMED TASK FORCE ON ENTERPRISE ENGAGEMENT FOR EXECUTIVE EDUCATION PURPOSES

A Task Force on Enterprise Engagement was formed in the last quarter of 2019 as a dedicated team to manage and coordinate the activities of enterprises and units within AIT, including internships, job placement, research collaboration, executive education, possible donations, and other collaboration.

### OPENED SMART LEARNING LAB

On its 60th anniversary, AIT launched the Del Rosario Smart Learning Lab, a joint project of One Small Step Forward Foundation, AITAA Philippines Chapter, AITAA Headquarters, and AIT Solutions. Named after its donor, Mr. Jaime Del Rosario of AITAA Philippines Chapter and Chairman of One Small Step Forward Foundation, this Smart Learning Lab is a multipurpose convertible room that can be used for classrooms, training, meetings, and workshops and is open to all users in AIT. It includes valuable equipment for new learning experiences using smart learning technologies. It is also equipped with latest technologies supporting a full wifi-equipped and flexible workspace, multi-user video conferencing, and live pitch with a high quality sound system.

### OPENED BIM LAB

Computers and Structures, Inc. (CSI), the pioneering leader in software tools for structural and earthquake engineering, has funded the construction and operation of the BIM (Building Information Modelling) Lab under AIT Solutions. The objectives of the CSI BIM lab are: To advance the application of BIM in various aspects of building design, construction, management, and operation; To carry out research and development for platforms and BIM applications; To support the development of tools that will be integrated into the CSI software and platform; To provide training environment for professionals and industry interested in BIM applications; and To carry out projects and services related to BIM applications.

### ORGANIZED HULT-PRIZE AIT ON-CAMPUS FINALS

AIT successfully organized the Hult Prize On-Campus Finals in December 2019 thanks to the dedication of our student-led team who believed that AIT could partner with the Hult Prize Foundation in creating social impact through innovation. The Hult Prize is a prestigious global competition established in 2009 that enables the new generation to deliver social change through education and entrepreneurship. Each year, the Hult Prize team issues a bold challenge aligned with a large market opportunity inspiring students from over 121 countries to solve its greatest problems.

## Entrepreneurship (Knowledge Management and Sharing, Strategic Planning, Offices and Centers Setup, Enterprise Engagement)

### LAUNCHED AIT ENTREPRENEURSHIP CENTER

Launched on 27 September 2019, the AIT Entrepreneurship Center is designed as a space for innovation, creation, and incubation for nurturing and driving the entrepreneurial capabilities of AIT in collaboration with industry to support the socioeconomic development of Thailand and the region.

### ORGANIZED 100 INNOVATIONS X ENTREPRENEURS SYMPOSIUM AND EXHIBITION

The 100 Innovations x Entrepreneurs event was held on 27-28 September 2019 in Bangkok as Southeast Asia's first Research to Commercial (R2C) Conference, bringing together social and technological innovations and entrepreneurs from industry, academia, development partners, and civil society in one creative environment to build meaningful collaborations with social impacts.

### ORGANIZED B.E.S.T. CAMP

A two-day interactive camp held on 28-30 September 2019 in the AIT campus empowered selected students from AIT, HKUST, and NUS to be more creative and collaborative and to focus on innovations with societal impact. The participants formed into teams and pitched their innovative ideas before a panel of judges.

### ORGANIZED SUSTAINABILITY HACKATHON 2019

Co-organized by the Department of Development and Sustainability, SERD and AIT Entrepreneurship Center, the Sustainability Hackathon 2019 aimed to propose and design innovative solutions that could be useful for solving real-world problems toward achieving sustainable development as well as any or all SDGs. It was held on 16 November 2019 and attended by more than 80 students.

### ORGANIZED AND LAUNCHED EXPERT TALKS AND LAUNCHED THE DISTINGUISHED ENTREPRENEUR TALK SERIES

The Inaugural Talk of the Distinguished Entrepreneur Talk Series was given on 27 November 2019 by world-renowned entrepreneur and philanthropist Mr. Wang Shi, Founder of China Vanke, the largest real estate enterprise in China and the largest residential real estate developer in the world.

## Stakeholders (Human Resources, Campus, Finance, Connect with Alumni, Institution)

Underlying the stakeholders strategy is a heightened caring and customer service attitude towards students, faculty, staff, and all stakeholders. This is supported by all AIT service providers, including outsourced contractors, upholding a Can Do approach to service delivery.

### NEW LEADERSHIP TEAM CAME ON BOARD BETWEEN APRIL AND AUGUST

As part of the transformation of AIT, new appointments were made in key leadership positions at AIT during 2019. Vice President for Academic Affairs (VPAA) Prof. Deepak Sharma and Vice President for Knowledge Transfer (VPKT) Dr. Naveed Anwar were appointed in April 2019. Vice President for Administration (VPA) Mr. Russell Rein joined in May 2019, while the Dean of the School of Engineering and Technology, Prof. Dieter Trau, started in his new functions in July 2019, also as Director of the Entrepreneurship Center. The Dean of the School of Management, Dr. Roger Levermore, joined in August 2019, these two Deans joining the current Dean of the School of Environment, Resources, and Development, Prof. Rajendra Shrestha.

### REFORMING OPERATIONAL SYSTEMS AND PROCESSES

A key driver of the stakeholders strategy was to bring about the reform of operational systems and processes. To do so, the VPA worked with the Operations Directors to understand their business processes. Based on this, new workflows were created, existing gaps identified, and incremental steps taken to remodel these services following best practice and high professional standards.

## REVIEWING OPERATIONAL SERVICES FOR GREATER EFFICIENCY

Since the arrival of the VPA, there have been improvements in many of the ways AIT serves its customers, and the operations teams continue to take the initiative to bring about further changes at an increasing speed, recognizing that these systemic reforms will make AIT more efficient and effective in the coming months.

Some of the initiatives taken so far include the revamp of the onboarding process for both employees and students, streamlining contract renewals and appointments, compliance with the Thai Labour Protection Act, the review of the procurement processes by introducing flexibility within contracts to increase or decrease staff based on demand for the service, and making the cafeteria and snack bar the central hub of AIT.

## IMPROVED BUDGET PROCESSES, FORECASTING AND PERFORMANCE REPORTING

This year saw significant changes in the way the AIT financials were presented, responding to stakeholder requests to provide the rationale and assumptions behind the figures. In addition, the financials were amended to reflect total revenue for sponsored programs, including research, training, and consulting. The Budget process was automated with a particular focus on ways to generate future additional revenue. Given the budget challenges faced during 2019, everyone across AIT played their part in reducing or delaying expenses.

## MODERNIZING POLICIES AND PROCEDURES TO TRANSFORM AIT

An important element in the transformation of AIT is to review current policies and procedures to ensure that they are but flexible enough to support transformative initiatives and creativity. This remains an ongoing process, with practices and forms being revised to ensure they follow best practice that are highly efficient and effective.

## ORGANIZED SUCCESSFUL 60TH ANNIVERSARY EVENTS ALL YEAR AS HIGHLIGHTED BY OCTOBER CELEBRATIONS

AIT celebrated its 60th Anniversary in 2019, and organized a number of activities throughout the year, culminating in very successful multi-event celebrations between 23 and 25 October 2019. These included a Thai-style gala dinner attended by over 700 participants, the main 60th anniversary ceremony, presided over by HRH Princess Maha Chakri Sirindhorn, the Presidents Forum in which 16 University Presidents and Vice Chancellors participated, and the AIT Alumni Open House. AIT was generously supported through sponsorship of the VIP luncheon and free coffee.

## ORGANIZED FIRST-EVER AIT SENIOR LEADERSHIP RETREAT FOR FACULTY AND STAFF IN NOVEMBER

The first all-Institute leadership retreat in some time was held in November 2019, with 39 faculty, staff, and senior leadership coming together to explore a number of issues, all under the main topic of Social Impact with Innovation. It was a productive retreat, where issues such as academic reform, student satisfaction, financial challenges, operational processes, and out-of-the-box thinking on finances and partnerships were deliberated.

It is worth mentioning that a welcome outcome of the retreat was getting to know people across AIT better, helping to break down the “silos” that exist in institutions.

## CENTRALIZED RECRUITING AND MARKETING AND PROMOTION ACTIVITIES LAUNCHED DECEMBER 2019

In recognition of the fact that AIT generates most of its revenue through tuition and fees, student recruitment activities are being supported by a more focused marketing and promotion approach. With this centralized approach, recruiting and marketing will be more effectively delivered as well as much more deliberate in targeting applicants and countries to expand AIT’s recruiting efforts.

AIT further aimed to cultivate alumni relations more broadly and deeply to include lifelong learning opportunities, among other aims. To this end, the AIT Graduates Club was launched.

An additional stakeholders strategy includes the AIT International School (AITIS), which remains integral to the recruitment of both employees and students. Enrolment at AITIS continues to grow, with parents being very supportive of the school and indicating their desire to keep their children enrolled in AITIS beyond Grade 6. Challenges to doing so are being addressed by the AIT leadership.

## Support (Fundraising)

The Office of Advancement and Alumni Affairs (OAAA) continues to initiate new partnerships with industry and the private sector in order to provide the Institute with more opportunities for student internships, tuition scholarships, and other forms of partnerships with both local and multinational companies in Thailand and overseas. The aim is also to secure fully-funded scholarships at Masters and PhD levels from donor agencies that provide human resource development capacity-building to universities through the respective Ministries in the Government. The OAAA also serves as the focal point for individual alumni, the AIT Alumni Association (AITAA), and national chapters to provide support to alumni and to develop collaboration and partnership for mutual benefit with focus on fundraising.

Internationalization is one of the key strategic priorities of AIT’s Roadmap, and the Institute is working toward providing Masters students with broader global opportunities such as through the Student Exchange Scholarship Program for their further development in order to become responsible citizens of the world. This scholarship is for students exchanging one semester at top universities around the world with whom AIT has partnership agreements and meet half the total airfare, board, and lodging expenses of the student.

During the AIT’s 60th Anniversary Fundraising Campaign, the soft launch of the campaign took place in January 2019 based on the three critical needs of the Institute and its corresponding priorities for fundraising. A total amount of Thai Baht 67,029,941 was successfully raised in 2019. Below is the breakdown of the funds raised.

## Industrial Scholarships

	DONORS	AMOUNT IN THAI BAHT	USE
1	Bangchak Petroleum PCL	4,597,936	(EEM, FEBT, Energy, SERD) Tuition Scholarship for Masters students
2	INDEX International Group Co. Ltd.	3,000,000	(SERD, SET, SOM) 3 Bonded Scholarship for Thai Masters students
3	Siam Cement Group	4,293,992	((SERD, SET, SOM) 2 Masters for Siam Cement employees only
4	Thai Pipe Industry Co. Ltd.	4,240,000	(SERD & SET) Tuition & Registration scholarship for Masters students
5	SEC'88 Fellowship	384,000	(STE, SET) 2 Masters students for 12 credit tuition scholarship
6	Computer & Structures, Inc.	512,000	(STE, SET) Masters students for tuition scholarship
7	Wisit Engineering Consultants, Inc.	712,000	(SET) 1 Masters student for tuition scholarship
8	AITAA Sri Lanka Chapter	192,000	(SERD, SET, SOM) - 12 credit tuition scholarship for Sri Lankan Masters students
9	AITAA Bangladesh Chapter (USD 5,600) *29.85	167,160	(SERD, SET, SOM) - Tuition scholarship for Bangladeshi Masters students
10	Government of Nepal (USD 60,000) *30	1,800,000	(SERD, SET, SOM) Nepali Masters students
11	Dr. Varaporn Jaovisidha	1,200,000	(SERD, SET, SOM) - 1 full scholarship Masters students of Thai nationality
12	AITAA Vietnam Chapter	143,000	(SERD, SET, SOM) Tuition scholarship for Vietnamese Masters students
13	Mr. Bun Wong	30,000	STE, SET (SEC'88 scholarship)
14	Thai Samsung Electronics Co. Ltd.	100,000	(SERD, SET, SOM) Tuition & registration scholarship for Masters student of any nationality
		<b>21,372,088</b>	

## ARIRANG Endowment Fund

	DONORS	AMOUNT IN THAI BAHT	USE
1	AITAA Korea Chapter (KRW 2,100,00)	53,443	North Korean Doctoral, Masters, or short training course students - ARIRANG SCHOLARSHIP FUND
		<b>53,443</b>	

## Updating of Laboratory Equipment

	DONORS	AMOUNT IN THAI BAHT	USE
1	Sheila Jay Demafeliz Wee Eng (GTE'86) (USD 5,000)	152,661	Purchasing GTE Laboratory equipment
2	Mr. Shih-Yi George Chen	99,900	Purchasing GTE Laboratory equipment
3	Mr. Chawalit Tanomtin	300,000	Purchasing GTE Laboratory equipment
4	Dr. Thumanoon Susumpow (USD 1,000)	28,776	Purchasing STE Laboratory equipment
5	Dr. Punchet Thammarak	125,000	Purchasing STE Laboratory equipment
6	Mr. Tsai, Yau-Tang (WRE'72)	5,000	Purchasing WEM Laboratory equipment
7	Nyan Khine Soe, Yin Lai Yee Oo & Alex Phone Myat Nyan Khine Family	75,000	Purchasing EEM Laboratory equipment
8	Dr. Kriengkrai Satapornvanit and Dr. Arlene Nietes Satapornvanit	25,000	Purchasing AARM Laboratory equipment
9	Ainzali Kyaw Soe	30,000	Purchasing RRDP Laboratory equipment
		<b>841,337</b>	

## Student Village

	DONORS	AMOUNT IN THAI BAHT	USE
1	Dr. Tongchat Hongladaromp and AIT alumni @ KMUTT	504,969	Refurbishing Student Village 1 - SV1
2	DR. YANYONG and MRS. GANTASIRI PHATARALAOHA (IE&M '86 and ENV '84)	500,000	Refurbishing Student Village 1 - SV2
3	Na Lamphun Family	500,000	Refurbishing Student Village 1 - SV3
4	Mr. Shih-Yi George Chen	499,900	Refurbishing Student Village 1 - SV4
5	AITAA Hong Kong & Macau Chapter	500,000	Refurbishing Student Village 2 - SV 36
		<b>2,504,869</b>	

## 65" LCD monitor and improvement of Korea House

	DONOR	AMOUNT IN THAI BAHT	USE
1	Dr. Tong Ki Woo (USD 5,000) *30	150,000	Purchasing 65" LCD monitor and improvements of Korea House
		<b>150,000</b>	

## LED E-Boards

	DONOR	AMOUNT IN THAI BAHT	USE
1	Dr. Eden Y. Woon	500,000	Partial sponsorship towards the purchase of two new AIT LED E-Boards at Clocktower
		<b>500,000</b>	

## Standard Dormitory

	DONORS	AMOUNT IN THAI BAHT	USE
1	Eastern Star Real Estate PCL	200,000	Refurbishing Dorm F27
2	Mr. Pira Laahasomboon	200,000	Refurbishing Dorm F28
		<b>400,000</b>	

## SMART Classroom

	DONORS	AMOUNT IN THAI BAHT	USE
1	Mr. Jaime & Mrs. Elise del Rosario (USD 59,985 + USD 40,410)	3,099,204.35	Construction of SMART Classroom.
		<b>3,099,204.35</b>	

## Entrepreneurship Center

	DONORS	AMOUNT IN THAI BAHT	USE
1	Ms. Arunporn Limskul	200,000	To support the Entrepreneurship Center activities.
2	Prof. Dieter Trau	20,000	To purchase 20-25 entrepreneurial & products design books for mini-library
		<b>220,000</b>	

## Refurbishments

	DONORS	AMOUNT IN THAI BAHT	USE
1	Randula Hettiarachchi & Dilesha Herath, ISE for 1 chair	5,000	Purchasing library materials
2	Dr. Supaporn Tantanasiwong (IM'17) for 1 chair	5,000	Purchasing library materials
3	Mr. Opas Ovasith (IME'10) for 1 chair	5,000	Purchasing library materials
4	Mr. Susanto Halim (SEM'73) for 7 chairs	35,000	Purchasing library materials
5	Mr. Chen Ren Chung (GTE'72) for 8 chairs	40,000	Purchasing library materials
6	Mr. Tsai, Yau-Tang (WRE'72) for 1 chair	5,000	Purchasing library materials
7	AITAA Bhutan Chapter (USD 1,000) *30 for 6 chairs	30,000	Purchasing library materials
8	Michael and Queenie Chan (USD 500) *30 for 3 chairs	15,000	Purchasing library materials
9	Ms. Areewan Haorangsi for 4 chairs	20,000	Purchasing library materials
10	Mr. Tan Tong Choon for 1 chair	5,000	Purchasing library materials
11	Dr. Supaporn Tantanasiwong (IM'17) for 1 chair	5,000	Refurbishment of RBB auditorium
12	AITAA ROC Chapter for 40 chairs	200,000	Refurbishment of RBB auditorium
		<b>370,000</b>	

## AIT Belt & Road Research Center

	DONORS	AMOUNT IN THAI BAHT	USE
1	AITAA China Chapter CONTRIBUTIONS RECEIVED FROM CANADA, GERMANY, & USA as part of total amount of 10 million baht: Chinese alumni in Toronto, Canada  Weiyi Lu (TC'94) Hongjian Peng (AFE'92) Xiaoyun Wu; Jie Lian (CS'97) Chengqian Zhang (INRDM'89); Zhangjun Du (IREM'93); Huiqing Shen (SOM'96); Jiande Feng (INRDM'94); Hang Jiang (INRDM'93); Gongying Chen (EE'95); Lin Wang Wei Bin Wu  Ling Liu-Weikl, Frankfurt, Germany; Hailin Jiang  Heng Zhou, Washington, USA	10,000,000	To support 3 Conferences, 5 Masters Fellowship, 5 Post-Doctoral Fellowships, other programs such as short-term trainings, exchange programs, and research cooperatives when funds allow
		<b>10,000,000</b>	

## Innovation, Entrepreneurship and Knowledge Transfer

	DONOR	AMOUNT IN THAI BAHT	USE
1	Computer & Structures, Inc. (USD 650,000*30)	19,500,000	100X Event, Entrepreneurship, and Enterprise & Alumni Engagement
		<b>19,500,000</b>	

## Fiber Glass Boat + Outboard motor equipment

	DONOR	AMOUNT IN THAI BAHT	USE
1	Mr. Russell Bruce Rein	19,000	To purchase Fiber glass boat + outboard motor equipment for OFAM
		<b>19,000</b>	

## Student Exchange Scholarship Program – to support half of the total expenses for airfare, board & lodging

	DONORS	AMOUNT IN THAI BAHT	USE
1	Mr. Edmond Yue	1,000,000	Masters student from Heilongjiang province exchanging to top universities around the world with which AIT has agreements
2	Dr. Subin Pinkayan	1,000,000	Masters student of any nationality exchanging to top universities around the world with which AIT has agreements
3	Lawsgroup Charity	1,000,000	Masters student from Belt & Road country exchanging to universities in China
4	Ningbo Ricky Brand Management Co. Ltd.	500,000	Masters student from Bangladesh exchanging to top universities around the world with which AIT has agreements
5	AITAA ROC Chapter	1,000,000	Masters student of any nationality exchanging to Chung Yuan Christian University (CYCU); AIT Masters student with Taiwanese nationality exchanging to any universities in the world which AIT has agreement; AIT Masters student of any nationality exchanging to any university in Taiwan
6	Thai Pipe Industry Co. Ltd.	500,000	AIT Masters students with Thai nationality employed in one of these 6 institutions: Provincial Waterworks Authority; Metropolitan Waterworks Authority; Royal Irrigation Department; Department of Water Resources; National Housing Authority; Industrial Estate Authority of Thailand exchanging to any universities in the world with which AIT has agreements
7	Raful Ahad and Frances Kasala Ahad	1,000,000	Financially needy AIT Masters students of any nationality or stateless with priority for SET students from Bangladesh, Myanmar, Thailand, Cambodia, Laos, and the Philippines exchanging to any universities with which AIT has agreements
8	AIT Chinese Alumni in Thailand	1,000,000	Chinese Masters students (holders of People's Republic of China passport) exchanging with recognized universities, colleges, or institutes worldwide with which AIT has agreements except those in mainland China. In addition, the donation may be used for other purposes (e.g. supporting one or two students from Belt & Road countries for round-trip air ticket when exchanging with any recognized university in mainland China with which AIT has agreements) on a case-by-case basis subject to approval by the donor
9	AITAA Thailand Chapter	1,000,000	For Thai students exchanging to any universities with which AIT has agreements
		<b>8,000,000</b>	



## AWARDS AND RECOGNITIONS

### FACULTY

#### SERD Faculty Achievements:

- Dr. Shobhakar Dhakal of the Department of Energy, Environment and Climate (EECC), was promoted to the rank of Professor. His elevation was confirmed at the meeting of the AIT Board of Trustees held on 31 January 2019.
- Dr. Loc Thai Nguyen of the Department of Food, Agriculture, and Bioresources was promoted to the rank of Associate Professor. His elevation was announced by President in January 2019.
- New book edited by AIT faculty member Dr. John K. M. Kuwornu titled "Climate Change and Sub-Saharan Africa: The Vulnerability and Adaptation of Food Supply Chain Actors" was released in January 2019.
- On May 2019, Dr. Ram C. Bhujel, Director of the AquaCenter and Research Associate Professor in the academic program in Aquaculture and Aquatic Resource Management was selected as a member of Technical Advisory Committee, Aquaculture group. Dr. Ram is one of two aquaculture professionals from Asia among 13 advisors serving the Seafood Watch program of the Monterey Bay Aquarium headquartered in California.
- A book titled "Regenerative Sanitation: A New Paradigm for Sanitation 4.0" was published by International Water Association Publications in June 2019. This book was authored by Prof. Thammarat Koottatep, Dr. Peter Emmanuel Cookey, and Prof. Chongrak Polprasert.
- A book titled "An Interdisciplinary Approach for Disaster Resilience and Sustainability" co-edited by Dr. Indrajit Pal and Dr. Sangam Shrestha was released by President Dr. Eden Y. Woon on 28 October 2019.
- Dr. Krishna R. Salin, Associate Professor in the academic program in Aquaculture and Aquatic Resources Management in the Department of Food, Agriculture, and Bioresources in SERD was elected Director of the World Aquaculture Society-Asia Pacific Chapter (WAS-APC) on June 2019. The World Aquaculture Society ([www.was.org](http://www.was.org)) is the world's largest professional organization in aquaculture and is headquartered in the USA.

- Dr. Wenchao Xue, Assistant Professor in the academic program in Environmental Engineering and Management has been appointed first Director of the Belt & Road Research Centre in AIT and was inaugurated in November 2019.
- The Naturally Acceptable and Technological Sustainable (NATS) lab in Environmental Engineering and Management was awarded a Certificate of Excellence by Waters ERA for achieving 100% acceptable data in their proficiency testing. Over 1,000 laboratories participated in this testing process. The NATS project operates under Prof. Thammarat.
- The 2019 Mary Fran Myers Gender and Disaster Award was awarded to Dr. Bernadette Resurrección, former faculty member in the Gender and Development Studies academic program and currently Distinguished Adjunct Faculty at AIT.
- Prof. Weerakorn Ongsakul of the Energy Academic Program received the IEEE PES Outstanding Engineering Award 2019 on 21 November 2019 at the Centara Grand Hotel, Central Plaza, Bangkok.
- Dr. Nophea Sasaki, Associate Professor and Dr. Manjunatha Venkatappa, both in Natural Resources Management at SERD, won the Next Step Award from Google at the Geo for Good Summit at the Google Cloud office in San Francisco on 19 September 2019. The award was for their Krump technology, a science-based approach to detecting deforestation and forest degradation in the tropics.
- Dr. P. Abdul Salam (Energy/EECC) received a Distinguished Research Award 2019 in the Research Leader (Senior) category. These awards are based on the evaluation of faculty members' sponsored activities and publications during the year 2018.

#### SET Faculty Achievements:

- Dr. Bonaventura H. W. Hadikusumo has been promoted to the rank of Professor. This follows approval by the Board of Trustees at its meeting held on 31 January 2019. Dr. Hadikusumo joined AIT as an Assistant Professor in the School of Engineering and Technology (SET) in July 2002 and was promoted to the rank of Associate Professor in April 2009.

- Prof. Mukand S. Babel was the recipient of the AIT Distinguished Teaching Award 2019 in the category of 15 or less students. Teaching awards are based on student evaluations and feedback on courses taught in 2018. Prof. Babel was also the recipient of the AIT Distinguished Research Leader Award 2016. The Scopus database shows that Prof. Babel has an h-index of 25 with 129 publications and 2,147 citations.
- Dr. Sangam Shrestha was the recipient of the AIT Distinguished Research Leader Award 2019. These researcher awards are based on evaluations of faculty members' sponsored activities and publications during the year 2018. Dr. Sangam was also the recipient of the AIT Distinguished Research Leader Award 2015. The Scopus database shows that Dr. Sangam has an h-index of 18 with 88 publications and 1,609 citations.
- Prof. Manukid Parnichkun was the recipient of the AIT Distinguished Teaching Award 2019 in the category of 15 or more students.
- Dr. Teerapat Sanguankotchakorn was recently appointed member of the Board of Directors of Banpu Public Company Limited (April 2019 to 2022) at its Annual General Meeting, which took place in April 2019.

## STUDENTS

### SERD Student Achievements:

- A team of three students from the academic program in Natural Resources and Management won the 2019 International Day of Forests (2019 IDF) organized by the Food and Agriculture Organization of the United Nations on 21 March 2019.
- In August 2019, three students from the Department of Development and Sustainability (DDS), School of Environment, Resources, and Development (SERD) attended the summer program at Tongji University, Shanghai, China, with the theme of sustainable urban and rural development.
- The research poster prepared by doctoral student Ms. Arlene Lu Gonzales from the Climate Change and Sustainable Development academic program was chosen to be displayed at the Chulachomklao Royal Military Academy Exhibition,

which took place on 19-20 November 2019 on its campus in Nakhon Nayok Province.

- Ms. Wipatsaya Srimanoi from the Environmental Engineering and Management program was invited to be a speaker at the 6th Mekong Forum on Youth Perspectives, Pullman Bangkok King Power, on 8 July. She was also selected to participate in the Young Southeast Asian Leader Initiative (YSEALI) program in the field of Environmental Issues and Natural Resource Management at the University of Montana for 5 weeks (August-September 2019).
- Mr. Moaz Altaf was awarded a full scholarship to attend the Social Youth Exchange program with selected students from AIT and 3 different Korean universities in August 2019, and the Association of Top Achievers' Scouts of the World Award was conferred on him at the Embassy of Indonesia in January 2019.
- Ms. Raquel Santiago-Arenas, doctoral student from the Department of Food, Agriculture, and Bioresources, was selected for the 2019 SEARCA (Southeast Asian Regional Center for Graduate Study and Research in Agriculture) PhD Research Scholarship. The award is available to graduate students in Agriculture and related sciences (including biological sciences, fishery, environmental science, statistics, forestry, and social sciences). The topic of the applicant's PhD research must be aligned with SEARCA's thrusts of Inclusive and Sustainable Agricultural and Rural Development (ISARD) towards food security and poverty alleviation in Southeast Asia.

### SET Student Achievements:

- Professor Bonaventura H. W. Hadikusumo published a book titled "Construction Health and Safety in Developing Countries." Three of his students contributed the following chapters in this book: Chapter 4: A Narrative Review of Occupational Safety and Health Legislation in Pakistan, by Abdul Qayoom and Bonaventura H. W. Hadikusumo; Chapter 5: Safety Law, Systems, and Regulations Influencing Construction Sector in India, by Duddukuru Sri Datta and Bonaventura H. W. Hadikusumo; Chapter 16: Safety Behavior and Culture Matter in the Malaysian Construction Industry, by Mazlina Zaira Mohammad and Bonaventura H. W. Hadikusumo.

- A research poster prepared by Master Student Mr. Ranadheer Reddy Mandadi from the Remote Sensing and Geographic Information Systems Academic Program in the ICT Department was selected to be displayed at the annual Chulachomklao Royal Military Academy Exhibition, which took place from 19-20 November 2019 in Nakhon Nayok.
- Mr. Gautam Dadhich, doctoral student from the Remote Sensing and Geographic Information Systems Program won 3rd place for the Best Poster Award during the exhibition of research posters held alongside AIT's Career Fair on 27 March 2019, showcasing a total of 31 research posters.
- Mr. Gautam Dadhich, doctoral student in the ICT Department's Remote Sensing and GIS Program, together with his advisor Dr. Hiroyuki Miyazaki were selected as finalists on 25 July 2019 in S-Booster, a space-based business idea contest organized by the Cabinet Office, Government of Japan. Their winning proposal was titled "BlueWatch: Spatial Aquaculture Advisory System for Smart Aquaculture Farms," in which satellite earth observation and positioning technologies can help aquaculture farms deal with risk management by issuing early alerts.
- Two students from SET, Mr. Anuj Pradhananga, Masters student from Structural Engineering, and
- Mr. Nilan Sachintha Jayasiri, Masters student from Geotechnical and Earth Resources Engineering, had the opportunity to attend the Ochanomizu Summer Program 2019 in Ochanomizu University, Bunkyo City, Tokyo from 27 July-9 August 2019.
- Five students from SET were selected to attend the International Summer School on "Geo-informatics Serves the Belt & Road" from 18-24 August 2019 organized by the School of Geoscience and Info-Physics of the Central South University of China. Participants students were the following:
  - Mr. Ranadheer Mandadi: Masters student, Remote Sensing and GIS
  - Ms. Afsana Shahid: Doctoral student, Remote Sensing and GIS
  - Mr. Gautam Dadhich: Doctoral student, Remote Sensing and GIS

- Mr. Nattapon Trumikaborworn: Doctoral student, Disaster Preparedness, Mitigation, and Management
- Mr. Hasan Reaz Kallol: Doctoral student, Disaster Preparedness, Mitigation, and Management.

■ Mr. Saikiran Gaddamedi

- First prize by voting criteria in the “most popular sustainability idea” in the Sustainability hackathon held in November 2019
- Runner-up in the Hult prize on-campus competition in December 2019 with the startup idea called “Nano Breeze” and selected for the regional summits representing AIT to be held in April 2020
- Finalist in the 100x Research Poster Presentation Competition at the 100 Innovations x Entrepreneurs (100x) in the September 2019 Asia First Research to Commercial (R2C) Conference. This was one of the top 16 teams innovating in the Climate Change and Sustainability space in the Bangkok region.

■ Ms. Christine Adelle Rico Yuson

- Among the top 45 selected participants from 38 countries and recipient of a full ICTP scholarship for the Women in Physics Program of the ICTP’s International Centre for Theoretical Physics, Trieste, Italy organized on October 26-November 2, 2019.

■ Mr. Sai Aditya

- Recipient of the Social Venture Youth Exchange Fellow award in August 2019
- Finalist in the 100x Pitch Competition in the 100 Innovations x Entrepreneurs (100x), Southeast Asia’s first Research to Commercial (R2C) Conference organized in Bangkok in September 2019
- Appointed Campus Director for the Hult Prize, the world’s largest student movement for social impact at AIT since September 2019
- Appointed Regional Summit Director for the Hult Prize Bangkok Regional Summit.

## ALUMNI

### SERD Alumni Achievements:

1. Ms. May Sabe Phyu was one of the winners of the 2019 N-Peace Award in the Untold Story category. The Untold Stories category recognizes the work of women with demonstrated skills in conflict resolution, prevention, and peacebuilding in their local communities. She graduated in January 2011 from the Gender and Development Studies academic program in the School of Environment, Resources, and Development.
2. Dr. An Pich Hatda, SERD alumnus, was appointed Chief Executive Officer (CEO) of the Mekong River Commission (MRC). He assumed office on January 18, 2019. Dr. Hatda earned a Masters in Agricultural Systems from AIT in 1997, after which he completed a doctorate in Development Studies at the University of Tokyo.
3. Doctoral student Dr. Jedsadaporn Sathapatyanon, from the Agribusiness Management program, was awarded the Highly Commended Paper Literati Award 2019 from Emerald Publishing. The award ceremony was held in SERD Dean’s office Meeting Room S101 on 4 June 2019.
4. Abdul Aziz Mohibbi, alumnus from the academic program in Natural Resources and Management, was appointed chancellor of Bamyán University by the Ministry of Higher Education of Afghanistan in August 2019.
5. Md. Rafi Hayat, a Masters graduate from Urban Environmental Management (UEM, 2018), was appointed Mayor of Kandahar, Afghanistan.
6. SERD alumna Fathimath Yumna (Masters in Gender and Development Studies, 2004) was appointed Deputy Minister of Gender, Family, and Social Services, Republic of Maldives. She previously served as a consultant to the collaborative project between the South Asian Association for Regional Cooperation (SAARC) and UNWOMEN and also as Director General in the Department of Gender and Family Protection Services in the Maldives’ Ministry of Health and Family.
7. Mr. Chira Wongburana, SERD alumnus, was appointed Director General

of the Wastewater Management Authority of Thailand. He graduated with a Masters in Environmental Engineering and Management (EEM) from the School of Environment, Resources, and Development (SERD) in 2007.

8. Dr. Phan Thi Van, who received a Danida scholarship (MSc at AIT in Aquaculture, 1998), was awarded the Danida Alumni Prize 2019. She was the first woman to be awarded this prize. The motivation for awarding Dr. Phan Thi Van the Danida Alumni Prize was her ambition, drive, and tireless promotion of scientific research in the sustainable development of aquaculture, not only nationally but also internationally.
9. Dr. Sanaullah Panezai, an RRDP Alumnus, launched a new research journal in December 2019. The title of the journal is Journal of Geography and Social Sciences (JGSS), serving as Editor-in-Chief of the journal. This newly-launched journal is an open access, peer-reviewed, multi-disciplinary journal offering rapid publication of substantive and integrative research articles in all areas of geography and the social sciences. JGSS has an International Editorial Board and uses an online submission system for receiving articles.

### SET Alumni Achievements:

1. Ms. Dulani Chamika Withanage, alumna of the Mechatronics Program in ISE/SET, is a key person associated with the development of Sri Lanka’s first satellite known as Raavana 1. Weighing 1.1 kilograms, the cube-sized satellite was launched into space from the mid-Atlantic space station in Virginia on 18 April 2019.
2. Dr. Bui Trung Thanh, alumnus of the Mechatronics Program (2003- 2005) in ISE/SET, has been appointed President of Hung Yen University of Technology and Education, Vietnam. His term will last from 2019-2024.
3. Mr. Abdul Tawab Bala Karzai, alumnus of Water Engineering and Management (2008-2010) in CIE, was appointed Acting Minister of Higher Education in Afghanistan in May 2019.

FACTS AND FIGURES

## Students at a Glance

The academic performance in terms of education performance, research performance, and technology and knowledge transfer is given below using some key indicators.

### A. STUDENT INTAKE

In 2019, of a total of 1,515 applications, 563 new students joined AIT.

In the January 2019 semester (including the March 2019 term), 95 new students enrolled from 17 different countries from five different regions, namely Southeast Asia and the Pacific, South and West Asia, East and Central Asia, Europe, and Africa. Of these, 37% enrolled in the School of Engineering and Technology (SET), 41% in the School of Environment, Resources, and Development (SERD), 18% in the School of Management (SOM), and 4% in Interdisciplinary programs. Approximately 37% of students were women. In this intake, 6% of the students were given scholarships (full subsidy on tuition fees), 29% were funded by external donors (sought by the students themselves, e.g. student's employer), 41% were given AIT fellowships (partial tuition subsidy), and 23% were self-supporting.

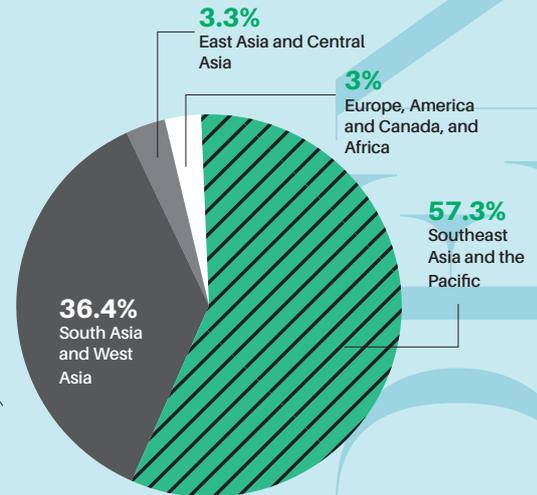
In the August 2019 semester (including the June and October 2019 terms), 468 new students were enrolled from 31 countries from all continents: 61% from Southeast Asia and the Pacific, 31% from South and West Asia, 4% from East and Central Asia, 3% from Europe, and 1% from Africa. Around 49% of these were enrolled in SET, 28% in SERD, 21% in SOM, and 2% in interdisciplinary programs. Approximately 46% of these students were women. In this intake, 42% of students were given scholarships, 12% were funded by external donors, 38% received AIT fellowships, and 8% were self-supporting.

### B. STUDENT ENROLLMENT

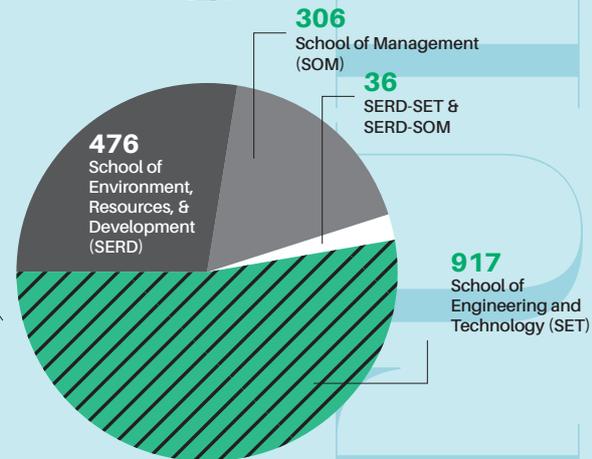
Average enrollment (new and continuing students) for the January and August semesters in 2019 was 1,735 from 49 countries. Of these, 68% were enrolled in Masters programs, 25% in Doctoral programs, 1.5% in Bachelor's programs, and the rest in other programs, with 53% enrolled in SET, 27% in SERD, 18% in SOM, and the rest in interdisciplinary programs. The average male-female distribution was around 62-38%.

1,735 total enrollment from 49 countries.

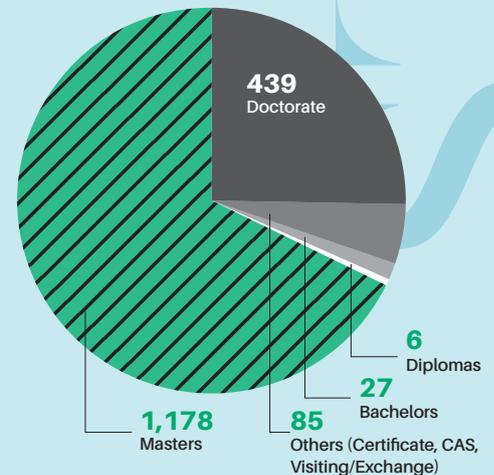
Total enrolment by REGION



Total enrolment by SCHOOL



Total enrolment by DEGREE



## C. STUDENT GRADUATION

During 2019, based on the Academic Senate's recommendation, a total of 675 students were conferred degrees ranging from doctoral, masters, professional masters, diploma, and bachelors (408 students on 17 May 2019, 49 students on 24 July 2019, and 218 students on 13 December 2019). Of these, 83% obtained masters or professional masters degrees, 9% doctoral degrees, 2% Diploma and 6% bachelor's degrees. The table on the right gives the total number of graduates from all degree programs in 2019 according to departments and schools.

School	Department	2019	Doctoral	Masters	Diplomas	Bachelors
SET	ICT	91	9	69	2	11
	ISE	77	2	51	1	23
	CIE	209	4	191	5	9
<b>SET Total</b>		<b>377</b>	<b>15</b>	<b>311</b>	<b>8</b>	<b>43</b>
SERD	FAB	45	12	32	1	-
	EECC	71	3	66	2	-
	DS	43	15	28	-	-
<b>SERD Total</b>		<b>159</b>	<b>30</b>	<b>126</b>	<b>3</b>	<b>-</b>
SOM		123	17	106	-	-
SERD-SET		16	1	15	-	-
<b>AIT total</b>		<b>675</b>	<b>63</b>	<b>558</b>	<b>11</b>	<b>43</b>

The following recipients were selected for graduation prizes given at the 131st graduation ceremony:

### School of Engineering and Technology

#### DEPARTMENT OF INFORMATION AND COMMUNICATIONS TECHNOLOGIES (ICT)

##### THE HISAMATSU PRIZE FOR COMPUTER SCIENCE

■ **Mr. Chaichan Poonperm**  
cGPA: 3.89

Thesis: Understanding the Natural Language: A Case Study of the Academic Interview Domain  
Grade: Excellent  
Advisor: Prof. Phan Minh Dung

##### THE AOYAGI PRIZE FOR INFORMATION AND COMMUNICATIONS TECHNOLOGIES

■ **Ms. Melina Tuladhar**  
cGPA: 3.77

Thesis: Integration of Internet of Things and Sustainable Vertical Farming Aquaponic Systems  
Grade: Excellent  
Advisor: Prof. Matthew N. Dailey

##### THE A B SHARMA MEMORIAL PRIZE FOR THE STUDENT WITH THE BEST THESIS IN THE AREA OF TELECOMMUNICATIONS FROM TC AND ICT FIELDS OF STUDY.

■ **Mr. Poonyavee Tabyam**  
cGPA: 3.83

Thesis: Deep Learning-Based Modulation Recognition in Wireless Channel  
Grade: Excellent  
Advisor: Dr. Attaphongse Taparugssanagorn

##### THE JOHN A HRONES PRIZE FOR REMOTE SENSING & GEOGRAPHIC INFORMATION SYSTEMS

■ **Mr. Sumesh K.C.**  
cGPA: 4.00

Thesis: Sugarcane Yield Estimation from Unmanned Aerial System (UAS) Using Crop Surface Model (CSM) and Object-Based Image Analysis (OBIA) Approach  
Grade: Excellent  
Advisor: Dr. Sarawut Ninsawat

##### THE WIRELESS PERSONAL MULTIMEDIA COMMUNICATIONS PRIZE FOR TELECOMMUNICATIONS

■ **Mr. Poonyavee Tabyam**  
cGPA: 3.83

Thesis: Deep Learning-Based Modulation Recognition in Wireless Channel  
Grade: Excellent  
Advisor: Dr. Attaphongse Taparugssanagorn

#### DEPARTMENT OF INDUSTRIAL SYSTEMS ENGINEERING (ISE)

##### THE TIM KENDALL MEMORIAL PRIZE FOR INDUSTRIAL AND MANUFACTURING ENGINEERING

■ **Mr. Sakkarin Ngiuwichit**  
cGPA: 3.89

Thesis: Job Shop Rescheduling Under Rush Order Arrivals  
Grade: Excellent  
Advisor: Dr. Huynh Trung Luong

##### THE HISAMATSU PRIZE FOR MECHATRONICS

■ **Mr. Ratnayake Mudiyansele Dhanika Thimal Ratnayake**  
cGPA: 3.94

Thesis: Development and Control of a Mobile Double Inverted Pendulum  
Grade: Excellent  
Advisor: Prof. Manukid Parnichkun

##### THE INFINEON PRIZE FOR MICROELECTRONICS AND EMBEDDED SYSTEMS

■ **Mr. Natthasit Wongsirikul**  
cGPA: 3.83

Thesis: Convolutional Neural Network-Based Object Detection Model Compression for Efficient Inference on Embedded Systems  
Grade: Excellent  
Advisor: Dr. Mongkol Ekpanyapong



#### THE JAMES A. LINEN III MEMORIAL PRIZE FOR NANOTECHNOLOGY

##### ■ [1] Ms. Meiling Li

cGPA: 3.94

Thesis: Preparation and Characterization of Polyacrylic/Silica Nanocomposite by Soap-Free Emulsion Polymerization Method

Grade: Excellent

Advisors: Dr. Tanujjal Bora / Dr. Gabriel Louis Hornyak

##### ■ [2] Mr. Shuang Liang

cGPA: 3.94

Thesis: Preparation of Superhydrophobic and Anti-Corrosion coating on Steel by One-Step Electrodeposition

Grade: Excellent

Advisors: Dr. Tanujjal Bora / Dr. Gabriel Louis Hornyak

#### DEPARTMENT OF CIVIL AND INFRASTRUCTURE ENGINEERING (CIE)

#### THE WEN-JEI YANG PRIZE FOR STRUCTURAL ENGINEERING

##### ■ Ms. Winsupa Junmoogda

cGPA: 3.73

Thesis: Performance Evaluation of Sampling Moiré Method in Displacement Measurement from Long Distance

Grade: Excellent

Advisor: Dr. Punchet Thammarak

#### THE CHIN FUNG KEE PRIZE FOR GEOTECHNICAL AND EARTH RESOURCES ENGINEERING

##### ■ Mr. Phichet Morya

cGPA: 4.00

Thesis: Evaluation of Multi-Standpipe Grouting Technique and RTGC Method for Mae Ngad - Mae Kuang Water Diversion Tunnel Project

Grade: Excellent

Advisors: Dr. Kuo-Chieh Chao

#### THE BARBARA AND JOHN HUGH JONES PRIZE FOR TRANSPORTATION ENGINEERING

##### ■ [1] Ms. Udayanthi Kumari Ilangasinghe

cGPA: 4.00

Thesis: Motorcyclists' Risk Perception and its Relationship to Road Accidents

Grade: Excellent

Advisor: Dr. Kunnawee Kanitpong

##### ■ [2] Mr. Natakorn Phuksuksakul

cGPA: 4.00

Thesis: Risk Perception of Mobile Phone Use While Driving and Its Effect on Driving Performance

Grade: Excellent

Advisor: Dr. Kunnawee Kanitpong

#### THE CHAINARONG NA LAMPHUN PRIZE FOR WATER ENGINEERING AND MANAGEMENT

##### ■ Mr. Muhammad Naveed Tahir

cGPA: 3.93

Thesis: Impact of Drought on Wheat Yield under Climate Change in Punjab and Sindh Provinces of Pakistan

Grade: Excellent

Advisor: Prof. Mukand S. Babel/Dr. Sangam Shrestha

#### SCHOOL LEVEL PRIZES

#### THE HIROMICHI SEYA PRIZE FOR THE MOST OUTSTANDING WOMAN GRADUATE(S) IN SET.

##### ■ Ms. Udayanthi Kumari Ilangasinghe

cGPA: 4.00

Thesis: Motorcyclists' Risk Perception and its Relationship to Road Accidents

Grade: Excellent

Advisor: Dr. Kunnawee Kanitpong

#### THE AIT ALUMNI ASSOCIATION PRIZE FOR THE MOST OUTSTANDING GRADUATE IN SET

##### ■ Mr. Phichet Morya

cGPA: 4.00

Thesis: Evaluation of Multi-Standpipe Grouting Technique and RTGC Method for Mae Ngad - Mae Kuang Water Diversion Tunnel Project

Grade: Excellent

Advisors: Dr. Kuo-Chieh Chao

**SCHOOL OF ENVIRONMENT, RESOURCES, AND DEVELOPMENT:**

**DEPARTMENT OF FOOD, AGRICULTURE AND BIORESOURCES (FAB)**

**THE MAHADEO N. SALOKHE MEMORIAL PRIZE FOR AGRIBUSINESS MANAGEMENT**

■ **Ms. Janati Khaipetch**  
cGPA: 3.71  
Thesis: Assessment of Sustainable Supply Chain Management Practices of Food Companies in Bangkok, Thailand  
Grade: Excellent  
Advisor: Dr. John K.M. Kuwornu

**THE HISAMATSU PRIZE FOR FOOD ENGINEERING AND BIOPROCESS TECHNOLOGY**

■ **Ms. Riya Shrestha**  
cGPA: 4.00  
Thesis: Genomic Analysis and Effect of Microbial Diversity on Vertical Aquaponic System  
Grade: Excellent  
Advisor: Dr. Anil Kumar Anal

**DEPARTMENT OF ENERGY, ENVIRONMENT AND CLIMATE CHANGE (EECC)**

**THE YOSHIRO TAKASAKI PRIZE FOR ENERGY**

■ **[1] Mr. Pham Xuan Dien**  
cGPA: 4.00  
Thesis: A Probabilistic Approach to Short-term Solar-Wind-Hydro-Thermal Coordination by using Cumulants and Modified Clustering-based Scenario Reduction Technique  
Grade: Excellent  
Advisor: Dr. Jai Govind Singh

■ **[2] Ms. Aagya Niraula**  
cGPA: 4.00  
Thesis: Deep Learning-Based Approach for State-of-Health Estimation of Lithium-Ion Battery in Electric Vehicle  
Grade: Excellent  
Advisor: Dr. Jai Govind Singh

**THE ROBERT AND GUNTA BANKS PRIZE FOR ENVIRONMENTAL ENGINEERING AND MANAGEMENT**

■ **Ms. Truong Thi Huyen**  
cGPA: 3.85  
Thesis: Development of Air Pollution Emission Inventory for Shipping Activities in Ha Long Bay, Vietnam  
Grade: Excellent  
Advisor: Dr. Ekbordin Winijkul

**THE CHONGRAK POLPRASERT PRIZE FOR ENVIRONMENTAL ENGINEERING AND MANAGEMENT (WITH SPECIALIZATION IN WATER AND WASTEWATER ENGINEERING)**

■ **Mr. Nandana Hewawasamge Sajith Madhawa Premarathna**  
cGPA: 3.94  
Thesis: Enhancement of Organic Matter and Total Nitrogen Removal in a Membrane Aerated Biofilm Reactor using Bio-Carriers  
Grade: Excellent  
Advisor: Prof. Chettiyanathan Visvanathan

## DEPARTMENT OF DEVELOPMENT AND SUSTAINABILITY (DS)

### THE ALASTAIR M. NORTH PRIZE FOR GENDER AND DEVELOPMENT STUDIES

#### Ms. Kay Thi Kyaw

cGPA: 3.50

Thesis: Constraints and Barriers in Accessing Social Services Among Victims of Intimate Partner Violence: A Case Study of Working Women in Mandalay, Myanmar  
Grade: Excellent  
Advisor: Dr. Joyee S. Chatterjee

### THE TIM KENDALL MEMORIAL PRIZE FOR NATURAL RESOURCES MANAGEMENT

#### Ms. Phastraporn Salaisook

cGPA: 3.88

Thesis: Analysis of Farm Structures and Farm Management Practices as Drivers of Adoption of Sustainable Land Management Practices in the Northeastern Region of Thailand  
Grade: Excellent  
Advisor: Dr. Nicolas Faysse

### THE JOHN A. HRONES PRIZE FOR URBAN ENVIRONMENTAL MANAGEMENT

#### Ms. Anupa Bhatta

cGPA: 3.96

Thesis: Gender Roles and Urban Informal Livelihood: Analysis of Their Interrelationship with Land Use in Bhaktapur, Nepal  
Grade: Excellent  
Advisor: Dr. Sohee Minsun Kim

## SCHOOL LEVEL PRIZES

### THE YOH KUROSAWA PRIZE FOR THE MOST OUTSTANDING WOMAN GRADUATE(S)

#### [1] Ms. Riya Shrestha

cGPA: 4.00

Thesis: Genomic Analysis and Effect of Microbial Diversity on Vertical Aquaponic System  
Grade: Excellent  
Advisor: Dr. Anil Kumar Anal

#### [2] Ms. Aagya Niraula

cGPA: 4.00

Thesis: Deep Learning-Based Approach for State-of-Health Estimation of Lithium-Ion Battery in Electric Vehicle  
Grade: Excellent  
Advisor: Dr. Jai Govind Singh

### THE AIT ALUMNI ASSOCIATION PRIZE FOR THE MOST OUTSTANDING GRADUATE IN SERD.

#### Mr. Pham Xuan Dien

cGPA: 4.00

Thesis: A Probabilistic Approach to Short-term Solar-Wind-Hydro-Thermal Coordination by using Cumulants and Modified Clustering-based Scenario Reduction Technique  
Grade: Excellent  
Advisor: Dr. Jai Govind Singh

## SCHOOL OF MANAGEMENT

### THE WILHELM HILL PRIZE FOR BUSINESS ADMINISTRATION

#### Mr. Manish Shrestha

cGPA: 4.00

Research Study: Impact of Intellectual Capital on External Technology Acquisition: The Moderating Role of Organizational Slack and Competitive Intensity  
Grade: Excellent  
Advisor: Dr. Yuosre F.M. Badir

### THE SHOICHIRO TOYODA PRIZE FOR THE MOST OUTSTANDING WOMAN GRADUATE

#### Ms. Gayani Madhushanthi Ranasinghe

cGPA: 3.92

Research Study: Organizational Resources and Green Performance: The Role of Board of Directors' Composition, Slack Resources and R&D Intensity  
Grade: Excellent  
Advisor: Dr. Yuosre F.M. Badir

### THE AIT ALUMNI ASSOCIATION PRIZE FOR THE MOST OUTSTANDING GRADUATE IN SOM.

#### Mr. Ajaya Kusum Adhikari

cGPA: 4.00

Research Study: The Role of Migration and Remittances in Poverty Reduction: The Case of Nepal, 2009-2017  
Grade: Excellent  
Advisor: Dr. Winai Wongsurawat

## Student Research – 2019

SCHOOL/ FoS	DOCTORAL STUDENTS DISSERTATION	STUDENTS' RESEARCH				TOTAL MASTERS STUDENT RESEARCH	UG STUDENTS' CAPSTONE PROJECT	TOTAL
		Thesis	Research Studies	Internships	Projects			
SET	15	213	48	0	50	326	43	369
CEIM	1	36	3		50	90		
CIE(UG)							9	
CS	1	4	2			7		
EL(UG)							1	
GTE		19	1			20		
ICT	1	1	8			10		
ICT(UG)							9	
IM	1	5	11			17		
IME		16				16		
ME	2	12	1			15		
ME(UG)							22	
MES		13				13		
NT		4	5			9		
RSGIS	4	23	8			35		
STE	1	22	1			24		
TC	2	5	2			9		
TC(UG)							2	
TE	1	7	5			13		
WEM	1	46	1			48		
SERD	30	110	16	0	0	156	0	156
AARM	1	7				8		
ABM	3	14				17		
ASE	1	2				3		
BSE(UG)								
CCSD		2	1			3		
E	1	22	13			36		
EEM	2	28				30		
FBT	7	9				16		
GDS	2	9				11		
NRM	5	8	1			14		
RRDP	5	2				7		
UEM	3	7	1			11		
SOM	17	0	42	0	44	103	0	103
MBA-D			42			42		
MBA-W					1	1		
MOT	1					1		
EMBA(VN)					32	32		
DBA	8					8		
BF					11	11		
SM-PHD	8					8		
SET & SERD	1	12	0	3	0	16	0	16
DPMM	1	4		3		8		
UWEM		8				8		
<b>TOTAL</b>	<b>63</b>	<b>335</b>	<b>106</b>	<b>3</b>	<b>94</b>	<b>601</b>	<b>43</b>	<b>644</b>

## D. CAREER CENTER

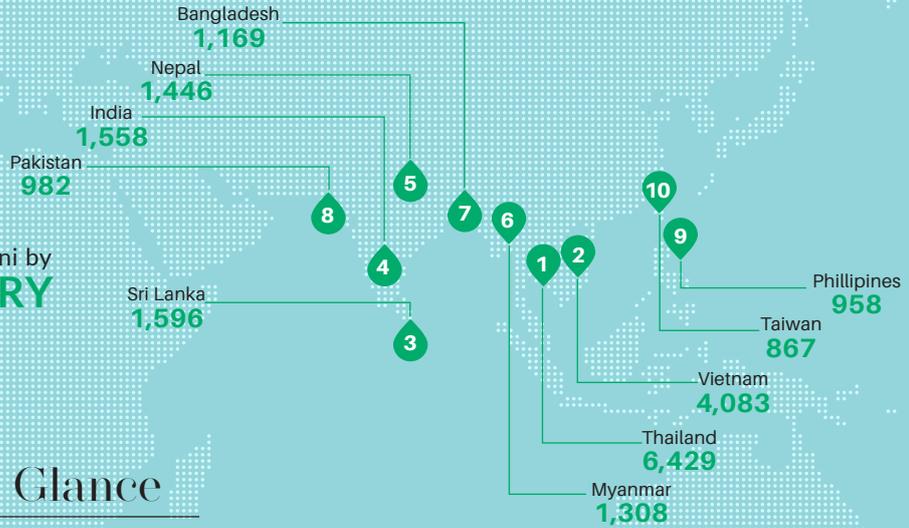
The Career Center organized two Career Fairs in 2019, attracting a total of 1,081 visitors (of whom 777 were students).

A total of 23 Career Talks were organized during the year, with 707 students taking part. The Career Center facilitated internship placements of 5 students in companies that participated in the Career Fairs and assisted 5 students in obtaining internships by providing recommendation letters to companies.

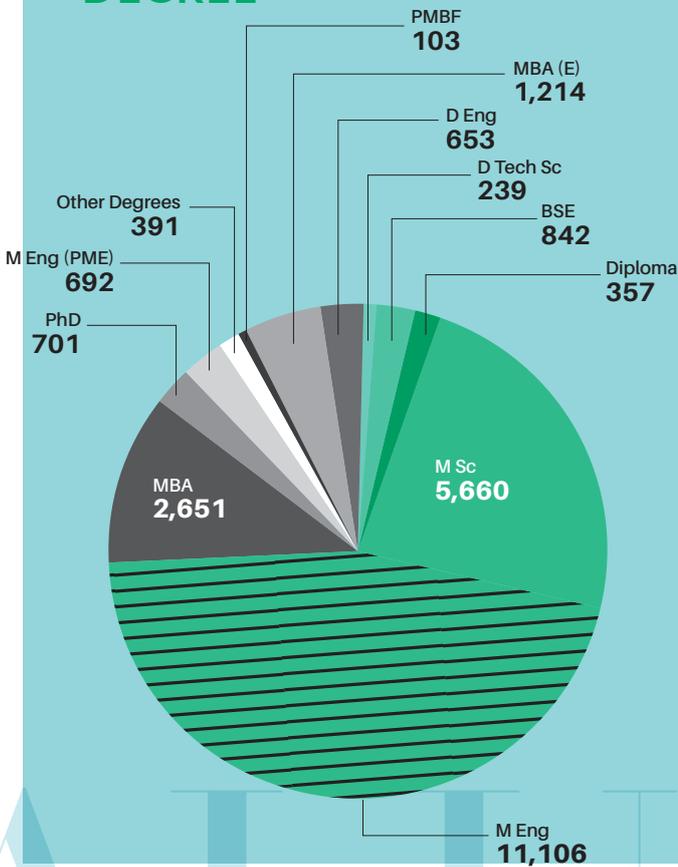
Alumni by **COUNTRY**

Alumni at a Glance

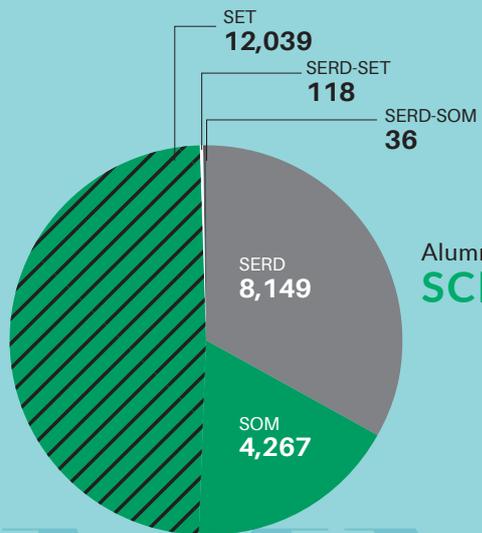
2019 TOTAL ALUMNI  
**24,609**



Alumni by **DEGREE**



Alumni by **GENDER**



Alumni by **SCHOOL**

## ALUMNI RECOGNITION

- AIT congratulates alumna **Ms. May Sabe Phyu**, Winner of the 2019 N-Peace Award. Ms. May received a Master of Science in Gender and Development Studies degree, School of Environment, Resources, and Development from AIT, 2011.



### REFERENCE:

<http://n-peace.net/winner-2019/may-sabe-phyu-4/>  
AWARDS ANNOUNCEMENT: <https://www.asia-pacific.undp.org/.../announcing-the-winners-...>

- **Dr. Muhammad Z Mamun** (Ph.D., 1996) Appointed Pro-Vice Chancellor of East West University (Bangladesh). He received AIT Doctor of Philosophy degree in Urban Development Planning and Environment Management.



<http://www.ewubd.edu/single-news/321>

- AIT alumnus **Professor Shakil Romshoo** (Environmental Remote Sensing & Geoinfo. for Development, 1997) received the Satish Dhawan National Award awarded by the Indian Space Research Organisation (ISRO): <https://www.tribuneindia.com/.../prof-romshoo-get.../864168.html>



- **Manoj Karkee** (Masters in Remote Sensing and GIS, 2005), AIT alumnus and Associate Professor in the Biological Systems Engineering Department at Washington State University was among the 11 US and Canadian professors to be named 2019 pioneers in artificial intelligence and the Internet by Connected World, a business and technology publication. [https://www.capitalpress.com/.../article\\_db867224-727c-11e9-b...](https://www.capitalpress.com/.../article_db867224-727c-11e9-b...)



- AIT Alumnus **Dr. Abdul Aziz Mohibbi**, has been appointed Chancellor of Bamyan University, Afghanistan.



Dr. Mohibbi completed his Masters in Natural Resources Management at AIT (2011) after obtaining his Bachelors degree from Kabul University. He studied for his PhD from Tokyo University in Agriculture and Technology. Dr. Mohibbi has taught at Kabul University, and he has also served in UN Environment (among others). He has been advisor to the Afghanistan Parliament Commission of Natural Resources and Environment and senior advisor with the National Environmental Protection Agency of Afghanistan.

- **Mr. Abul Kashem MD Shirin** (Masters, Agricultural and Food Engineering, 1991) reappointed MD of Dutch-Bangla Bank.



<https://www.daily-sun.com/.../Md-Shirin-reappointed-as-MD-of-D...>

- AIT Alumna **Dr. Rachada Dhnadirek** (Ph.D. 2004, School of Management) has been appointed Deputy Spokesperson of the Royal Thai Government. Speaking after her appointment, she stated that she will be "ready to collaborate with ministerial spokespersons for the more efficient and constructive operation and positive image of the Government. The Government spokesperson team will also reach out to people in different areas and voice their feedback to the Government." <https://www.thaigov.go.th/news/contents/details/22419>



- SOM Alumnus, **Dr. Bilal Afsar** (Ph.D, 2015, School of Management), has been awarded the Best Young Research Scholar Award in the Management Sciences category by the Higher Education Commission (HEC), Pakistan. He was honored by Lt. Gen (Retd). Muhammad Asghar, Executive Director, HEC.



Dr. Bilal was selected from candidates from all over Pakistan due to his excellence in research. He has 35 SSCI publications with a cumulative impact factor of over 80. He dedicated this award to AIT for making him what he is today and above all to his supervisor, Dr. Badir, who has always been an inspiration for him.

- **Dr. Phan Thi Van**, who received a Danida scholarship and an AIT Master of Science degree in Aquaculture (1998) wins the Danida Alumni Prize 2019. [https://dfcentre.com/.../dr-phan-thi-van-to-receive-the-dani...](https://dfcentre.com/.../dr-phan-thi-van-to-receive-the-dani.../)



- AIT alumnus **Abdul Tawab Bala Karzai** appointed Acting Minister of Higher Education in Afghanistan. Mr. Balakarzai received an AIT Master of Engineering degree in Water Engineering and Management (WEM) in 2010 and after graduating joined Kandahar University, where he served as Vice Chancellor for Academic Affairs. He was appointed Deputy Minister for Academic Affairs in Afghanistan, and he visited AIT as Deputy Minister in February 2018. [https://www.khaama.com/ghani-appoints-abdul-tawab-bala-kar...](https://www.khaama.com/ghani-appoints-abdul-tawab-bala-kar.../)



■ AIT Alumna Stars in Sri Lanka’s First Satellite Launch. **Ms. Withanage Dulani Chamika** (BSc. Mechatronics Engineering, 2014 ) is behind the cube-sized satellite “Raavana 1” that was launched into space with the assistance of the US rocket “Antares” from the mid-Atlantic space station in Virginia. <https://www.newsfirst.lk/.../18/raavana-1-successfully-launc.../>



■ **Dr. Bui Trung Thanh** was appointed New President of Hung Yen University of Technology and Education, Vietnam for a term running from 2019-2024. He received his AIT Master of Engineering degree in Mechatronics in 2005.



■ **Mr. Niyot Masavisut** has been appointed President of Sukhumvit Asset Management Co. Ltd. (SAM) effective from 1 February 2019. Most recently, he served as Senior Executive Vice President at SAM. He received AIT Master of Business Administration degree in International Business in 1996. <https://www.debtclinicbysam.com/13043-2/>



■ AIT Alumna **Dr. Jirapan Chaowanapong** has been honored with an award by the National Research Council of Thailand (NRCT) for the best top three thesis in the field of Economics. The Award Ceremony was held on 2 February 2019 on the occasion of “Inventors Day” organized at Bitec, Bangna. She received an AIT Doctorate in Management in 2017.



■ AIT Alumnus, **Dr. An Pich Hatda**, has been appointed Chief Executive Officer (CEO) of the Mekong River Commission (MRC). He assumed office on 18 January 2019. He received an AIT Master of Science degree in Agricultural Systems in 1997. <https://www.ait.ac.th/.../ait-alumnus-appointed-ceo-mekong-r.../>



■ **Mr. Bundit Sapianchai**, President and CEO of BCPG Energy (Bangchak Corporation PLC) was featured in the Bangkok Post. He received an AIT Master of Engineering degree in Industrial Engineering and Management in 1988. <https://www.bangkokpost.com/.../at-bcpg-the-boss-leads-and-le...>



■ Cabinet approves the appointment of **Mr. Chira Wongburana**, as Director General of the Wastewater Management Authority, Thailand. Mr. Chira received an AIT Master of Engineering degree in Environmental Engineering and Management in 2007. <https://mgronline.com/politics/detail/9620000000431...>



■ **Prof. Somchai Wongwises** (AIT alumnus from Energy, School of Environment, Resources, and Development, 1984) has been included in the list Highly Cited Researchers in the field of Engineering announced in November 2019. Prof. Somchai specializes in Fluid Mechanics, Thermal Engineering, and Multiphase Flow. He is currently working in the Department of Mechanical Engineering, Faculty of Engineering, King Mongkut University of Technology Thonburi (KMUTT), Bangmod, Bangkok.



■ **Professor Siriwan Suebnukarn**, DDS, PhD (CSIM 01 & 05), Vice Rector for Research and Innovation, Thammasat University, Thailand. An AIT alumni from the School of Engineering and Technology in Computer Science and Information Management, Master of Science in 2001, and Doctor of Philosophy in 2005. Professor Siriwan attended the WinTRADE (Women in Business Network) week in London in 2019. At the event, she was the Recipient of a Global Women Inventors and Innovators Network (GWIIN) award.



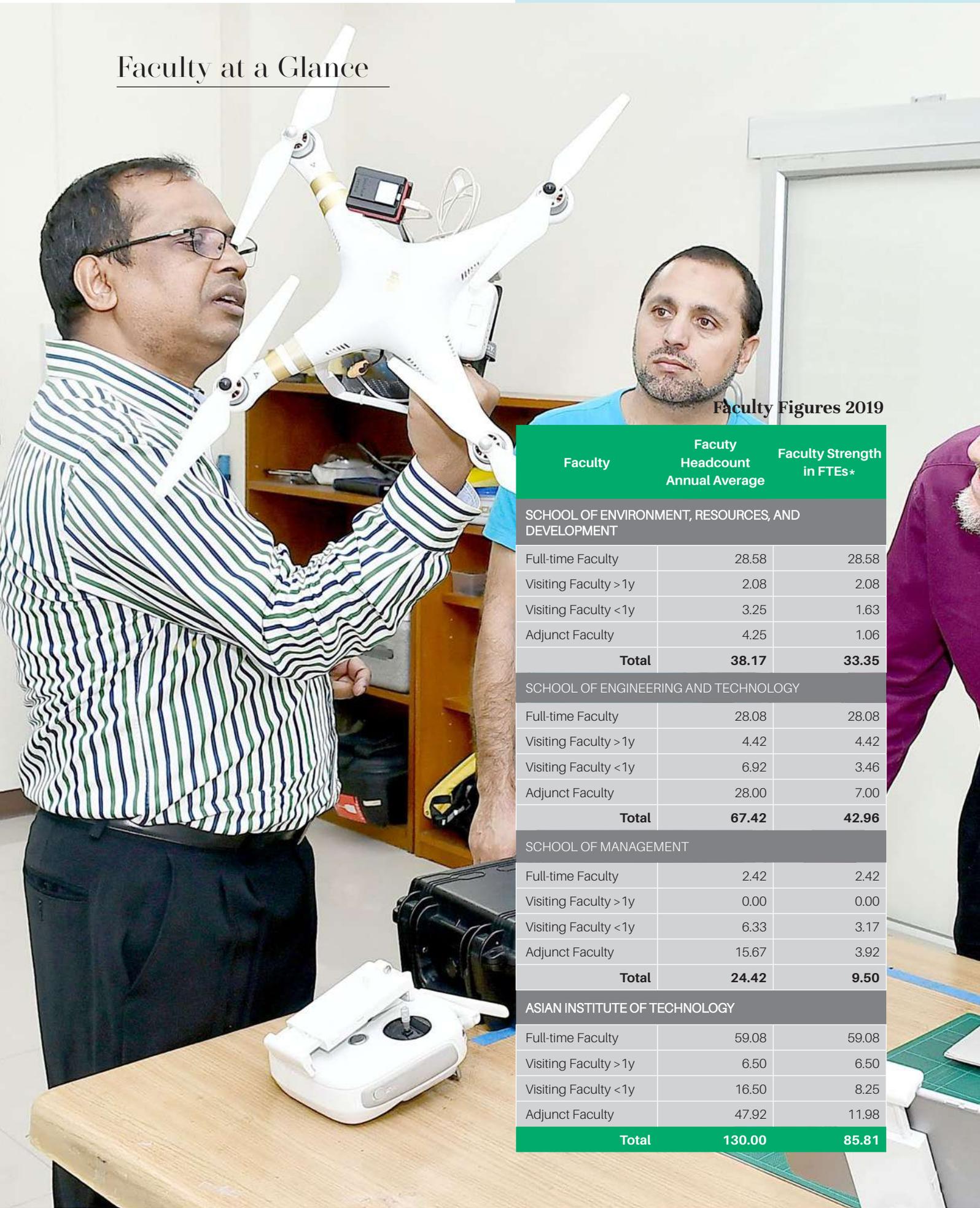
For more details, please visit: <https://wintradeweek.com/http://globalwiin.com/>

■ **Mr. Mohammad Rafi Hayat** (UEM 18), AIT alumnus from the School of Environment, Resources, and Development in Urban Environmental Management, Master of Science (2018), was recently appointed Kandahar City Mayor, Afghanistan. He applied for the position and was selected from among eight other Masters candidates.



For more details, please visit: <https://idlg.gov.af/en/3515/>

## Faculty at a Glance



### Faculty Figures 2019

Faculty	Faculty Headcount Annual Average	Faculty Strength in FTEs*
<b>SCHOOL OF ENVIRONMENT, RESOURCES, AND DEVELOPMENT</b>		
Full-time Faculty	28.58	28.58
Visiting Faculty > 1y	2.08	2.08
Visiting Faculty < 1y	3.25	1.63
Adjunct Faculty	4.25	1.06
<b>Total</b>	<b>38.17</b>	<b>33.35</b>
<b>SCHOOL OF ENGINEERING AND TECHNOLOGY</b>		
Full-time Faculty	28.08	28.08
Visiting Faculty > 1y	4.42	4.42
Visiting Faculty < 1y	6.92	3.46
Adjunct Faculty	28.00	7.00
<b>Total</b>	<b>67.42</b>	<b>42.96</b>
<b>SCHOOL OF MANAGEMENT</b>		
Full-time Faculty	2.42	2.42
Visiting Faculty > 1y	0.00	0.00
Visiting Faculty < 1y	6.33	3.17
Adjunct Faculty	15.67	3.92
<b>Total</b>	<b>24.42</b>	<b>9.50</b>
<b>ASIAN INSTITUTE OF TECHNOLOGY</b>		
Full-time Faculty	59.08	59.08
Visiting Faculty > 1y	6.50	6.50
Visiting Faculty < 1y	16.50	8.25
Adjunct Faculty	47.92	11.98
<b>Total</b>	<b>130.00</b>	<b>85.81</b>

## Faculty Teaching and Research Supervision Loads and Assessments in 2019

SCHOOL / DEPARTMENT		NO. OF TEACHING FACULTY		TOTAL NO OF COURSES	TOTAL NO OF COURSE OFFERINGS	AVERAGE CLASS SIZE	AVERAGE ASSESSMENT
		REGULAR	Short-term/ Part-time				
SERD	DS	12	2	40	47	12	4.4
	EECC	17	2	46	54	10	4.6
	FAB	6	4	26	27	10	4.6
SERD-wide		35	8	112	128	10	4.5
SET	CIE	13	25	76	159	20	4.6
	ICT	13	15	53	67	13	4.5
	ISE	6	7	28	28	9	4.4
SET-wide		32	47	157	254	14	4.5
SET-SERD		4	0	7	7	11	4.6
SOM		2	18	54	104	19	4.3
AIT-wide		73	73	330	493	13	4.5

SCHOOL / DEPARTMENT		NO. OF TEACHING FACULTY		TOTAL DOCTORAL GRADUATES	AVERAGE ASSESSMENT (Doctoral Graduates)	TOTAL MASTERS GRADUATES	AVERAGE ASSESSMENT (Masters Graduates)
		REGULAR	Short-term/ Part-time				
SERD	DS	13	-	15	4.60	28	4.60
	EECC	14	-	3	4.80	66	4.70
	FAB	7	2	12	4.90	32	4.60
SERD-wide		34	2	30	4.77	126	4.63
SET	CIE	13	8	4	4.70	190	4.74
	ICT	13	3	9	4.63	69	4.63
	ISE	6	5	2	4.73	51	4.63
SET-wide		32	16	15	4.69	310	4.67
SET-SERD		5	8	1	-	15	4.32
SOM		4	17	17	4.20	107	4.70
AIT-wide		75	43	63	4.66	558	4.62

## Faculty Publications 2019

SCHOOL / DEPARTMENT		No. of full-time faculty	Average H-index		Sum of Cited Documents		Sum of Citations		Sum of Refereed Journal Articles (Scopus)
			Scopus	Google Scholar	Scopus	Google Scholar	Scopus	Google Scholar	
SERD	DS	11	8	15	340	854	2,633	9,265	279
	EECC	12	19	23	871	912	18,127	25,526	577
	FAB	6	10	18	304	559	2,978	7,945	284
SERD-wide		29	12	19	1,515	2,325	23,738	42,736	1,140
SET	CIE	12	11	16	508	1,018	8,094	13,554	694
	ICT	9	11	17	515	927	8,495	17,102	247
	ISE	6	11	16	326	542	2,736	8,113	157
SET-wide		27	11	16	1,349	2,487	19,325	38,769	1,098
SET-SERD		1	11	8	12	45	153	288	11
SOM		3	9	15	66	138	883	3,353	46
AIT-wide		60	11	16	2,942	4,995	44,099	85,146	2,295

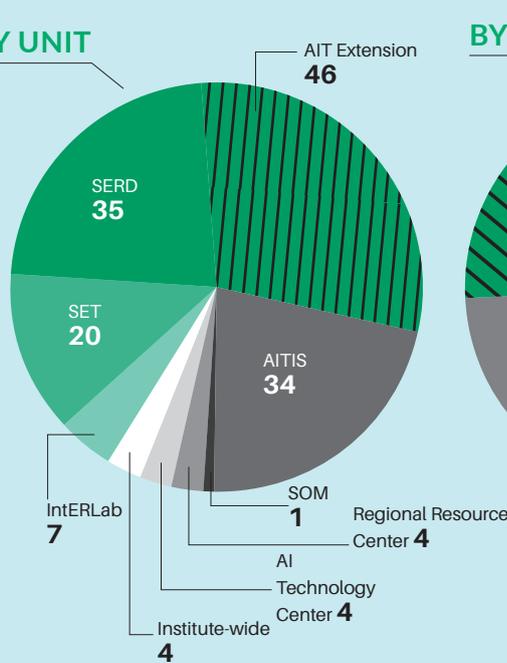
# Projects at a Glance

## INITIATED PROJECTS 2019

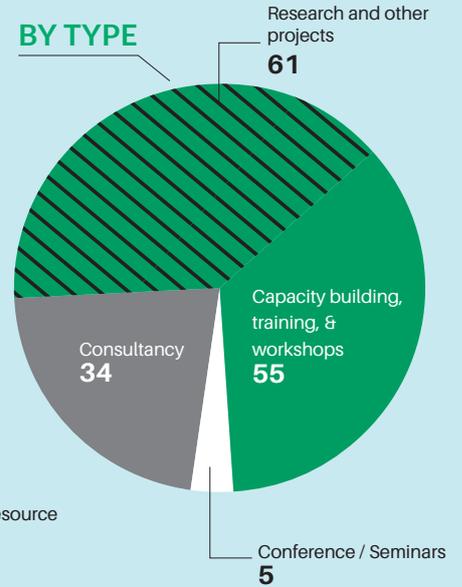
**320** Total project budget (Million Thai Baht)

**155** Total Number of Initiated Projects

### BY UNIT



### BY TYPE

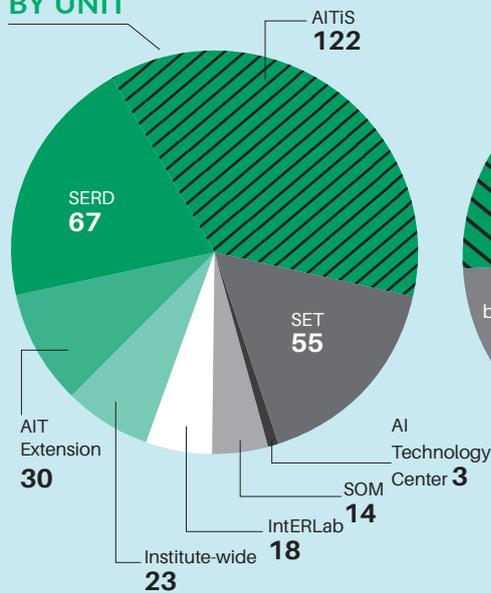


## ONGOING PROJECTS 2019

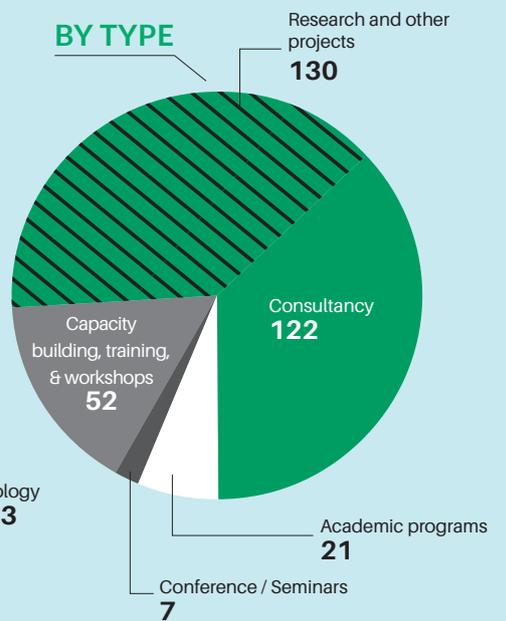
**1,346** Total project budget (Million Thai Baht)

**332** Total Number of Ongoing Projects

### BY UNIT



### BY TYPE

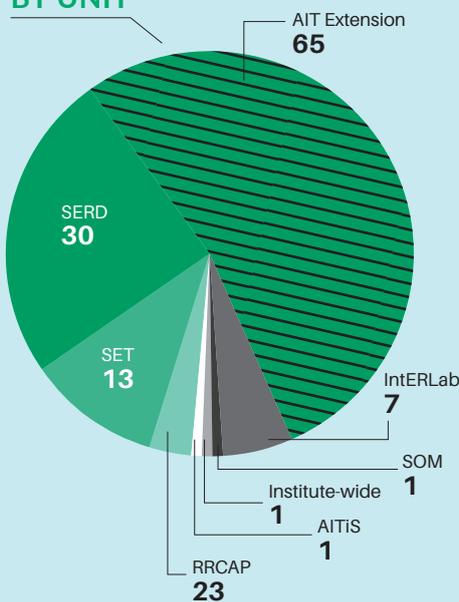


## CLOSED PROJECTS 2019

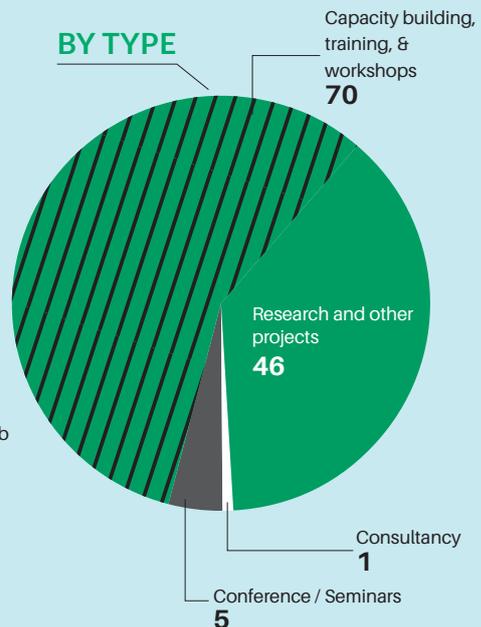
**197** Total project budget (Million Thai Baht)

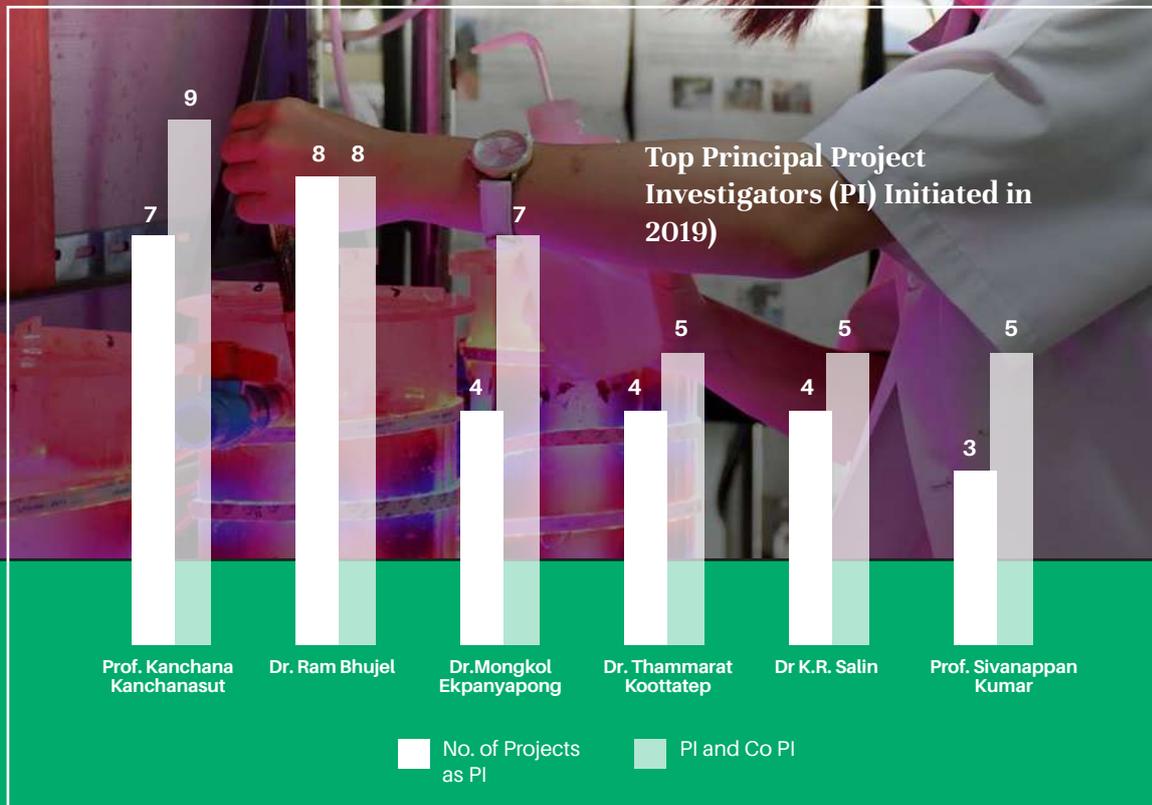
**122** Total Number of closed Projects

### BY UNIT



### BY TYPE





## Top Scopus-Cited AIT Researchers

### 1. Prof. Phan Minh Dung

- On the acceptability of arguments and its fundamental role in nonmonotonic reasoning, logic programming, and n-person games (cited 2,572 times) 1995; Artificial Intelligence; Dung, P.M.
- An abstract, argumentation-theoretic approach to default reasoning (cited 441 times) 1997; Artificial Intelligence; Bondarenko, A., Dung, P.M., Kowalski, R.A., Toni, F.

### 2. Prof. Nguyen Thi Kim Oanh

- Simultaneously Mitigating Near-Term Climate Change and Improving Human Health and Food Security (cited 633 times) 2012; Science; Shindell, D., Kuylenstierna, J.C.I., Vignati, E., Van Dingenen, R., Amann, M., Klimont, Z., Anenberg, S.C., Muller, N., Janssens-Maenhout, G., Raes, F., Schwartz, J., Faluvegi, G., Pozzoli, L., Kupiainen, K., Höglund-Isaksson, L., Emberson, L., Streets, D., Ramanathan, V., Hicks, K.,

Oanh, N.T.K., Milly, G., Williams, M., Demkine, V., Fowler, D.

### 3. Prof. Weerakorn Ongsakul

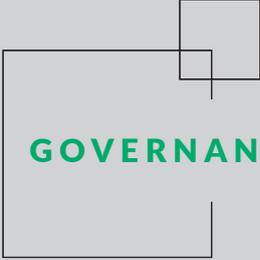
- Unit Commitment by Enhanced Adaptive Lagrangian Relaxation (cited 366 times) 2004; IEEE Transactions on Power Systems; Ongsakul, W., Petcharak, N.

### 4. Prof. C. Visvanathan

- Membrane Separation Bioreactors for Wastewater Treatment (cited 349 times) 2000; Critical Reviews in Environmental Science and Technology; Visvanathan, C., Ben Aim, R., Parameshwaran, K.

### 5. Dr. Anil Kumar Anal

- Chitosan-alginate Multilayer Beads for Controlled Release of Ampicillin (cited 240 times) 2005; International Journal of Pharmaceutics; Anal, A.K., Stevens, W.F.



## GOVERNANCE

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Note: The following members completed their term as Trustees on 27 November 2019

■ Dr. Sumate Yamnoon, Former Secretary-General, Office of Higher Education, Thailand

■ Assoc. Prof. Kraiwood Kiattikomol, Advisor, King Mongkut's University of Technology Thonburi (KMUTT)

■ Dr. Bindu N. Lohani, Former Vice-President, Asian Development Bank (ADB) for Knowledge Management and Sustainable Development

■ Mr. Noritada Morita, Former Director, Asian Development Bank (ADB)

■ Prof. Ricardo P. Pama, Secretary-General, Association of Universities of Asia and the Pacific (AUAP) and Former AIT Vice President

Mr. Soonthorn Chaiyindeepum, Deputy Permanent Secretary, Ministry of Foreign Affairs Thailand succeeded Mr. Thani Thongphakdi, former Deputy Permanent Secretary as the representative of the Ministry on the Board, and H.E. Dr. Sarah Taylor, Ambassador of Canada to Thailand, likewise succeeded former Ambassador H.E. Ms Donica Pottie as the representative from Canada.

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### CHAIRMAN

**Professor Emeritus Dr. Sahas Bunditkul**  
Former Deputy Prime Minister and Interim Minister of Foreign Affairs of Thailand

### VICE CHAIRMAN

**Mr. Chaiwat Kovavisarach**  
CEO, President & Director, Bangchak Corporation Public Company Ltd.

### MEMBERS

**Mr. Chaovalit Ekabut**  
Advisor to the President and CEO, Siam Cement Group (SCG) Public Company Limited

**Mr. Chawalit Chanthararat**  
President, TEAM Consulting Engineering & Management Group PCL Bangkok, Thailand

**Mr. Robert James Kay**  
Executive Vice President, GMS Power Public Co., Ltd.

**Dr. Sutapa Amornvivat**  
Chief Executive Officer and Founder: SCB Abacus

**Mr. Lee Pit Teong**  
Chairman, iGroup (Asia Pacific) Ltd.

**Dr. Twarath Sutabutr**  
Inspector-General : Ministry of Energy, Thailand

**Prof. Karl E. Weber**  
Former AIT Vice President and AIT Professor Emeritus

**Dr. Yanyong Phataralaoha**  
Managing Director, Thai Pipe Industry Co. Ltd., Thailand

### EX-OFFICIO MEMBERS

**Dr. Subin Pinkayan**  
Chairman of the Board & Former Minister of Foreign Affairs Thailand

**Dr. Eden Woon**  
AIT President

Note: The following members completed their term on the Executive Committee on 27 November 2019.

■ Assoc. Prof. Kraiwood Kiattikomol, Advisor, King Mongkut's University of Technology Thonburi (KMUTT)

■ Dr. Bindu N. Lohani, Former Vice-President, Asian Development Bank (ADB), Knowledge Management and Sustainable Development

## Audit Committee

### CHAIRMAN

**Mr. Chaovalit Ekabut**  
Advisor to the President and CEO, Siam Cement Group (SCG) PCL.

### MEMBERS

**Mr. Chaiwat Kovavisarach**  
CEO, President & Director, Bangchak Corporation Public Company Ltd.

**Mr. Robert James Kay**  
Executive Vice President, GMS Power Public Co., Ltd.

**Mr. Lee Pit Teong**  
Chairman of the iGroup (Asia Pacific) Ltd.

**Prof. Karl E. Weber**  
AIT Emeritus Professor and former AIT Vice President



## **PRESIDENT**

**Dr. Eden Y. Woon**

## **VICE-PRESIDENTS**

Academic Affairs

**Prof. Deepak Sharma**

Knowledge Transfer

**Dr. Naveed Anwar**

Administration

**Mr. Russell Bruce Rein**

## **DEANS**

School of Environment, Resources, and  
Development

**Prof. Rajendra Prasad Shrestha**

School of Engineering & Technology

**Prof. Dieter Wilhelm Trau**

School of Management

**Dr. Roger John Levermore**

## **DIRECTORS OF OUTREACH CENTERS**

AIT Extension

**Dr. Jonathan L. Shaw**

AIT Solutions

**Mr. Thaung Htut Aung**

Entrepreneurship Center

**Prof. Dieter Trau**

Belt and Road Research Center

**Dr. Wenchao Xue**

Geoinformatics Center

**Dr. Manzul Hazarika**

Regional Resource Center for Asia & the  
Pacific

**Mr. Naoya Tsukamoto**

Asian Centre of Innovation for  
Sustainable Agriculture Intensification

**Dr. Abha Mishra**

Center of Excellence in Nanotechnology

**Dr. Tanujjal Bora (Interim)**

Internet Education & Research  
Laboratory

**Dr. Mongkol Ekpanyapong**

AIT Artificial Intelligence Technology  
Center

**Prof. Matthew N. Dailey**

AIT Center in Vietnam

**Dr. Dong Phung Van**



## **APPENDICES**

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INDEPENDENT  
AUDITOR'S REPORT  
AND  
FINANCIAL  
STATEMENTS FOR  
THE YEAR ENDED  
31 DECEMBER 2019

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FACULTY  
MEMBERS

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AIT  
SUSTAINABILITY  
REPORT 2019

# Independent Auditor's Report

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## To the Board of Trustees of Asian Institute of Technology

### *Opinion*

I have audited the financial statements of Asian Institute of Technology ("Institute"), which comprise the statement of financial position and statement of financial position classified by funds as at 31 December 2019, the statement of revenues and expenses, the statement of revenues and expenses classified by funds, changes in fund balances and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

In my opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Institute as at 31 December 2019 and its financial performance and cash flows for the year then ended in accordance with the Thai Financial Reporting Standard for Non-Publicly Accountable Entities (TFRS for NPAEs).

### *Basis for Opinion*

I conducted my audit in accordance with Thai Standards on Auditing (TSAs). My responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of my report. I am independent of the Institute in accordance with Code of Ethics for Professional Accountants issued by the Federation of Accounting Professions that is relevant to my audit of the financial statements, and I have fulfilled my other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

### *Other Information*

Management is responsible for the other information. The other information comprises the information included in the annual report, but does not include the financial statements and my auditor's report thereon. The annual report is expected to be made available to me after the date of this auditor's report.

My opinion on the financial statements does not cover the other information and I will not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, my responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

When I read the annual report, if I conclude that there is a material misstatement therein, I am required to communicate the matter to the management and request that the correction be made.

### *Responsibilities of Management for the Financial Statements*

Management is responsible for the preparation and fair presentation of the financial statements in accordance with TFRS for NPAEs, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Institute's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Institute or to cease operations, or has no realistic alternative but to do so.

### *Auditor's Responsibilities for the Audit of the Financial Statements*

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with TSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with TSAs, I exercise professional judgment and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Institute's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Institute's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Institute to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with management regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.



(Yuvanuch Thepsongvaj)  
Certified Public Accountant  
Registration No. 5371

KPMG Phoomchai Audit Ltd.  
Bangkok  
28 May 2020

## Statements of financial position

		31 December	
	Note	2019	2018
		(in Baht)	
<b>ASSETS</b>			
<i>Current assets</i>			
Cash and cash equivalents	4	83,723,928	193,017,166
Current investments	5	613,272,363	695,271,169
Accounts receivable	6	54,386,114	54,134,577
Receivables from Program fund		72,799,553	55,420,809
Assets held on behalf of donors	10	377,243,421	365,438,895
Other current assets		20,434,280	21,254,781
<b>Total current assets</b>		<b>1,221,859,659</b>	<b>1,384,537,397</b>
<i>Non-current assets</i>			
Restricted deposits of financial institutions	5	15,175,000	15,175,000
Property and equipment	7	687,253,240	727,161,292
<b>Total non-current assets</b>		<b>702,428,240</b>	<b>742,336,292</b>
<b>Total assets</b>		<b>1,924,287,899</b>	<b>2,126,873,689</b>
<b>LIABILITIES AND FUND BALANCES</b>			
<i>Current liabilities</i>			
Accounts payable and accrued expenses	8	149,752,547	188,747,140
Advances from Program fund		170,667,364	177,872,120
Current portion of long-term loan	9	2,309,417	2,309,417
Deposit payables		5,526,357	5,574,293
Amounts due to donors	10	377,243,421	365,438,895
<b>Total current liabilities</b>		<b>705,499,106</b>	<b>739,941,865</b>
<i>Non-current liabilities</i>			
Long-term loan	9	20,784,750	23,094,167
Provision for retirement benefits	11	19,163,247	15,902,734
<b>Total non-current liabilities</b>		<b>39,947,997</b>	<b>38,996,901</b>
<b>Total liabilities</b>		<b>745,447,103</b>	<b>778,938,766</b>
<i>Fund balances</i>			
Endowment fund balances		143,446,975	142,724,615
Capital funds balances		823,671,650	865,159,658
General reserve fund		211,722,171	340,050,650
<b>Total fund balances</b>		<b>1,178,840,796</b>	<b>1,347,934,923</b>
<b>Total liabilities and fund balances</b>		<b>1,924,287,899</b>	<b>2,126,873,689</b>

## Statements of revenues and expenses

		For the year ended 31 December	
	Note	2019	2018
		(in Baht)	
<b>INCOME</b>			
Tuition income and other fees		330,417,446	426,265,281
Research grants and contract service income		92,382,071	101,875,910
Support operations income		193,034,173	210,813,715
Training income		128,338,422	132,040,252
Other contributions		7,206,650	8,758,909
Faculty secondments income		15,849,385	24,129,190
<b>Total income</b>		<b>767,228,147</b>	<b>903,883,257</b>
<b>EXPENSES</b>			
Employee benefit expenses	12	405,554,569	402,648,182
Materials, supplies and services expenses		182,744,669	166,146,013
Contracted services expenses		171,376,864	190,789,890
Communication and travel expenses		33,091,162	34,207,817
Utilities and insurance expenses		48,546,577	62,777,883
Faculty secondments expenses		15,849,385	24,129,190
<b>Total expenses</b>		<b>857,163,226</b>	<b>880,698,975</b>
<b>Income over (under) expenses</b>		<b>(89,935,079)</b>	<b>23,184,282</b>
Depreciation	7	(108,439,730)	(99,841,086)
<b>Income under expenses including depreciation</b>		<b>(198,374,809)</b>	<b>(76,656,804)</b>
<b>Non operating income and expenses</b>			
Interest income		14,016,285	14,818,796
Gain (loss) on exchange rate		(2,235,551)	872,151
<b>Income under expenses</b>		<b>(186,594,075)</b>	<b>(60,965,857)</b>

## Statements of changes in fund balances

	Note	Unrestricted Current fund	Unrestricted fund-General	Restricted funds		Unrestricted fund	Capital funds-Property and equipment	Restricted fund - General reserve	Total	
				Endowment fund	Program fund				Integrated facility management	31 December 2019
<b>Balances as at 1 January</b>										
		-	-	142,724,615	-	-	865,159,658	340,050,650	1,347,934,923	1,390,402,473
<b>Additions (Deductions):</b>										
Income (under) over expenses for the year (AITTH)		70,398,737	(13,032,998)	722,360	3,087,871	(133,009,738)	(106,377,897)	2,871,272	(175,940,393)	(53,705,286)
Income (under) over expenses for the year (AITVN)	13	(213,316)	(7,085,105)	-	(3,645,423)	-	(309,838)	-	(11,253,682)	(7,260,571)
<b>Total additions (deductions) for the year</b>		<b>70,185,421</b>	<b>(20,118,103)</b>	<b>722,360</b>	<b>(557,552)</b>	<b>(133,009,738)</b>	<b>(106,687,735)</b>	<b>2,871,272</b>	<b>(186,594,075)</b>	<b>(60,965,857)</b>
Adjusted loss on foreign currency translation of AITVN		-	-	-	-	-	(42,862)	(6,638,878)	(6,681,740)	(412,461)
<b>Total</b>		<b>70,185,421</b>	<b>(20,118,103)</b>	<b>143,446,975</b>	<b>(557,552)</b>	<b>(133,009,738)</b>	<b>758,429,061</b>	<b>336,283,044</b>	<b>1,154,659,108</b>	<b>1,329,024,155</b>
<b>Increase capital:</b>										
Capital from funds held on behalf of others		-	-	-	-	-	4,866,172	-	4,866,172	4,146,622
Capital for Program fund		-	-	-	19,315,516	-	-	-	19,315,516	14,764,146
<b>Total</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>19,315,516</b>	<b>-</b>	<b>4,866,172</b>	<b>-</b>	<b>24,181,688</b>	<b>18,910,768</b>
<b>TRANSFER TO (FROM) OTHER FUNDS:</b>										
Unrestricted current fund		-	-	-	-	-	-	70,185,421	70,185,421	152,474,960
Unrestricted fund - General		-	-	-	-	-	-	(20,118,103)	(20,118,103)	(1,380,147)
Restricted funds - Program fund		-	-	-	-	-	19,315,516	(557,552)	18,757,964	20,175,634
Unrestricted fund - Intergrated facility management		-	-	-	-	-	-	(133,009,738)	(133,009,738)	(122,218,494)
Restricted fund - General reserve		(70,185,421)	20,118,103	-	557,552	133,009,738	41,060,901	-	124,560,873	22,948,687
Capital fund - property and equipment - liquid assets		-	-	-	(19,315,516)	-	-	(41,060,901)	(60,376,417)	(72,000,640)
<b>Net</b>		<b>(70,185,421)</b>	<b>20,118,103</b>	<b>-</b>	<b>(18,757,964)</b>	<b>133,009,738</b>	<b>60,376,417</b>	<b>(124,560,873)</b>	<b>-</b>	<b>-</b>
<b>Balances as at 31 December</b>										
		-	-	142,724,615	-	-	823,671,650	211,722,171	1,178,840,796	1,347,934,923

## Statements of cash flows

		For the year ended 31 December	
	Note	2019	2018
		(in Baht)	
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>			
Opening fund balances		1,347,934,923	1,390,402,473
Closing fund balances		1,178,840,796	1,347,934,923
Movement in fund balances		(169,094,127)	(42,467,550)
<b>Adjustments to reconcile movement of fund balances</b>			
Doubtful debts expense (reversal)	6	401,232	(1,188,673)
Depreciation	7	108,439,730	99,841,086
Loss on disposal of equipment		-	151,840
Interest income		(14,016,286)	(14,818,796)
Unrealised (gain) loss on exchange rate		1,595,428	(1,197,524)
Provision for retirements benefits	11	5,180,252	930,393
Movement in fund balances from operating activities before changes in operating assets and liabilities		(67,493,771)	41,250,776
<b>Changes in operating assets and liabilities:</b>			
Accounts receivable		(2,248,197)	5,473,529
Receivables from Program fund		(17,378,744)	(17,502,510)
Other current assets		2,740,275	10,256,595
Accounts payable and accrued expenses		(38,994,593)	25,864,439
Advances from Program fund		(7,204,756)	(3,269,491)
Deposit payables		(47,936)	(82,376)
Provision for retirements benefits paid	11	(1,919,739)	(2,366,657)
<b>Net cash from (used in) operating activities</b>		<b>(132,547,461)</b>	<b>59,624,305</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>			
Interest received		12,096,512	9,218,331
(Increase) decrease in current investments		81,998,806	(73,293,269)
Purchase of property and equipment	7	(68,574,540)	(124,824,379)
<b>Net cash from (used in) investing activities</b>		<b>25,520,778</b>	<b>(188,899,317)</b>
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>			
Repayment of long-term loan	9	(2,309,417)	(2,309,417)
<b>Net cash used in financing activities</b>		<b>(2,309,417)</b>	<b>(2,309,417)</b>
<b>Net decrease in cash and cash equivalents</b>		<b>(109,336,100)</b>	<b>(131,584,429)</b>
Cash and cash equivalents at beginning of year		193,017,166	324,598,917
Effects of exchange rate changes on balances held in foreign currencies		42,862	2,678
<b>Cash and cash equivalents at end of year</b>	4	<b>83,723,928</b>	<b>193,017,166</b>

## Statements of financial position classified by funds

	Note	Unrestricted Current fund	Unrestricted fund-General	Restricted funds		Unrestricted fund	Capital funds - Property and equipment	Restricted funds - General reserve	Agency fund	Total	
				Endowment fund	Program fund					Integrated facility management	31 December 2019
<b>ASSETS</b>											
<b>Current assets</b>											
Cash and cash equivalents	4	339,051	2,479,671	52,838	5,020,994	3,569,868	50,598,546	21,662,960	-	83,723,928	193,017,166
Current investments	5	96,621,747	-	143,390,603	74,425,394	-	110,482,429	188,352,190	-	613,272,363	695,271,169
Accounts receivable	6	6,761,485	2,518,151	-	36,963,442	8,143,036	-	-	-	54,386,114	54,134,577
Receivables from Program fund		-	-	-	72,799,553	-	-	-	-	72,799,553	55,420,809
Assets held on behalf of donors	10	-	-	-	-	-	-	-	377,243,421	377,243,421	365,438,895
Other current assets		12,378,920	155,006	3,534	5,513,392	676,407	-	1,707,021	-	20,434,280	21,254,781
<b>Total current assets</b>		<b>116,101,203</b>	<b>5,152,828</b>	<b>143,446,975</b>	<b>194,722,775</b>	<b>12,389,311</b>	<b>161,080,975</b>	<b>211,722,171</b>	<b>377,243,421</b>	<b>1,221,859,659</b>	<b>1,384,537,397</b>
<b>Non-current assets</b>											
Restricted deposits of financial institutions	5	-	-	-	15,175,000	-	-	-	-	15,175,000	15,175,000
Property and equipment	7	-	-	-	-	-	687,253,240	-	-	687,253,240	727,161,292
<b>Total non-current assets</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>15,175,000</b>	<b>-</b>	<b>687,253,240</b>	<b>-</b>	<b>-</b>	<b>702,428,240</b>	<b>742,336,292</b>
<b>Total assets</b>		<b>116,101,203</b>	<b>5,152,828</b>	<b>143,446,975</b>	<b>209,897,775</b>	<b>12,389,311</b>	<b>848,334,215</b>	<b>211,722,171</b>	<b>377,243,421</b>	<b>1,924,287,899</b>	<b>2,126,873,689</b>
<b>LIABILITIES AND FUND BALANCES</b>											
<b>Current liabilities</b>											
Accounts payable and accrued expenses	8	96,923,734	3,907,828	-	38,222,250	9,130,337	1,568,398	-	-	149,752,547	188,747,140
Advances from Program fund		-	-	-	170,667,364	-	-	-	-	170,667,364	177,872,120
Current portion of long-term loan	9	-	-	-	-	-	2,309,417	-	-	2,309,417	2,309,417
Deposit payables		1,022,383	1,245,000	-	-	3,258,974	-	-	-	5,526,357	5,574,293
Amounts due to donors	10	-	-	-	-	-	-	-	377,243,421	377,243,421	365,438,895
<b>Total current liabilities</b>		<b>97,946,117</b>	<b>5,152,828</b>	<b>-</b>	<b>208,889,614</b>	<b>12,389,311</b>	<b>3,877,815</b>	<b>-</b>	<b>377,243,421</b>	<b>705,499,106</b>	<b>739,941,865</b>
<b>Non-Current liabilities</b>											
Long-term loan	9	-	-	-	-	-	20,784,750	-	-	20,784,750	23,094,167
Provision for retirement benefits	11	18,155,086	-	-	1,008,161	-	-	-	-	19,163,247	15,902,734
<b>Total non-current liabilities</b>		<b>18,155,086</b>	<b>-</b>	<b>-</b>	<b>1,008,161</b>	<b>-</b>	<b>20,784,750</b>	<b>-</b>	<b>-</b>	<b>39,947,997</b>	<b>38,996,901</b>
<b>Total liabilities</b>		<b>116,101,203</b>	<b>5,152,828</b>	<b>-</b>	<b>209,897,775</b>	<b>12,389,311</b>	<b>24,662,565</b>	<b>-</b>	<b>377,243,421</b>	<b>745,447,103</b>	<b>778,938,766</b>
<b>Fund balances</b>											
Endowment fund balances		-	-	143,446,975	-	-	-	-	-	143,446,975	142,724,615
Capital funds balances		-	-	-	-	-	823,671,650	-	-	823,671,650	865,159,658
General reserve		-	-	-	-	-	-	211,722,171	-	211,722,171	340,050,650
<b>Total fund balances</b>		<b>-</b>	<b>-</b>	<b>143,446,975</b>	<b>-</b>	<b>-</b>	<b>823,671,650</b>	<b>211,722,171</b>	<b>-</b>	<b>1,178,840,796</b>	<b>1,347,934,923</b>
<b>Total liabilities and fund balances</b>		<b>116,101,203</b>	<b>5,152,828</b>	<b>143,446,975</b>	<b>209,897,775</b>	<b>12,389,311</b>	<b>848,334,215</b>	<b>211,722,171</b>	<b>377,243,421</b>	<b>1,924,287,899</b>	<b>2,126,873,689</b>

## Statements of revenues and expenses classified by funds

	Note	Unrestricted Current fund	Unrestricted fund-General	Restricted funds		Unrestricted fund Integrated Facility Management	Capital fund - property and equipment	Restricted fund - General reserve	Total	
				Endowment fund	Program fund				31 December 2019	31 December 2018
<b>INCOME</b>										
<i>(in Bath)</i>										
Tuition income and other fees		319,104,661	-	-	11,312,785	-	-	-	330,417,446	426,265,281
Research grants and contract service income		724,528	250,500	-	91,407,043	-	-	-	92,382,071	101,875,910
Support operations income		2,068,522	94,179,783	-	-	96,785,868	-	-	193,034,173	210,813,715
Training income		-	675,000	-	127,663,422	-	-	-	128,338,422	132,040,252
Other contributions		3,344,322	893,002	626,521	590,810	-	1,751,995	-	7,206,650	8,758,909
Faculty secondments income		-	15,849,385	-	-	-	-	-	15,849,385	24,129,190
<b>Total income</b>		<b>325,242,033</b>	<b>111,847,670</b>	<b>626,521</b>	<b>230,974,060</b>	<b>96,785,868</b>	<b>1,751,995</b>	<b>-</b>	<b>767,228,147</b>	<b>903,883,257</b>
<b>EXPENSES</b>										
Employee benefit expenses	12	255,773,576	51,430,748	-	83,026,364	15,323,881	-	-	405,554,569	402,648,182
Materials, supplies and services expenses		61,990,653	8,092,024	187,913	90,419,433	22,054,646	-	-	182,744,669	166,146,013
Contracted services expenses		38,142,816	22,346,623	-	35,357,830	75,529,595	-	-	171,376,864	190,789,890
Communication and travel expenses		9,479,531	2,867,022	-	20,078,747	665,862	-	-	33,091,162	34,207,817
Utilities and insurance expenses		(787,109)	(481,199)	-	2,649,238	47,165,647	-	-	48,546,577	62,777,883
Faculty secondments expenses		-	15,849,385	-	-	-	-	-	15,849,385	24,129,190
<b>Total expenses</b>		<b>364,599,467</b>	<b>100,104,603</b>	<b>187,913</b>	<b>231,531,612</b>	<b>160,739,631</b>	<b>-</b>	<b>-</b>	<b>857,163,226</b>	<b>880,698,975</b>
<b>Income over (under) expenses before allocation</b>		<b>(39,357,434)</b>	<b>11,743,067</b>	<b>438,608</b>	<b>(557,552)</b>	<b>(63,953,763)</b>	<b>1,751,995</b>	<b>-</b>	<b>(89,935,079)</b>	<b>23,184,282</b>
Allocation costs		(100,711,781)	33,280,390	-	-	67,431,391	-	-	-	-
<b>Income over (under) expenses</b>		<b>61,354,347</b>	<b>(21,537,323)</b>	<b>438,608</b>	<b>(557,552)</b>	<b>(131,385,154)</b>	<b>1,751,995</b>	<b>-</b>	<b>(89,935,079)</b>	<b>23,184,282</b>
Depreciation	7	-	-	-	-	-	(108,439,730)	-	(108,439,730)	(99,841,086)
<b>Income over (under) expenses including depreciation</b>		<b>61,354,347</b>	<b>(21,537,323)</b>	<b>438,608</b>	<b>(557,552)</b>	<b>(131,385,154)</b>	<b>(106,687,735)</b>	<b>-</b>	<b>(198,374,809)</b>	<b>(76,656,804)</b>
<b>NON OPERATING INCOME AND EXPENSES</b>										
Interest income		10,409,910	2,075,935	283,752	-	(1,624,584)	-	2,871,272	14,016,285	14,818,796
Gains (losses) on exchange rate		(1,578,836)	(656,715)	-	-	-	-	-	(2,235,551)	872,151
<b>Income over (under) expenses</b>		<b>70,185,421</b>	<b>(20,118,103)</b>	<b>722,360</b>	<b>(557,552)</b>	<b>(133,009,738)</b>	<b>(106,687,735)</b>	<b>2,871,272</b>	<b>(186,594,075)</b>	<b>(60,965,857)</b>

# Notes to the financial statements For the year ended 31 December 2019

## 1. General information

The Asian Institute of Technology, the "Institute", is a regional post-graduate institution. The Institute operates on a not-for-profit basis. The Institute is located at the following addresses

Thailand: 58 Moo 9 Km. 42 Paholyothin Highway, Klong Luang, Pathumthani, Thailand.

Branch: Building B3, University of Transport and Communications, Lang Thuong Ward, Dong Da Dist., Hanoi, Vietnam

The principal activities of the Institute are providing programs in engineering, science, advanced technologies and related management and administration.

## 2. Basis of preparation of the financial statements

The financial statements are prepared in accordance with Thai Financial Reporting Standard for Non-publicly Accountable Entities (TFRS for NPAEs) and guidelines promulgated by the Federation of Accounting Professions and the Institute's accounting policy.

In addition, the Institute has complied with Thai Financial Reporting Standard for Publicly Accountable Entities as follows:

TFRS	Topic
TAS 7	Statement of Cash Flows

The financial statements are prepared and presented in Thai Baht, rounded in the notes to the financial statements to the nearest thousand unless otherwise stated. They are prepared on the historical cost basis except as stated in the accounting policies.

The preparation of financial statements in conformity with TFRS for NPAEs requires management to make judgements, estimates and assumptions that affect the application of the Company's accounting policies. Actual results may differ from these estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised prospectively.

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 and classified for accounting and reporting purposes into funds, which are in accordance with activities or 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. The governing board retains full control of unrestricted funds to use in achieving institutional objectives.

## THESE NOTES FORM AN INTEGRAL PART OF THE FINANCIAL STATEMENTS.

The financial statements issued for Thai statutory and regulatory reporting purposes are prepared in the Thai language. These English language financial statements have been prepared from the Thai language statutory financial statements, and were approved and authorised for issue by the President of the Institute on 28 May 2020.

The purposes and objects of the funds are as follows:

### UNRESTRICTED CURRENT FUND (FUND 10)

This fund is the operating account of most of the academic and administrative units of the Institute. It is available for general operating purposes without restrictions, such as might be imposed by a grant agency or donor.

### UNRESTRICTED FUND-GENERAL (FUND 21)

This fund is the operating account of support units that offer academic-related services and certain administrative functions.

### RESTRICTED ENDOWMENT FUND (FUND 22)

The Endowment Fund is used where donors have stipulated, as a condition of their gift, either the principal is to be maintained inviolate and in perpetuity or used along with the income to meet the objectives of the endowment.

### RESTRICTED PROGRAM FUND (FUND 30 AND FUND 31)

The program fund includes academic and non-academic programs. Non-academic programs is subject to restrictions by donors or other agencies limiting its use for funding specific research projects, conference, short courses, workshops or similar projects.

### UNRESTRICTED FUND-INTEGRATED FACILITY MANAGEMENT (FUND 24)

This fund includes the operating account of the Institute for asset maintenance and for the provision of the Institute's non-core operations, mainly on integrated facilities management service.

### RESTRICTED FUND-GENERAL RESERVE (FUND 23)

The annual surplus of the unrestricted funds and the excess of the activities under Sponsored Program fund that were completed during the year, are transferred to the General Reserve each year. General Reserve funds are held for future use.

### CAPITAL FUND (FUND 41)

This fund holds the Institute's property and equipment, including library books.

### AGENCY FUND (ACCOUNTED FOR AS FUND 50 AND FUND 60)

These funds are held on behalf of donors and other agencies and are disbursed in accordance with their instructions. The Institute has no title to these funds and the associated revenues and expenses have been excluded from the statement of revenues and expenses. The assets held on behalf of these others have been disclosed in the statement of financial position together with the associated liability for the same amount to these other parties.

### 3. Significant accounting policies

The accounting policies set out below have been applied consistently to all periods presented in these financial statements.

#### (A) BASIS OF PREPARATION

The financial statements of the Institute comprise the funds of the Institute and those of its branch to which it holds title.

The Branch is an autonomous or semi-autonomous operating entity within an organisation which does not have a separate legal identity. The Branch has separately identifiable assets, liabilities, cash flows, revenues and expenses over which it has accountability.

#### (B) FOREIGN CURRENCIES TRANSACTIONS

Transactions in foreign currencies are translated into Thai Baht at the foreign exchange rates ruling at the dates of the transactions.

Monetary assets and liabilities denominated in foreign currencies at the reporting date are translated to Thai Baht at the foreign exchange rates at that date. Gains or losses arising on translation are recognised in the statement of revenues and expenses.

Non-monetary assets and liabilities arising from foreign currency transactions are measured at cost in foreign currencies are translated to Thai Baht at the exchange rates at the dates of the transactions.

##### *Foreign branch*

The assets and liabilities of foreign branch are translated to Thai Baht at the foreign exchange rates ruling at the reporting date.

The revenues and expenses of foreign branch are translated to Thai Baht at rates approximating the foreign exchange rates ruling at the dates of the transactions.

Foreign exchange differences arising on translation are recognised in the statement of revenues and expenses.

#### (C) CASH AND CASH EQUIVALENTS

Cash and cash equivalents comprise cash balances, call deposits and highly liquid short-term investments.

#### (D) ACCOUNTS RECEIVABLES

Accounts receivable are stated at their invoice value less allowance for doubtful accounts.

Receivables from Program fund are unbilled receivables represented amount expected to be collected from donors.

The allowance for doubtful accounts is provided for inactive students. Bad debts are written off when incurred.

Bad debts recovered are recognised in other income in the statement of revenues and expenses.

#### (E) PROPERTY AND EQUIPMENT

##### *Owned assets*

Property and equipment are measured at cost less accumulated depreciation and losses on decline in value.

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labour, any other costs directly attributable to bringing the assets to a working condition for their intended use, the costs of dismantling and removing the items and restoring the site on which they are located and capitalised borrowing costs. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.

Donated assets are stated at cost or reasonable market price as deemed cost. Subsequently they are stated at cost less accumulated depreciation.

When parts of an item of property and equipment have different useful lives, they are accounted for as separate items (major components) of property and equipment.

Any gains and losses on disposal of an item of property and equipment are determined by comparing the proceeds from disposal with the carrying amount of property and equipment, and are recognised net within other income in the statements of revenues and expenses.

##### *Subsequent costs*

The cost of replacing a part of an item of property and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied within the part will flow to the Institute, and its cost can be measured reliably. The carrying amount of the replaced part is derecognised. The costs of the day-to-day servicing of property and equipment are recognised in the statements of revenues and expenses as incurred.

##### *Depreciation*

Depreciation is calculated based on the depreciable amount which excludes freehold land and assets under construction, which is the cost of an asset, or other amount substituted for cost, less its residual value.

Depreciation is charged to the statement of revenues and expenses on a straight-line basis over the estimated useful lives of each component of an item of property and equipment. The estimated useful lives are as follows:

Campus development	10 years
Building improvement	10 years
Buildings	40 years
Furniture and equipment	5,10 years
Transportation equipment	8 years
Library assets	6 years

#### (F) LOSSES ON DECLINE IN VALUE

The carrying amounts of the Institute's assets are reviewed at each reporting date to determine whether there is any indication of a permanent decline in value. If any such indication exists, the assets' recoverable amounts are estimated. A loss on decline in value is recognised if the carrying amount exceeds its recoverable amount. A loss on decline in value is recognised in the statement of revenues and expenses.

#### (G) PAYABLES

Payables are stated at cost.

Advances from Program fund represents the amount of advance billing, for which the Institute had not rendered the service under the conditions stipulated in the contracts. Income received in advanced is stated at cost.

#### (H) PROVISIONS

A provision is recognised if, as a result of a past event, the Institute has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by the best estimate method.

##### *Provision for retirement benefits*

Provision for retirement benefits are recognised using the best estimate method at the reporting date. The Institute derecognises the provision when actual payment is made.

##### *Defined contribution plans*

Obligations for contributions to the Social Securities Fund, Provident Fund and Insured Saving Fund are recognised as expenses in the statement of revenues and expenses as incurred.

#### (I) REVENUE

##### *Tuition income and other fees*

Tuition income and other fees are recognised on an accrual basis.

##### *Research Grant and Contract service income*

Research grant and contract service income received from Donors/Sponsors under Sponsored Program Fund (Fund 30) is recognised when service are rendered and recognised in proportion to the stage of completion of the project.

##### *Support operations income*

Support operations income are recognised as goods or services are provide.

##### *Training income*

Training income are recognised as services are provided.

##### *Other contributions (donations)*

Due to the absence of any obligation on the donor to make the donation and the uncertain nature of the timing of receipt, donations have to be recognised on a cash basis.

##### *Contribution in kind (Faculty secondments income)*

These represent services donated to the Institute in the form of a secondment of faculty or staff and where the value is estimated based on the approved Institute professional salary scale. The amounts are recognised as revenues and expenses in the unrestricted general fund.

##### *Interest income and other income*

Interest income and other income are recognised as it accrues.

#### (J) OPERATING LEASES

Payments made under operating leases are recognised on a straight-line basis over the term of the lease. Lease incentives received are recognised in the statement of revenues and expenses as an integral part of the total lease expense, over the term of lease.

#### (K) INCOME TAX

No income tax provision is made in the financial statements as the Institute is exempt from payment of income tax in accordance with the notification issued in the Royal Gazette dated 25 October, 2510 B.E. (1967).

Except for services rendered by the Conference Center, the Institute has been exempted from Value Added Tax (VAT), under Section 4(4) of the Royal Decree issued under the Revenue Code governing exemption from Value Added Tax (No. 239), B.E. 2534 which was additionally amended under the Royal Decree (No. 254) B.E. 2535.

## 4. Cash and cash equivalents

	2019	2018
	(in thousand Baht)	
Cash at banks – current accounts	8,589	6,295
Cash at banks – saving accounts	26,394	154,085
Highly liquid short-term investments	48,741	32,637
<b>Total</b>	<b>83,724</b>	<b>193,017</b>

## 5. Current investments

	2019	2018
	(in thousand Baht)	
Fixed deposits at financial institutions	628,447	710,446
Less Deposits pledged as collateral	(15,175)	(15,175)
<b>Net</b>	<b>613,272</b>	<b>695,271</b>

At 31 December 2019, fixed deposits of Baht 15.2 million (2018: Baht 15.2 million) were pledged as collateral for bank overdraft facility and outstanding letters of guarantee issued by the same financial institutions (see Note 14).

## 6. Accounts receivable

	2019	2018
	(in thousand Baht)	
Tuition and other fees	24,788	22,747
Others (mainly from research grants and contract service income)	44,127	45,516
	<b>68,915</b>	<b>68,263</b>
Less allowance for doubtful accounts	(14,529)	(14,128)
<b>Net</b>	<b>54,386</b>	<b>54,135</b>
<b>Doubtful debt expenses for the year (reversal)</b>	<b>401</b>	<b>(1,189)</b>

## 7. Property and equipment

	Campus development	Building and building improvement	Furniture and equipment	Transportation equipment	Library assets	Assets under construction	Total
<i>(in thousand Baht)</i>							
<b>COST</b>							
At 1 January 2018	454,272	988,638	510,855	21,912	7,749	39,702	2,023,128
Additions	4,092	-	33,389	300	466	86,577	124,824
Disposals	-	-	(139)	-	-	(12)	(151)
Write-off	-	-	(4,532)	(1,411)	-	-	(5,943)
Transfer	72,367	29,417	2,071	128	-	(103,983)	-
Foreign currency translation	-	(16)	(60)	(19)	-	-	(95)
<b>At 31 December 2018 and 1 January 2019</b>	<b>530,731</b>	<b>1,018,039</b>	<b>541,584</b>	<b>20,910</b>	<b>8,215</b>	<b>22,284</b>	<b>2,141,763</b>
Additions	29,382	-	26,790	-	443	11,959	68,574
Transfers	7,982	-	167	-	-	(8,149)	-
Foreign currency translation	-	(163)	(279)	(87)	-	-	(529)
<b>At 31 December 2019</b>	<b>568,095</b>	<b>1,017,876</b>	<b>568,262</b>	<b>20,823</b>	<b>8,658</b>	<b>26,094</b>	<b>2,209,808</b>
<b>ACCUMULATED DEPRECIATION</b>							
At 1 January 2018	176,811	714,042	414,235	13,529	2,173	-	1,320,790
Depreciation charge for the year	41,405	22,857	32,558	1,792	1,229	-	99,841
Write-off	-	-	(4,532)	(1,411)	-	-	(5,943)
Foreign currency translation	-	(14)	(53)	(19)	-	-	(86)
<b>At 31 December 2018 and 1 January 2019</b>	<b>218,216</b>	<b>736,885</b>	<b>442,208</b>	<b>13,891</b>	<b>3,402</b>	<b>-</b>	<b>1,414,602</b>
Depreciation charge for the year	48,156	23,546	33,765	1,619	1,354	-	108,440
Foreign currency translation	-	(141)	(259)	(87)	-	-	(487)
<b>At 31 December 2019</b>	<b>266,372</b>	<b>760,290</b>	<b>475,714</b>	<b>15,423</b>	<b>4,756</b>	<b>-</b>	<b>1,522,555</b>
<b>NET BOOK VALUE</b>							
<b>At 31 December 2018</b>	<b>312,515</b>	<b>281,154</b>	<b>99,376</b>	<b>7,019</b>	<b>4,813</b>	<b>22,284</b>	<b>727,161</b>
<b>At 31 December 2019</b>	<b>301,723</b>	<b>257,586</b>	<b>92,548</b>	<b>5,400</b>	<b>3,902</b>	<b>26,094</b>	<b>687,253</b>

The gross amount of fully depreciated property and equipment that was still in use as at 31 December 2019 amounted to Baht 705 million (2018: Baht 685 million).

## 8. Accounts payable and accrued expenses

	2019	2018
	(in thousand Baht)	
Advance from students	62,575	70,419
Accounts payable from operation	22,152	46,915
Accrued staff expenses	30,876	37,173
Provision for insured saving fund tax	9,365	9,365
Accrued operating expenses	18,972	9,988
Withholding tax payable	3,665	5,146
Others	2,148	9,741
<b>Total</b>	<b>149,753</b>	<b>188,747</b>

## 9. Loan

In August 2017, the institute has a loan from a local company for building construction, an interest rate of 7.15% per annum. The repayment period is June 2018 to December 2029.

## 10. Assets held on behalf of, and amounts due to, donors

The agency fund represents amounts held on behalf of donors and other agencies and are disbursed in accordance with their instructions. The Institute has no title to these funds or the associated revenues and expenses. The fund balances as at 31 December 2019 and 2018 and revenues and expenses for the years then ended were as follows:

	2019	2018
	(in thousand Baht)	
Funds received from donors	313,991	528,192
Application of funds		
● Salaries and other benefits	5,315	4,283
● Scholarships	283,140	617,438
● Contracted services	22,509	29,360
● Communication, travel and utility expenses	1,775	2,069
Total funds applied	312,739	653,150
<b>Income over (under) expenses for the year</b>	<b>1,252</b>	<b>(124,958)</b>
Assets held on behalf of donors		
Cash and deposits at financial institutions	118,167	147,642
Current investments	227,008	185,883
Accounts receivable and other current assets	32,068	31,914
<b>Total assets held on behalf of donors</b>	<b>377,243</b>	<b>365,439</b>
<i>Balance at 1 January:</i>		
● Amounts due to donors	134,982	264,238
● Amounts due to (from) donors - AITVN	21	(112)
Income over (under) expenses for the year	1,252	(124,958)
Transfers to other funds	(4,866)	(4,147)
Foreign currency translation	2	(18)
Balance at 31 December	131,391	135,003
Other liabilities	245,852	230,436
	<b>245,852</b>	<b>230,436</b>
<b>Total amounts due to donors</b>	<b>377,243</b>	<b>365,439</b>

## 11. Provision for retirement benefits

	2019	2018
	(in thousand Baht)	
At 1 January	15,903	17,339
Additions	5,180	930
Paid	(1,920)	(2,366)
<b>At 31 December</b>	<b>19,163</b>	<b>15,903</b>

The addition of provision for retirement benefits in 2019 was

primarily due to the impact from the amended Labor Protection Act (on 5 April 2019) which requires an employer to provide an additional severance payment to a terminated employee. The employee who is terminated after having been employed by the same employer for an uninterrupted period of twenty years or more, shall receive severance payment of 400 days of wages at the most recent rate.

## 12. Employee benefit expenses

	2019	2018
	(in thousand Baht)	
Wages and salaries	372,011	372,984
Contribution to provident fund	22,056	21,143
Social security costs	5,385	5,356
Personal income tax of employees	4,528	1,271
Others	1,575	1,894
<b>Total</b>	<b>405,555</b>	<b>402,648</b>

### PROVIDENT FUND

The defined contribution plan comprises a provident fund established by the Institute for its employees. Membership to the fund is required. Contributions are made monthly by the employees at the rate of 3% to 15% of their basic salaries and by the Institute at the rate of 5% to 7% of the employees' basic salaries. The provident fund is registered under the Securities and Exchange Commission (SEC) and is managed by a licensed Fund Manager (TISCO Assets Management Co., Ltd.).

## 13. AIT Center in Vietnam (AITVN)

The Institute has a branch operation in Hanoi, Vietnam of which the purpose of its operation is to:

- Educate and train students, technocrats, business managers and other professionals; and
- Organise research outreach and development activities as well as the transfer of technologies as required by the economic development of the country.

The results of the operations which have been included as part of the results of the Unrestricted (Fund 10) and Unrestricted-General (Fund 21), Restricted Fund - Program Fund (Fund 30), and Capital Fund (Fund 41) were summarised below:

The agreements are summarised as follows:

Type of services	Parties	Contract date	Contract duration	Contract period
Cleaning service	SN Service Solutions Co., Ltd.	1 January 2020	3 years	31 December 2022
Landscape management service	Green Tree Arborist Co., Ltd.	1 January 2020	3 years	31 December 2022
Technical maintenance included preventive and collective maintenance of academic building, residence and field zone	SN Service Solutions Co., Ltd.	1 January 2020	3 years	31 December 2022
Management of dining and catering service	SN Service Solutions Co., Ltd.	1 June 2018	2 years 5 months	31 October 2020
Management of hotel service	VP Service Management Co., Ltd.	1 November 2017	3 years	31 October 2020
Security service	Securitas Security Guard (Thailand) Limited	1 October 2017	2 years 4 months	31 January 2020
		Renew contracts on 1 February 2020	3 years	31 January 2023

	2019	2018
	(in thousand Baht)	
Income	34,413	54,911
Expenses	(45,667)	(62,172)
<b>Income under expenses</b>	<b>(11,254)</b>	<b>(7,261)</b>

Financial statements for the years ended 31 December 2019 and 2018 have been prepared and approved by management of the branch.

Significant accounting transactions between the Institute and its branch were eliminated from these financial statements.

## 14. Commitments

### LAND LEASE

The Institute successfully renewed the lease with the Thammasat University on 10 June 2005. The new lease also contains a Memorandum of Understanding between the Institute and Thammasat University, concerning academic co-operation, as an integral part of the new lease agreement to lease land for 30 years from 19 January 2001 to 18 January 2031 in the amount of Baht 600,000; on expiry of the lease agreement it will give the Institute the right to continue to lease the land. However, the consideration for this discount is that should the lease not be renewed and the land reverts to Thammasat University (University), so all buildings and infrastructure on the Institute's site will become the property of the University.

Furthermore, the lease is contingent on a Memorandum of Understanding (MOU) between the University and the Institute. The MOU provides that the Institute will make available and fund a total of sixty scholarships over the thirty-year life of the land lease agreement. Scholarships made in accordance with the MOU will cover tuition fees for qualified lecturers from the University, selected by the University, to pursue a Doctoral degree at the Institute. At 31 December 2019, the scholarship commitment amounted to totaling Baht 76.5 million (2018: Baht 76.5 million).

### SERVICE AGREEMENT

The Institute has entered into service agreements with various companies, some of which had expired in 2019 and beginning of 2020. Therefore, the Institute has entered into new agreements with the previous parties to receive various services and are obligated to pay service fees at the rates specified in the new agreements. The agreements can be extended by notifying in writing before the end of the original contract period which are specified in the agreements.

As at 31 December 2019 and 2018, The Company had:

	2019	2018
	(in thousand Baht)	
Non-cancellable operating lease commitments		
Within 1 year	4,068	5,452
1-5 years	4,068	-
<b>Total</b>	<b>8,136</b>	<b>5,452</b>

#### BANK GUARANTEES

At 31 December 2019, bank guarantees which were issued by the bank on behalf of the Institute in respect of bank overdraft facility and certain performance bonds as required in the normal course of operations of the Institute amounted to totalling Baht 0.46 million (2018: Baht 0.46 million). These bank guarantees were collateralised by Institute's fixed deposits as discussed in Note 5.

#### OTHERS

At 31 December 2019, the Institute had obtained credit facilities for bank overdraft totaling Baht 5 million (2018: Baht 5 million) which were collateralised by Institute's fixed deposits as discussed in Note 5. Bank overdrafts bore interest at the rate of fixed deposits plus 1.25 % per annum (2018: fixed deposits plus 1.25% per annum).

## 15. Contingent liabilities

#### LABOUR CASE

At 31 December 2018, the Institute had labour case regarding the breach of employment contracts and in process at Central Labour Court. The Central Labour Court rendered its judgment to dismiss on 30 January 2018. However, the plaintiff has appealed to the Court on 11 May 2018. On 5 November 2018, The Central Labour Court verdict has ordered the Institute to pay wages the amount of Baht 0.81 million and the Institute has already paid the amount regarding as the Court's verdict. Although, the plaintiff disagreed and submitted a request to exercise the right to appeal to the Supreme Court to consider the special case on other matter on 8 February 2019. However, on 28 May 2019, the Supreme Court rendered the decision that the request was not permitted and its judgment to dismiss.

At 31 December 2019, the Institute had 3 labour cases regarding the breach of employment contracts and on process at Labour Court of Region 1. The Labour Court of Region 1 had considered the indictment on 9 December and 24 December 2019 and will make an appointment for consideration again in June 2020.

The management believes that the ultimate outcome cannot be presently and reliably determined or quantified. Thus, no provision is recorded in the accompanying financial statements as at 31 December 2019.

## 16. Non-adjusting events after the reporting date

In March 2020, in an effort to contain the impact of COVID-19, provincial governments decided to temporarily shut down school, university and training center. As a result, the Institute has changed to teach via on-line system and is continuously taking corrective actions to address this situation in order to lessen the impact on the institute assets and operations. The potential impact from this situation has not yet been reflected in the financial statements.

## 17. Reclassification of accounts

Certain accounts in the 2018 financial statements have been reclassified to conform to the presentation in the 2019.

	2018		
	Before reclassification	Reclassification	After reclassification
	(in thousand Baht)		
<i>Statements of financial position</i>			
Accounts payable and accrued expenses	214,150	(25,403)	188,747
Current portion of long-term loan	-	2,309	2,309
Long-term loan	-	23,094	23,094
<b>Total</b>			-

The new classification is more appropriate to the institute's business.

## Faculty Members

### HONORARY FACULTY

The Institute is deeply grateful that HRH Princess Maha Chakri Sirindhorn saw fit to share her expertise and experience with faculty, staff, and students as an Honorary Faculty Member. In this singular position, Her Royal Highness is associated with the Remote Sensing and Geographic Information Systems Academic Program.



### EMERITUS PROFESSORS

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