



$\label{lem:copyright} \ @\ 2023\ Asian\ Institute\ of\ Technology.$ All rights reserved.

POSTAL ADDRESS: STREET ADDRESS:

P.O. Box 4, Klong Luang 58 Moo 9 Klong Nueng

Pathumthani 12120 Km. 42 Paholyothin Highway

Thailand Klong Luang, Pathumthani 12120

www.ait.ac.th Thailand

This Annual Report was compiled and produced by Karma Rana, Izel Ann Mojado-Dante, Namita Sravat, Sanjeev Jayasinghe, Shawn Kelly, Amalia Canullas, M Zia Islam and Sarina Pradhan Thapa with the technical and editorial support of the Office of Public Affairs (OPA) and the involvement of all AIT employees. The report was edited by Dr. Paul Bruthiaux (External Editor), and designed by Nadhika Mendhaka. AIT wishes to thank the many people who rendered their assistance in preparing this report.

Table of Contents





Chairman's Statement

As we reflect on the year 2022, we are reminded of the significant transitions and accomplishments that have shaped AIT's journey It was a year of change, marked by the passing of the baton from former President Dr. Eden Woon to Professor Kazuo Yamamoto, who assumed the role of Interim President on 1st September 2022. We express our gratitude to Dr. Woon for his dedicated service and leadership, and we warmly welcome Professor Yamamoto as he embarks on this new chapter of leadership at AIT.

Throughout the year, AIT has remained highly active and engaged with our partners across various domains. The annual report showcases our vibrant collaborations and the impactful work accomplished in collaboration with our esteemed partners. These collaborations have been instrumental in expanding our research capabilities, fostering knowledge exchange, and generating innovative solutions to address pressing global challenges.

I would like to express my sincere gratitude to the Executive Committee and Audit Committee for their invaluable contributions in vetting critical issues before they are presented to the Board of Trustees. Their diligent work and expertise ensure that AIT maintains the highest standards of governance and decision-making.

To our esteemed Trustees and partners, I extend my sincere gratitude for your unwavering support and commitment to AIT. Your invaluable contributions continue to strengthen our institution and propel us forward in our mission to be a leading institution for sustainability in the region. Together, we are making a tangible difference and shaping a better future for all.

Dr. Tongchat Hongladaromp

Chairman

AIT Board of Trustees



President's Message

I am delighted to present the AIT Annual Report for 2022, providing a comprehensive overview of our achievements, progress, and endeavors throughout the year

The year 2022 was a period of transition, during which I assumed the Interim Presidency following the tenure of former President Dr. Eden Woon until August 2022. We take great pride in acknowledging the collective efforts of our esteemed faculty, dedicated staff, talented students, and supportive partners who have contributed to another successful year at the Asian Institute of Technology.

The Annual Report highlights our endeavors in key thematic areas such as Climate Change, Smart Communities, Food-Energy-Water, Infrastructure, and Technology, Policy, and Society. I am delighted to share that AIT continued to establish strategic partnerships and collaborations with leading institutions, governments, and organizations. These alliances have enhanced our research capabilities, expanded academic programs, and provided valuable opportunities for knowledge exchanges and capacity building. Together, we strive to find innovative solutions and shape a more sustainable and resilient future.

Furthermore, I am immensely proud of our faculty and researchers who have made significant contributions to research and knowledge creation. Their dedication to advancing the frontiers of knowledge and addressing real-world challenges has positioned AIT as a hub for interdisciplinary research and expertise. I also wish to acknowledge the hard work and commitment of our students, who have shown exceptional resilience and adaptability amid ongoing global challenges. Their passion for learning, innovative thinking, and commitment to making a positive impact inspire us all. I have full confidence that they will emerge as future leaders, equipped with the knowledge and skills to tackle the complex sustainability issues ahead.

As we move forward, AIT remains unwavering in our commitment to fostering a sustainable and inclusive learning environment. We will continue to invest in our campus infrastructure, ensuring that we support our academic programs and research initiatives. Our ongoing efforts to transform AIT into a fully-fledged botanical garden, coupled with our commitment to achieving Net Zero emissions by 2030, exemplify our dedication to practicing what we teach.

I extend my heartfelt appreciation to the Board of Trustees, the Executive Committee, and all our stakeholders for their unwavering support and guidance. Together, we will strengthen AIT's position as a leading institution for sustainability in the region.

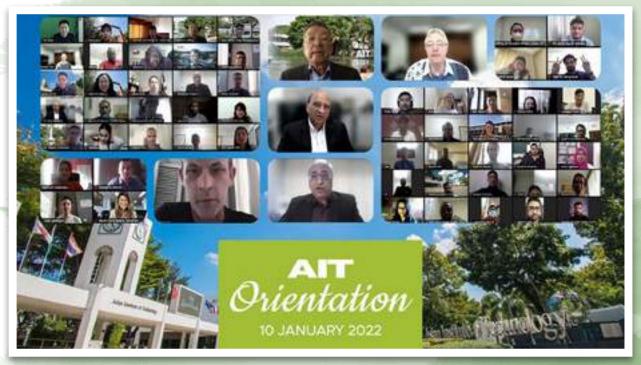
Professor Kazuo Yamamoto

Interim President

Asian Institute of Technology (AIT)

Year in Review

January



10 January 2022 - The Spring 2022 semester at AIT began with a virtual Institute-wide orientation to warmly welcome the many new students joining from near and far.



20 January 2022 - The Regional Resource Centre for Asia and the Pacific of AIT (RRC.AP - AIT) co-organized the 7th Interna-tionalInternational Forum on Sustainable Future of Asia with partners in Ja- panJapan for global participants to share knowledge and dialogue with a global audience on "Research for Societal Transforma-tionTransformation with Future Earth.".



14 January 2022 - A research paper by students and faculty members of AIT won Best Paper Award at the 10th Asian Society of Agricultural Economists (ASAE) International Conference held in Beijing, China.

February



11 February 2022 - With the theme of Equity, Diversity, and Inclusion: Water Unites Us, three AIT engineering students from three countries shared inspirational stories about their personal journey and research, which unite them as agents of change and acceleration of progress towards SDG6: Clean Water and Sanitation for All.



25 February 2022 - Industrial Engineering and Management AIT alumnus George Arulanantham once again received one of the highest accolades and was appointed Officer of the New Zealand Order of Merit (ONZM).



24 February 2022 - Anika Bushra, a master's student in Sustainable Energy Transition, gained enhanced understanding of renewable energy in Southeast Asian nations, solidifying her unwavering belief in its pivotal role in shaping the future of our planet following her internship with the Rockefeller Foundation's Power and Climate for Asia.



26 February 2022 - AIT signed an MoU with the University of Da Nang (UD), one of the top universities in Vietnam, in a hybrid ceremony attended virtually by diplomats and senior-level delegates from numerous locations in Vietnam and Thailand.



15 February 2022 - H.E. Mrs. C.A. Chaminda I. Colonne, Ambassador Extraordinary and Plenipotentiary of the Democratic Socialist Republic of Sri Lanka to the Kingdom of Thailand and AIT Board of Trustee paid a courtesy visit to AIT.

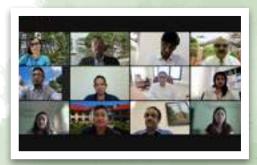
March



31 March 2022 - AIT President Dr. Eden Woon was invited to share his insights and experience as part of the training of leaders from Malaysian Universities on the International Dean's Course — Malaysian Chapter (MyIDC) Module 11: Internationalization.



8 March 2022 - Thanks to generous donations from its partners, for the Spring Semester starting in January, AIT initiated scholarships for master's programs that will allow four female students from Afghanistan to receive an education at AIT.



17 March 2022 - AIT and the Indian Institute of Technology (IIT) jointly launched the Dual Doctoral Degree Program via a virtual ceremony. The beginning of the AIT - IIT Dual Degree Program offered a preview of the two institution's academic strengths and many more possible collaborations.



8 March 2022 - The Embassy of France in Thailand, the United Nations Development Programme (UNDP) Thailand, and AIT organized a screening of a documentary film and panel discussion on 8 March to commemorate International Women's Day 2022.



25 March 2022 - The Food Innovation, Nutrition, and Health (FINH) and Food Engineering and Bioprocess Technology (FEBT) Academic Programs conducted a one-day workshop on the theme of Food Innovations & the Sustainable Development Goals (SDGs)" via a hybrid platform to inspire action towards achieving the SDGs.

April



29 April 2022 - The Thailand Board of Investment (BOI) announced earlier this year that it had granted AIT the status of Science and Technology Park. This will promote active collaboration between the industry and educational/research institutions and provide an opportunity for entrepreneurs to strengthen their capabilities in research and development.



2 April 2022 - On the occasion of World Water Day 2022, AIT in partnership with the Stockholm Environment Institute (SEI), the Sustainable Mekong Research Network (SUMERNET), Chulalongkorn University, and Thailand's Department of Groundwater Resources, organized a celebration to raise awareness of the importance of groundwater.



5 April 2022 - AIT organized a virtual panel discussion that brought together climate and policy experts from four South Asian countries: Bangladesh, India, Nepal, and Pakistan to discuss the IPCC Report 2022: Is it Code Red for South Asia?



19 April 2022 - The United Nations Development Programme (UNDP) and AIT signed a memorandum of understanding (MoU) to raise awareness and enhance knowledge of the SDGs and of their status in Thailand among the Thai public through studies, publications, and seminars.



25 April 2022 - AIT welcomed an APEX-level delegation from Pakistan's Water and Power Development Authority (WAPDA), signaling the resumption of a decade-long knowledge-sharing collaboration interrupted by the COVID-19 pandemic.



30 April 2022 - AIT signed an agreement with the United Nations Office for Outer Space Affairs (UN-OOSA) to become a Regional Support Office of the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER) program.

May



1 May 2022 - AIT maintained its position as a leader in addressing sustainable development and social impact in the region by meeting the UN's Sustainable Development Goals (SDGs). Despite the increasing number of competing universities from 1,107 in the previous year, AIT maintained its overall rank of 101-200 out of 1,406 universities from 106 countries and regions.



6 May 2022 - AIT was awarded five-star ratings in four core categories and one in learning environment by Quacquarelli Symonds (QS) University Rankings, one of the world's leading higher education evaluation agencies.



20 May 2022 - AIT resumed its in-person graduation ceremony after over two years of restrictions due to the COVID-19 pandemic. 183 students from 20 different countries graduated at this 137th graduation ceremony.



8 May 2022 - AIT Gender and Development Studies (GDS) alumna (class of 2011) Mrs. May Sabe Phyu was awarded the Franco-German Prize titled Human Rights and the Rule of Law in 2021 by the French and German embassies in Myanmar for her lifelong commitment and contribution to women's rights in Myanmar.



27 May 2022 - AIT and the United Nations Office for Project Services (UNOPS) signed an MoU to collaborate on research and development exchanges, capacity building, gender inclusivity and equality, employment and internship opportunities for students working in infrastructure resilience and sustainable development in the Asia region.



16 May 2022 - AAIT and the Thailand Institute of Scientific and Technological Research (TISTR) signed an MoU to develop partnership activities in line with their current mission and objectives.

June



5 June 2022 - AIT organized an event to celebrate World Environment Day, during which AIT President Dr. Eden Y. Woon reaffirmed AIT's goal of becoming a sustainable campus within the next five years.



10 June 2022 - AIT and Christiani & Nielsen Energy Solutions Co., Ltd. (CNES) signed an MOU focusing on Research & Development and Electrical Energy Generation in Agrivoltaic Solar Farming.



20 June 2022 - AIT Alumna Prof. Nguyen Minh Thuy received the 2021 Kovalevskaya Award, a prestigious annual award for female scientists with outstanding research achievements in applied sciences for her career contributions to Vietnam's national development and scientific community.



21 June 2022 - AIT successfully installed water heating systems and enhanced air-conditioning capabilities in over 70% of student housing units. All campus accommodations are now equipped with an enhanced WIFI system, thus providing students with a more comfortable campus life.



23 June 2022 - AIT, Siam Commercial Bank (SCB), Microsoft Thailand, and the Digital Economy Promotion Agency (DEPA) signed an MoU to collaborate on a Digital Manpower Development program to develop and prepare future talent in AI.

July



27 July 2022 - After serving as an essential quarantine home to more than 600 people over the past two years, AIT's Organizational Quarantine (OQ) was formally closed.



20 July 2022 - AIT alumnus Prof. Shabbir H. Gheewala and three AIT faculty members: Emeritus Prof. Dennes T. Bergado, Prof. Mukand S. Babel, and Prof. Sangam Shrestha of the School of Engineering and Technology have been recognized among the top five scientists in Environmental Sciences in Thailand in the first edition of the top scientist ranking by Research.com.



19 July 2022 - Students from various universities, including AIT, shared their innovations to provide solutions to the problems faced by the elderly and people with disabilities in digitized time at the SDG Open Hack Bangkok 2022 organized by the AIT Entrepreneurship Center.



12 July 2022 - AIT organized an online discussion panel to present initiatives undertaken during the first four years of the prestigious First Bangabandhu Chair highlighting accomplishments in knowledge advancement, collaboration, and knowledge dissemination in accordance with the SDGs for the people, the planet, and peace.



29 July 2022 - The Food Innovation, Nutrition, and Health (FINH) academic program at AIT along with its 15 consortium partners co-organized a FOODI Info Day and Expert Workshop on Smart and Innovative Processing Towards Safe and Sustainable Food Systems.



27 July 2022 - AIT community members now have a new space for recreational and physical activities within the campus. The Wellness Park, a multipurpose recreational area, was inaugurated by AIT President Dr. Eden Woon on 27 July 2022.

August



4 August 2022 - The AIT Board of Trustees Meeting was held in the Robert B Banks Auditorium (AIT Conference Center), chaired by Dr. Tongchat Hongladaromp. The meeting took place in person after years of Covid-19 restrictions, with very high participation, including overseas members. Dr. Hongladaromp announced the appointment of Prof. Kazuo Yamamoto as the new interim President, effective 1 September 2022.



8 August 2022 - AIT welcomed more than 400 new students during a hybrid orientation event held in the AIT Conference Center. Over 250 new students attended the event in person.



11 August 2022 - Three Dual Degree Master's students, Ms. Wangmo Ghalley, Mr. Kasun Sahabandu, and Ms. Avalokita Tuladhar from AIT left Thailand for the United States on 10 August 2022 to continue their Master's studies at Colorado State University in Fort Collins, Colorado.



12 August 2022 - - Following the MoA signed between AIT and the Punjab Resource Management Program Unit (PRMPU), Government of Punjab, Pakistan in June 2022, the first international training program on Project Monitoring and Impact Evaluation took place on 1-12 August 2022.

September



29 September 2022 - AIT's Master's in Business Administration (MBA) program under the School of Management (SOM) has been ranked first in Thailand and 21st in Asia in the latest QS Global MBA Rankings 2023 released on September 29. The program has also been ranked 10th in Asia and 71st/80 in the Career Specialization Rankings 2023: Entrepreneurship.



28 September 2022 - AIT is proud to celebrate 25 years of GDS as a regional hub of excellence in gender and development. The program has always been committed to serving as an extension and catalyst of grassroots community-based efforts working to build capacity on gender and development globally.



1 September 2022 - The Department of Food, Agriculture and Bioresources (FAB) in SERD announced the opening of a new Digital Agriculture Lab. This lab was developed as part of the Agricultural Systems and Engineering Academic Program under the supervision of Dr. Sushil Kumar Himanshu.



1 September 2022 - Prof. Kazuo Yamamoto is the new Interim President of AIT. He assumed office on 1 September 2022. Prof. Yamamoto thanked the Board of Trustees for their trust and confidence in him during this transition period.



30 September 2022 - H.E Ambassador Mr. Pavel Pitel, Embassy of the Czech Republic in Thailand accompanied by Mr. Michal Sveda, Deputy Head of Mission, visited AIT to discuss bi lateral cooperation between the Czech Republic and AIT.



14 September 2022 - Dr. Thorsten Clausing, Counselor, Science and Technology Cooperation, Embassy of the Federal Republic of Germany to Thailand, met with President Kazuo Yamamoto to foster cooperation with AIT.



21 September 2022 - Delegates Kyoto University, Mahidol University Japan, and Thammasat University, Thailand, Kyoto University's ASEAN Center, and the Japan Science and Technology Agency visited AIT to discuss possibilities for bilateral and collaborations multilateral between these institutions.

October

12 October 2022 - The Bill and Melinda Gates Foundation awarded an US\$ 8.1 million grant to establish a Center of Excellence at AIT to expedite and support a Water, Sanitation, and Hygiene strategy in Asia and beyond by working with governments, international financing institutions, and other development partners.





26 October 2022 - With the aim of helping students develop networks with industry, an AIT Career Fair was organized by the AIT Career Center. 28 organizations from Thailand and Asia participated in the event, which attracted more than 200 students from AIT and other universities.



5 October 2022 - A conference entitled Al: The Path Forward from Asian and European Perspective was organized at AIT. The event brought together academic institutions, research centers, businesses, and corporations from several countries to exchange the latest advances, experiences, and work in data science and AI.



11 October 2022 - AIT Vice Chair of the Board of Trustees Dr. Suwit Khunkitti and AIT President Prof. Kazuo Yamamoto met with Mr. Sarun Charoensuwan, Deputy Permanent Secretary, Ministry of Foreign Affairs, Thailand at the Ministry of Foreign Affairs.



6 October 2022 - AIT's Office of Sustainable Campus (OSC) organized a workshop to promote awareness of the United Nations Sustainable Development Goal 15: Life on Land.

November



25 November 2022 - The Asian Institute of Technology Alumni Association (AITAA) and its Nepal Chapter hosted the 51st Asian Institute of Technology Alumni Association Governing Board Meeting (AITAA-GBM) in the capital city of Nepal - Kathmandu.



30 November 2022 - The Global Water & Sanitation Center (GWSC) funded by the Bill & Melinda Gates Foundation was launched on November 30 at AIT. The launch ceremony was attended by over 140 participants representing more than 45 organizations, including International Financing Institutions, academic and research institutions, and governmental agencies.



29 November 2022 - The Chairman of the ESG Council at Indorama Ventures (IVL) Mr. Yash Lohia was the fourth speaker at an AIT signature event, the Distinguished Entrepreneurs Talk Series. More than 150 scholars, faculty, company directors, and staff attended this event, which was held in hybrid mode (onsite and online) at the AIT Conference Center.



20 November 2022 - Students from AIT and various universities shared their innovations on sustainable urban wellness at the 4th Sustainability Hackathon organized on 18-20 November 2022 at the AIT Entrepreneurship Center (EC).



18 November 2022 - AIT faculty members Prof. Shobhakar Dhakal, Prof. P. Abdul Salam, and Prof. Joyashree Roy attended COP 27, the 2022 UN Climate Change Conference held in Sharm El Sheikh, Egypt on 6-18 November 2022.

December



16 December 2022 - The 138th graduating class of the Asian Institute of Technology held its commencement ceremony at the AIT Conference Center, where 19 Doctoral and 169 Master's students graduated.



22 December 2022 - The Board has approved the following recent appointments to the Board of Trustees: Mrs. Phantipha lamsudha Ekarohit, Deputy Permanent Secretary, Ministry of Foreign Affairs of Thailand; H.E. Mr. Nagesh Singh, Ambassador of India to Thailand; Dr. Bindu N. Lohani, former Ranking Vice-President of the Asian Development Bank (ADB) for Knowledge Management; and Sustainable Development Executive Committee Prof. Worsak Kanok-Nukulchai.



2 December 2022 - The Office of Sustainable Campus (OSC) organized the AIT SDG Research Fair to raise awareness of the Sustainable Development Goals and showcase the research of AIT students and scholars in line with the SDGs.



1-3 December 2022 - The annual Water Security and Climate Change Conference (WSCC 2022) was organized at Novotel Rangsit in hybrid mode. The event was inaugurated by H.E. Mr. Varawut Silpaarcha, Minister of Natural Resources and the Environment. The conference sought to go beyond science and build bridges between state-of-the-art advances in multiple disciplines and various groups of stakeholders and practitioners.

According to the United Nations, the SDGs are a roadmap for humanity, encompassing almost every aspect of human and planetary well-being and, if met, will provide a stable and prosperous life for every person and ensure the health of the planet. Reaching the 2030 Agenda and the SDGs presents both challenges and opportunities.

Asia is home to more than 60% of the world's population. If it is to be prosperous, its future must be built upon sustainable and sound green principles. Like other universities and institutions playing essential roles in the SDGs, AIT is driving forward academic programs, research projects, and outreach activities designed to bolster sustainable development, sustainability, and environmental conservation around Asia and beyond. Recognized as one of the leading academic institutes in the field of sustainability in Asia, AIT has been collaborating with its partners to contribute its expertise to the sustainable development of the region over the past six decades. Under its five thematic areas: Climate Change; Smart Communities; Food - Energy - Water; Infrastructure; and Technology, Policy, and Society, AIT focuses on learning and research strategies that will drive poverty reduction, reduce risk and resource consumption, and create opportunities for green job creation by building sustainable livelihoods in Asia.

The AIT Sustainability Report 2022 provides a summary of the range of activities undertaken at AIT during 2022 with a view to meeting the SDGs through its teaching, research, outreach and public engagement, and operations. AIT carries out a diverse range of activities across the Institute, and this report lists only some of many such initiatives. AIT strives to produce solutions and recommendations on climate change, water and food insecurity, air pollution, biodegradation, biodiversity plastic pollution, and many others. The Institute continually strives to implement sustainability in all its core operations under its motto of Social Impact with Innovation, including by creating a platform to showcase its efforts toward achieving the SDGs in a comprehensive and detailed manner.

AIT maintains its position as a leader in addressing the region's sustainable and social impact development by meeting the SDGs. Despite the increasing number of competing universities, AIT has successfully retained its strong standing among the world's academic institutions. Of 1,406 universities representing 106 countries and regions, AIT proudly held its overall ranking between 101-200. Moreover, AIT's overall score increased to 82.5 this year. This accomplishment can be attributed to various collaborations with governments, NGOs, international organizations, impactful research projects, policies designed to support its diverse community, and the publication of its Sustainability Report.

AIT has been ranked highly for its contributions to the SDGs, with a global ranking of 43rd for SDG1: No Poverty; 86th for SDG2: Zero Hunger; 68th (the top ranking in Thailand) for SDG10: Reduced Inequalities; and 72nd (the top ranking in Thailand) for SDG16: Peace, Justice, and Strong Institutions. This recognition highlights the extensive work done by AIT's faculty and students across various fields of education and research.

AIT also aims to take the lead in practicing and promoting sustainability by establishing an all-encompassing botanical garden on its campus. This initiative builds on previous campus plans and represents a significant leap forward toward making the entire AIT a fully-fledged botanical garden with a target to be Net Zero by 2030.

The AIT Sustainability Report 2022 can be viewed at the following link on the AIT website:

https://ait.ac.th/sustainability-reports



Awards and Recognitions



Faculty Achievements

School of Environment, Resources and Development (SERD)

- Dr. Krishna R. Salin, was voted President Elect of the World Aquaculture Society Asia-Pacific Chapter (WAS-APC) in January 2022.
- Prof. Mokbul Morshed Ahmad was appointed Head of the Department of Development and Sustainability (DDS) starting on 10 January 2022.
- Prof. Mokbul Morshed Ahmad was promoted from the rank of Associate Professor to Full Professor,

- following the approval of the Board of the Trustees at its meeting of 25 January 2022.
- New book publication on Pandemic Risk, Response, Resilience and DRR, and Resilience and Sustainability by Assoc. Prof. Dr. Indrajit Pal, Chair of the Disaster Preparedness, Mitigation, and Management (DPMM) Program at AIT.
- Dr. Ekbordin Winijkul and Dr. Wenchao Xue were promoted from the ranks of Assistant Professor to Associate Professor.
- Prof. Avishek Datta was promoted from the rank of Associate Professor to Full Professor following the approval of the Board of Trustees at its meeting of 4 August 2022.

- Prof. Anil Kumar Anal, co-edited two books: i) "Probiotics, Prebiotics and Synbiotics: Technological Advancements Towards Safety and Industrial Applications," published by Wiley and Sons Ltd, and ii) Valorization of Agro-Industrial By-Products: Sustainable Approaches for Industrial Transformation, published by CRC Press Ltd.
- Prof. P Abdul Salam of the Department of Energy, Environment and Climate Change, Sustainable Energy Transition Academic Program, was appointed member of the Council of Engineers for the Energy Transition (CEET) in December 2022.
- AIT SERD faculty members Prof. Shobhakar Dhakal, Prof. P. Abdul Salam, and Prof. Joyashree Roy attended COP 27, the 2022 UN Climate Change Conference, held in Sharm El Sheikh, Egypt on 6-18 November 2022.
- 10. Dr. Indrajit Pal co-edited two books: "Lecture Notes on Civil Engineering, Proceedings of the 2nd International Symposium on Disaster Resilience and Sustainable DEVELOPMENT, Vol. 1: Multi-hazard Vulnerability, Climate Change and Resilience Building" and "Vol. 2: Disaster Risk Science and Technology." The books were published by Springer Nature Singapore.

School of Engineering and Technology (SET)

- Prof. Kunnawee Kanitpong was promoted from Associate Professor to Full Professor following the approval of the Board of Trustees at its meeting of 25 January 2022.
- Dr. Chutiporn Anutariya was invited as one of the keynote speakers at the Second International Conference on Networks and Intelligent Systems on 19-20 March 2022.
- 3. Prof. Nitin Kumar Tripathi, Professor of Remote Sensing (RS) and Geographical Information Systems (GIS) and Director of Special Degree Programs co-edited a book titled "Geospatial Data Science in Healthcare for Society 5.0," which was published by Springer.
- 4. Dr. Indrajit Pal co-edited two books titled "Lecture Notes on Civil Engineering, Proceedings of the 2nd International Symposium on Disaster Resilience and Sustainable Development, Vol. 1: Multi-hazard Vulnerability, Climate Change and Resilience Building," and Vol. 2 "Disaster Risk Science and

- Technology." The books were published by Springer Nature Singapore.
- 5. Emeritus Prof. Dennes T. Bergado, Prof. Mukand S. Babel, and Prof. Sangam Shrestha were recognized among the top five scientists in Environment Sciences in Thailand in the first edition of the top scientist ranking by Research.com. The website is a major research portal in the field of Environmental Sciences and has offered credible data on scientific contributions since 2014. The rankings were developed after examining more than 9,100 profiles in the discipline.
- Prof. Huynh Trung Luong was promoted from Associate Professor to Full Professor following the approval of the Board of Trustees at its meeting of August 2022.
- A conference entitled "AI: The Path Forward from ASIAN and European Perspectives" was organized on 3-5 October 2022 by the Data Science and Artificial Intelligence Program under the leadership of Dr. Chutiporn Anutariya and Prof. Matthew Daily. The event brought together academic institutions, research centers, businesses, and corporations from several countries to exchange the latest advances, experiences, and work in data science and Al. 20 presentations and 15 poster exhibits highlighted the successful partnership and collaboration linking 14 Data Science and Artificial Intelligence (DS&AI) project partners.
- 8. Dr. Salvatore G.P. Virdis was promoted from the rank of Assistant Professor to Associate Professor following the approval of the President on 27 October 2022.
- Prof. Sangam Shrestha was appointed Co-Director of the AIT Global Water and Sanitation Center (GWSC) on 26 September 2022, with the Center officially launched on 30 November 2022. The Bill and Melinda Gates Foundation awarded the Center an US\$ 8.1 million grant.
- 10. According to a paper recently published by Stanford University researchers, AIT faculty members are among the world's top 2% of scientists based on career-wide scientific impact on respective sub-disciplines. Prof. Dung Phan Minh was placed in the top 1% of the global scientific community. The study was published in PLOS Biology Journal. The findings are based on an extensive database of standardized citation metrics

- across all scientists and scientific disciplines from Scopus, assessing scientists from across the world for research carried out over their entire academic career up to the end of 2019. In addition, Prof. Sangam Shrestha and Prof. Mukand S. Babel appear in the top 2% list of scientists for research impact based on the most recent single year (2019).
- 11. The Water Security and Climate Conference Change 2022 (WSCC2022) was conducted 1-3 December 2022 at Novotel, Rangsit. The conference was organized by Prof. Mukand Babel (Chair of the Scientific and Organizing Committees of Water Security and Climate Change Conference 2022) and his team. The opening session was graced by the Honorable Minister of Natural Resources and Environment of Thailand, H.E. Mr. Varawut Silpa-Archa, Ambassador of Germany to Thailand H.E. Mr. Georg Schmidt, Deputy Chief of Mission and Minister at the Embassy of Japan to Thailand H.E. Mr. Yuichi Oba, Chief of the Water Sector Group at the Asian Development Bank Ms. Neeta Pokhrel, Vice-Chair of the AIT Board of Trustees Dr. Suwit Khunkitti and the President of the Asian Institute of Technology Prof. Kazuo Yamamoto.
- 12. Prof. Sangam Shrestha participated, collaborated, and organized sessions in the AGU Fall Meeting 2022 in Chicago, IL on 12 December 2022. His own session was titled "Hydro-climatic Modeling, Analyses, and Projections in South and Southeast Asia: Challenges and Opportunities." The AGU (American Geophysical Union) Fall Meeting is the most influential event in the world dedicated to the advancement of earth and space sciences. Every year, the AGU Fall Meeting convenes over 25,000 attendees from 100+ countries to share research and network.

Student Achievements

School of Environment, Resources and Development (SERD)

- An article by a group of students from the academic program in Climate Change and Sustainable Development (CCSD) titled "The IPCC AR6 WGIII Report: A Youth Perspective" was featured on the PLOS Climate Journal's Latitude Blog in April 2022.
- A green finance platform titled "Defire" developed by Mr. Theethat Rangkasiri, a Master's student in Development and Sustainability (DS) Program, won the SCG Bangkok Business Challenge @ Sasin 2022 -Thailand Competition, securing US\$ 3,000 (approximately 100,000 THB). The project is qualified to compete in the Global Competition stage.
- Graduates from the first batch of the Marine Plastics Abatement (MPA) Program published a journal article titled "Fate identification and management strategies of nonrecyclable plastic waste through the integration of material flow analysis and leakage hotspot modeling" in Scientific Reports, a top scientific journal in the field in November 2022.
- Two GDS students, Sneha Shakya and Jitrin Wanmeechai, visited Ochanomizu University in Japan as part of an exchange program between AIT and Ochanomizu University.
- Sarnai Battulga from Mongolia, Ph.D candidate, Climate Change and Sustainable Development Program, published three children's books "Miracle Makers" about waste reduction, water, and energy saving. The books are published by Admon Printing Co. Ltd. in Mongolia and sold in the market.
- Academic Excellence awards were received by SERD students during 2022 graduation ceremonies:
 - The Hisamatsu Prize for Gender and Development Studies

Ms. Tang Sai

 The C. Kwei Lin Prize for Aquaculture and Aquatic Resources Management

Mr. Sumit Vinod Jungi

 The Yoshiro Takasaki Prize for Energy

Mr. Khongpol Poka

 The Robert B. Banks Prize for Environmental Engineering and Management

Mr. Danuwas Sarathana

 The Chongrak Polprasert Prize for Environmental Engineering and Management (with specialization in Water and Wastewater Engineering)

Ms. Wanni Zhang

 The Prof. Shabbir H. Gheewala Prize in Development and Sustainability

Ms. Dilasha Joshi

 The Robert C. Bodden Prize for the most outstanding woman graduate in SERD

Ms. Dilasha Joshi

 The AIT Alumni Association Prize for the most outstanding graduate in SERD

Mr. Khongpol Poka

School of Engineering and Technology (SET)

- The 7th International Day of Women and Girls in Science Assembly held virtually on 11 February 2022, at the United Nations (UN) Headquarters focused on the role of women and girls in science as agents of change. With the theme of "Equity, Diversity, and Inclusion: Water Unites Us," three AIT engineering students, Ms. Laila, Ms. Pluem Chuaychii, and Ms. Shakti Gunawadana from three different countries shared inspirational stories about their journey and research, which unite them as agents of change and acceleration of progress towards SDG6: Clean Water and Sanitation for all.
- A research paper titled "An Ensemble Approach to Deep Learning-Based Wireless Indoor Localization" by Ms. Juthatip Wisanmongkol was published in the prestigious journal of the Institution of Engineering and Technology (IET), United Kingdom on 17 February 2022.
- A research project titled "Design and Fabrication of Multi-walled carbon nanotube Polydimethylsiloxane (MWCNT-PDMS) Composite Polymer-Based Flow Sensor" by Ms. Rezoana Bente Arif was awarded for research and development for technology innovation in the ADB-Japan with a special Scholarship Program Thesis of the Year Award 2022 held in May 2022.
- 4. Three Dual-Degree Master's students (the first batch from AIT), Ms. Wangmo

Ghalley, Mr. Kasun Sahabandu, and Ms. Avalokita Tuladhar, enrolled in the Water Engineering and Management Program, left Thailand for the United States on 10 August 2022 to continue their Master's studies at Colorado State University in Fort Collins, Colorado.

- 5. 24 Geotechnical Earth Resources Engineering (GTE) students, faculty, and staff members participated in the Global Project-Based learning (gPBL) experiment conducted by the Shibaura Institute of Technology (SIT), Tokyo from 26 August to 3 September 2022. The gPBL project gathers students from Japanese and overseas partner universities to work as tag teams to discuss and solve problems presented by Professors, Japanese corporations, and organizations.
- Mr. Chamaka Sameera Karunanayake, enrolled in Water Engineering and Management, was awarded the Dr. Subin Pinkayan Student Exchange Scholarship in September 2022.
- 7. A research project titled "Public Transport GPS Probe and Metro Data for Assessing the Pattern of Human Mobility in the Bangkok Metropolitan Region, Thailand" by Mr. Songkorn Siangsuebchart was showcased before HRH Princess Maha Chakri Sirindhorn at the CRMA Exhibition on 30 November 2022.
- Mr. Pongraphe Kangsanarak, enrolled in Computer Science, was awarded an AITAA Thailand Chapter Student Exchange Scholarship in December 2022.
- Academic Excellence awards received by SET students during 2022 graduation ceremonies:
 - The Chin Fung Kee Prize for Geotechnical and Earth Resources Engineering

Ms. Peetiya Nidhinandana

 The Chainarong Na Lamphun Prize for Water Engineering and Management

Mr. Sharad Aryal

 The Prof. Emeritus Madan Mohan Das Memorial Prize for Water Engineering and Management

Mr. Sharad Aryal

 The AIT Alumni Association Prize for the most outstanding graduate in SET

Mr. Sharad Aryal

 The Robert C. Bodden Prize for the most outstanding woman graduate in SET

Ms. Peetiya Nidhinandana

Alumni Recognition



DR. REYNALDO P. RAMOS

The Board of Regents (BOR) of the Technological University of the Philippines appointed Dr. Reynaldo P. Ramos 9th President of the Technological University of the Philippines (TUP). He assumed office on 24 September 2022.

Dr. Ramos graduated with a B.Sc. (Civil Engineering) in 1989 and a Diploma (Civil Technology) in 1985 with honors from the same university. He earned his PhD in Urban Regeneration and Mixed-use Development from Ulster University, United Kingdom (2011) and an MPhil (by research), Environmental Engineering, University of Queensland, Australia (2004). He graduated with a Master's Degree in Human Settlements and Housing Development from the Asian Institute of Technology, Thailand (1992). Dr. Ramos is the former Director of Romblon State University (RSU) International Linkages and External Affairs Office.

After he graduated with a Master's Degree at AIT in 1992, he worked in the Continuing Education Center (CEC), until mid-1995. He was also the class representative of the Filipino scholars in the May 1991 batch and HSD Batch representative in 1991. He is an active member of the Student Union committee and was an officer of the Filipino Association (FILA) at AIT. In addition, he is the former secretary of the AITAA Philippine Chapter.



DR. TWARATH SUTABUTR

Dr. Twarath Sutabutr has been President of the Office of Knowledge Management and Development (OKMD), an autonomous public organization in Thailand under the Office of the Prime Minister from August 2022.

Dr. Twarath is a public servant by career, an engineer by training, and an energy policy & planner by experience, with a portfolio covering Petroleum E&P, Gas and Power integration, Promotion of Renewable Energy (RE), and Energy Efficiency (EE). He has experience of many international energy cooperative operations, serving as head of Thailand's team in multilateral frameworks such as the UN, IEA, APEC, and ASEAN. His works in energy planning is reflected in a cross-sectional portfolio that includes the ASEAN Plan of Action in Energy Cooperation (APAEC) 2010-2015, Thailand Integrated Energy Blueprint (TIEB) 2015, the Energy 4.0 & Smart Grids Master Plan, and the innovative Local Energy Planning (LEP) initiatives.

He earned his PhD in Civil and Environmental Engineering from the Massachusetts Institute of Technology in 1999 and a Master's in Geotechnical and Transportation Engineering from AIT in 1992. He was President of the AIT Alumni Association, Thailand Chapter from 2018 to 2019.



MR. GEORGE ARULANANTHAM

Mr. George Arulanantham received one of the highest honors bestowed upon a New Zealander. Her Majesty Queen Elizabeth II appointed him Officer of the New Zealand Order of Merit (ONZM) in recognition of his services to the community. This honor

was included in the New Year Honors List 2022, which was announced on 31 December 2021.

Mr. Arulanantham has been involved in community work since his arrival in New Zealand over twenty years ago, initially being deeply involved in advocating and assisting refugee and migrant communities. Over the years, he has been able to extend his ability to continue serving the community through organizations such as Rotary Clubs, the Institute of Engineering and Technology (UK) Auckland Network, Engineering New Zealand, etc.

Mr. Arulanantham graduated with a Masters in Industrial Engineering and Management (IEM) in 1991. In his own words, he is "proud to have been a Student of AIT, and the knowledge, ethics, and values he learned from AIT have contributed to his ongoing growth. He is very privileged to be a part of AIT."



MR. RAMESH HAMAL

Mr. Ramesh Hamal is appointed as Chairperson of the Securities Board of Nepal (SEBON), which is the regulatory body of the stock exchange of Nepal. He took the oath from the Minister of Finance Nepal and assumed office from 18 February 2022.

Mr. Hamal is born in Silgadhi, Doti, Nepal and graduated MBA International Business in 1999 and former Student Union President in 1998 from the Asian Institute of Technology (AIT).



MR. SRINIVASA B. POPURI

Mr. Srinivasa B. Popuri iswas appointed as Chief, of the Bangkok Multi Country Programme Office OrganisationOrganization, United Nations Human Settlements Programme (UN-Habitat) sincein September 2022 to strengthen the UN-Habitat

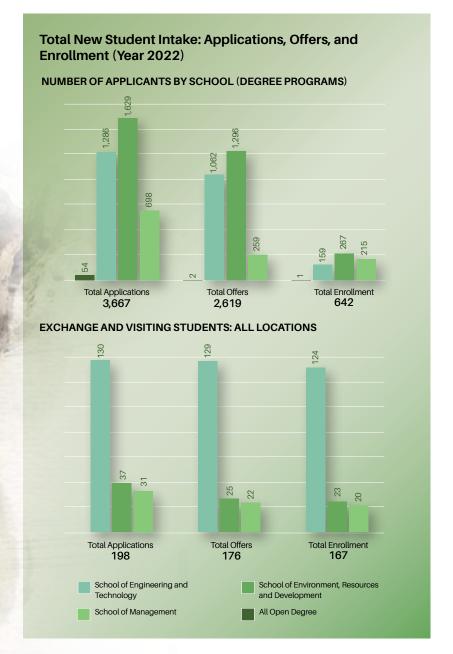
engagement with regional bodies regional bodies based in Bangkok and in the sub-region and as a repre-sentative representative to Thailand, Malaysia, Singapore and Brunei.

As a development professional, SrinivasaMr. Popuri has worked over 25 years in the field of urban development, housing, and sustainable human settlements. Of these, over 20 years were spent working with the United Nations in several countries in Asia and the Pacific afterfollowing his service for over 5five years with the Government of India and International OrganisationsOrganizations.

Mr. Srinivasa B. Popuri, graduated with a Master's in Environmental Engineering and Management (EEM) in 1996. From September 2012 to August 2022, he served as Senior Human Settlements Officer and deputy to the regional director based in Fukuoka, Japan in overseeing programmes of, where he oversaw programs run by UN-Habitat in Asia and the Pacific countries.

Facts and Figures





Student Enrolment

Average total enrollment (new and continuing students) in 2022 was

2,473from 57 countries

67% enrolled in a master's programs

enrolled in doctoral programs, the remainder in other programs

43% 6

enrolled in SET

31%

in SERD

23%

in SOM

and the rest in interdisciplinary programs.

The male-female distribution was around

59-41%

Student Graduation

School	Department	2021	2022
SET	CIE	123	120
	ICT	72	92
	ISE	38	20
	SET Total	233	232
SERD	DS	39	35
	EECC	114	81
	FAB	30	30
	SERD Total	183	146
SOM		99	118
SERD-SOM		-	2
SERD-SET		7	5
Institute total		522	503
On-time Graduation		180	172
	Percentage	34%	34%

Note: Professional master's stu-dents typically take at least 3 semesters to graduate and, while doctoral students usuallytypically take longer than the specified period to graduate.

Student Prizes

SCHOOL OF ENGINEERING AND TECHNOLOGY

 The Mahesh Varma Prize for Construction, Engineering and Infrastructure Management

Ms. Natima Sawaddee

 The Chin Fung Kee Prize for Geotechnical and Earth Resources Engineering

Ms. Peetiya Nidhinandana

 The Chainarong Na Lamphun Prize for Water Engineering and Management

Mr. Sharad Aryal

 The Prof. Emeritus Madan Mohan Das Memorial Prize for Water Engineering and Management

Ms. Surabhi Upadhyay

 The AIT Alumni Association Prize (most outstanding graduate) in SET

Mr. Sharad Aryal

 The Robert C. Bodden Prize (most outstanding woman) in

Ms. Peetiya Nidhinandana

SCHOOL OF ENVIRONMENT, RESOURCES AND DEVELOPMENT

 The C. Kwei Lin Prize for Aquaculture and Aquatic Resources Management

Mr. Sumit Vinod Jungi

 The Yoshiro Takasaki Prize for Energy

Mr. Khongpol Poka

 The Robert B Banks Prize for Environmental Engineering and Management

Mr. Danuwas Sarathana

 The Chongrak Polprasert Prize (with specialization in Water and Wastewater Engineering)

Ms. Wanni Zhang

 The Hisamatsu Prize for Gender and Development Studies

Ms. Tang Sai

 The Prof. Shabbir H. Gheewala Prize in Development and Sustainability

Ms. Dilasha Joshi

 The AIT Alumni Association Prize (most outstanding graduate) in SERD

Mr. Khongpol Poka

 The Robert C. Bodden Prize (most outstanding woman) in

Ms. Dilasha Joshi

SCHOOL OF MANAGEMENT

- The Wilhelm Hill PrizeMr. Nguyen Manh Duc
- The Sandeep Mohapatra Memorial Prize

Mr. Sneh Singh

 The AIT Alumni Association Prize (most outstanding graduate) in SOM

Ms. Sirikorn Chatsanguthai

 The Robert C. Bodden Prize (most outstanding woman) in

Ms. Anushma Shrestha



Student Research

SET CE

CEIM

CS

DSAI

Doctoral Students' Dissertation

1

2

GTE	1	14				15
ICT		1	4			5
IM	1	4	6			11
IME		4				4
IOT		1				1
ME	1	7				8
MES	1					1
NT		6	1			7
PMDS					9	9
RSGIS	3	9	8			20
STE		12				12
TC	1	3	2			6
TE		5	1			6
WEM	1	15				16
SERD	23	75	37	0	0	135
AARM	4	5				9
ABM		4				4
ASE	4	3				7
CCSD	3	3				6
DS	2	4	4			10
E	2	3	1			6
EEM	1	21				22
FEBT	1	5				6
FINH		4				4
GDS	2	8	2			12
NRM	2	3	1			6
MPA			23			23
RRDP	1					1
SE		10	5			15
UEM	1	2	1			4
som	7	0	12	11	30	60
BADT			3	3	1	7
IF			1	1		2
MBA-D			8	7	6	21
MBA(VN)					1	1
EMBA(VN)					1	1
PMBADT					21	21
DBA	4					4
SM-PHD	3					3
SET&SERD	0	5	0	0	0	5
DPMM		4				4
UWEM		1				1
SERD&SOM	0	0	0	0	2	2
YPM-SBE					2	2
TOTAL	42	189	90	13	86	420

Research Studies

41

5

7

7

54

44

2

218

60

18

18

109

10

7

11

Career Center

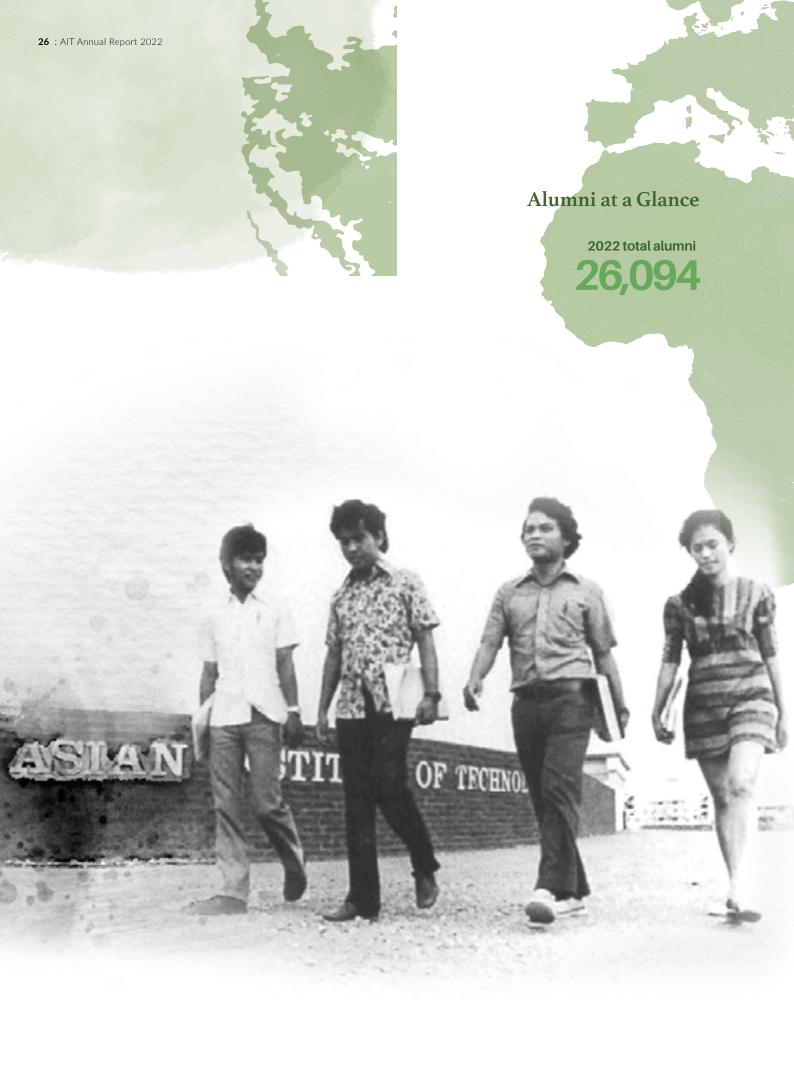
The Career Center organized one Career Fair in 2022, attracting a total of

446

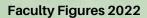
visitors of which 369 were students

A total of 19 Career Talks were organized by 21 companies during the year, with

540 students taking part





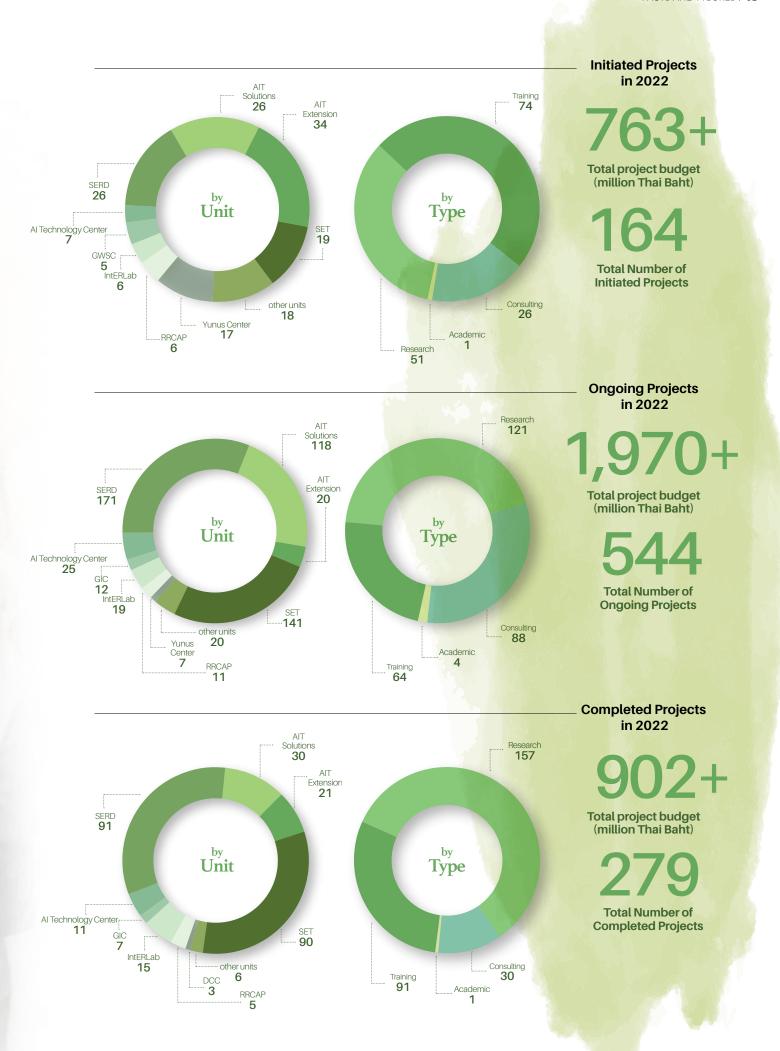


FACULTY	HEADCOUNT (ANNUAL AVERAGE)	FACULTY STRENGTH (IN FTEs*)					
SCHOOL OF ENVIRONMENT, RESOURCES, AND DEVELOPMENT							
Full-time Faculty	26.17	26.17					
Visiting Faculty > 1y	0.50	0.50					
Visiting Faculty <1y	0.42	0.21					
Adjunct Faculty	9.33	2.33					
	otal 36.42	29.21					
SCHOOL OF ENGINEERING AND TECHNOLOGY							
Full-time Faculty	27.58	27.58					
Visiting Faculty > 1y	4.00	4.00					
Visiting Faculty <1y	0.00	0.00					
Adjunct Faculty	24.75	6.19					
т	otal 56.33	37.77					
SCHOOL OF MANAGEMENT							
Full-time Faculty	3.83	3.83					
Visiting Faculty > 1y	5.25	5.25					
Visiting Faculty <1y	0.25	0.13					
Adjunct Faculty	25.25	6.31					
	otal 34.58	15.52					
ASIAN INSTITUTE OF TECHNOLOGY							
Full-time Faculty	57.58	57.58					
Visiting Faculty > 1y	9.75	9.75					
Visiting Faculty <1y	0.67	0.34					
Adjunct Faculty	59.33	14.83					
	otal 127.33	82.50					

^{*} FTE (full-time equivalence) is computed by multiplying the headcount by the FTE factor, where 1 is used for Chair Professor, Professor, Associate Professor, Assistant Professor, Instructor, and long-term Visiting Faculty; 0.5 for short-term Visiting Faculty; and 0.25 for Adjunct Faculty.







Board of Trustees

Chair

Dr. Tongchat Hongladaromp,Chairman of the Board of Trustees, AIT

Vice Chair

Dr. Anat Arbhabhirama

Chairman of Management Committee, Bangkok Mass Transit System Public Company Limited, Thailand

Dr. Suwit Khunkitti

Former Deputy Prime Minister and Former Minister of Education of Thailand

Dr. Za-Chieh Moh

Chairman of the Board, MAA Group Consulting Engineer

Board Members

H.E. Mr. Mohammed Abdul Hye

Ambassador of Bangladesh

H.E. Mr. Ouk Sorphorn

Ambassador of Cambodia

H.E. Dr. Sarah Taylor

Ambassador of Canada

H.E. Mr. Han Zhiqiang

Ambassador of the People's Republic of China

H.E. Mr. Thierry Mathou

Ambassador of France

H.E. Ms. Suchitra Durai

Ambassador of the Republic of India

H.E. Mr. Rachmat Budiman

Ambassador of the Republic of Indonesia

H.E. Mr. Moon Seoung-Hyun

Ambassador of the Republic of Korea (till June 2022)

H.E. Mr. Seng Soukhathivong

Ambassador of the Lao People's Democratic Republic (untill June 2022)

H.E. Dato' Jojie Samuel

Ambassador of Malaysia

H.E. Mr. Ganesh Prasad Dhakal

Ambassador of the Federal Democratic Republic of Nepal

H.E. Sahebzada A. Khan

Ambassador of the Islamic Republic of Pakistan

H.E. Mrs. Colonne Appuhamillage Chaminda Inoka Colonne

Ambassador of Sri Lanka

H.E. Mr. Phan Chi Thanh

Ambassador of the Socialist Republic of Vietnam

Ms. Lulu Tian

Deputy Secretary-General, China Scholarship Council (CSC)

Executive Committee

Chairman

Mr. Chaiwat Kovavisarach

CEO, President, and Director, Bangchak Corporation PLC

Members

Mr. Chaovalit Ekabut

Advisor to the President and CEO, Siam Cement Group (SCG) Public Company Limited

Mr. Chawalit Chanthararat

President, Team Consulting Engineering and Management Group PCL Bangkok

Prof. Kazuo Yamamoto

Professor Emeritus University of Tokyo and former AIT Vice President (untill August 2022)

Professor Emeritus Karl E. Weber

AIT Emeritus Professor and former AIT Vice President

Dr. Twarath Sutabutr

President, Office of Knowledge Management and Development

Dr. Yanyong Phataralaoha

Managing Director, Thai Pipe Industry Co. Ltd.

Dr. Sutapa Amornvivat

Chief Executive Officer and Founder: SCB Abacus

Mr. Alger Fung

Chief Executive Officer at AIA Hong Kong & Macau

Ex-officio Members

Dr. Tongchat Hongladaromp

Chairman of the Board

Dr. Eden Woon

AIT President (untill August 2022)

Prof. Kazuo Yamamoto

AIT Interim President (from 1 September 2022)

Mr. Chutintorn Gongsakdi

Deputy Permanent Secretary, Ministry of Foreign Affairs, Thailand

Mrs. Chulamanee Chartsuwan

Deputy Permanent Secretary, Ministry of Foreign Affairs, Thailand (from August 2022)

Professor Sirirurg Songsivilai

Permanent Secretary, Ministry of Higher Education, Science, Research, and Innovation (MHESI), Thailand

Professor Bundhit Eua-arporn

President of Chulalongkorn University, Thailand

Mr. Chaiwat Kovavisarach

CEO, President, and Director, Bangchak Corporation PLC and Chair of the AIT Executive Committee

Mr. Chawalit Chanthararat

President, Team Consulting Engineering and Management Group PCL Bangkok

Prof. Gasinee Witoonchart

Rector, Thammasat University, Thailand

Dr. Punya P. Regmi

Vice Chancellor, Agriculture and Forestry University, Nepal

Dr. David McLean

Professor and Dean, Walter Scott, Jr. College of Engineering, Colorado State University

Prof. Denis Fred Simon

Senior Adviser to the President for China Affairs, Duke University

Mr. Somprasong Boonyachai

Chairman, Osotspa Public Company Limited and Chairman, Thaicom

Professor Kazuhiko Takeuchi

President, Institute for Global Environmental Strategies (IGES)

Dr. Yanyong Phataralaoha

Managing Director, Thai Pipe Industry Co. Ltd.

Dr. Sutapa Amornvivat

Chief Executive Officer and Founder, SCB Abacus

Ex-Officio

Dr. Eden Woon

AIT President (untill August 2022)

Prof. Kazuo Yamamoto

AIT Interim President (from 1 September 2022)

Mr. Taweechai Termkunanon

President, AIT Alumni Association

Observers

H.E. Mr. Nashida Kazuya

Ambassador of Japan to Thailand

H.E. Mr. David Daly

Ambassador and Head, Delegation of the European Union to Thailand

Secretariat

Mr. Karma Rana

Institute Secretary, AIT

Dr. Namita Sravat

Institute Deputy Secretary, AIT

Ms. Rungnapar Sa-Nguanphuak

Administrative Assistant, AIT

Audit Committee

Chairman

Mr. Chaovalit Ekabut

Advisor to the President and CEO, Siam Cement Group (SCG) Public Company Limited

Members

Mr. Chawalit Chanthararat

President, Team Consulting Engineering and Management Group PCL Bangkok

Professor Emeritus Karl E. Weber

AIT Emeritus Professor and former AIT Vice President

Secretary

Ms. Saowarot Buabok

Internal Auditor, AIT

Rapporteur

Dr. Namita Sravat

Institute Deputy Secretary

Senior Management

PRESIDENT

Dr. Eden Y. Woon (until 31 August 2022)

Prof. Kazuo Yamamoto, interim (from 1 September 2022)

VICE-PRESIDENTS

Academic Affairs Prof. Shobhakar Dhakal

Administration Mr. Russell Bruce Rein

Knowledge Transfer Dr. Naveed Anwar

DEANS

School of Engineering & Technology Prof. Dieter Wilhelm Trau

School of Environment, Resources & Development Prof. Vilas Nittivatananon

School of Management Dr. Roger John Levermore

DIRECTORS OF OUTREACH CENTERS

AIT Extension Dr. Christopher Garnier **Executive Director** Mr. Voravate Chonlasin co-Executive Director (from 11 November 2022)

AIT Artificial Intelligence **Technology Center** Dr. Mongkol Ekpanyapong

AIT Center in Vietnam Dr. Dong Phung Van

AIT Solutions Mr. Thaung Htut Aung

Center for Global Challenges Prof. Deepak Sharma

Belt & Road Research Center Dr. Wenchao Xue

Entrepreneurship Center Prof. Dieter Trau

Geoinformatics Center Dr. Manzul Hazarika

Global Water and Sanitation Center **Prof. Thammarat Koottatep** (from 1 August 2022) **Prof. Sangam Shrestha** (from 1 August 2022)

Internet Education & Research Laboratory Dr. Adisorn Lertsinsrubtavee

Regional Resource Center for Asia & the Pacific Dr. Naoya Tsukamoto (until 14 September 2022) Dr. Guilberto Borongan (from 15 September 2022)

Yunus Center at AIT Dr. Syed Faizul Hassan Shah



Appendices

Independent Audit's Report

Financial Statements for the Year Ended 31 December 2022

Faculty Members

Independent Audit's Report

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 2022, the statement of revenues and expenses, the statement of revenues and expenses classifies 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 2022 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 Company in accordance with the Code of Ethics for Professional Accountants including Independence Standards issued by the Federation of Accounting Professions (Code of Ethics for Professional Accountants) that is relevant to my audit of the financial statements, and I have fulfilled my other ethical responsibilities in accordance with the Code of Ethics for Professional Accountants. 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.

OF 7.

(Yuvanuch Thepsongvaj)
Certified Public Accountant
Registration No. 5371

KPMG Phoomchai Audit Ltd. Bangkok 28 April 2023

Statements of financial position

Decem	

ASSETS Current assets Cash and cash equivalents Current investments Accounts receivable Receivables from Program fund Assets held on behalf of donors Other current assets Total current assets Non-current assets Restricted deposits of financial institutions Froperty and equipment Total non-current assets LIABILITIES AND FUND BALANCES Current liabilities Accounts payable and accrued expenses Advances from Program fund Current portion of long-term loan Deposit payables Amounts due to donors Total current liabilities Non-current liabilities Non-current liabilities Non-current liabilities Total current liabilities Fund balances Endowment fund balances Endowment fund balances Capital funds balances		ember
Current assets Cash and cash equivalents Current investments Accounts receivable Receivables from Program fund Assets held on behalf of donors Other current assets Total current assets Non-current assets Restricted deposits of financial institutions 5, 14 Property and equipment Total non-current assets LIABILITIES AND FUND BALANCES Current liabilities Accounts payable and accrued expenses Advances from Program fund Current portion of long-term loan Deposit payables Amounts due to donors Total current liabilities Non-current liabilities Non-current liabilities Total liabilities Fund balances Endowment fund balances	2022	2021
Current assets Cash and cash equivalents Current investments Accounts receivable Receivables from Program fund Assets held on behalf of donors Other current assets Total current assets Non-current assets Restricted deposits of financial institutions Froperty and equipment Total non-current assets Total assets LIABILITIES AND FUND BALANCES Current liabilities Accounts payable and accrued expenses Advances from Program fund Current portion of long-term loan Deposit payables Amounts due to donors Total current liabilities Non-current liabilities Non-current liabilities Long-term loan Provision for retirement benefits Total non-current liabilities Total labilities Fund balances Endowment fund balances	(in B	aht)
Current assets Cash and cash equivalents Current investments Accounts receivable Receivables from Program fund Assets held on behalf of donors Other current assets Total current assets Non-current assets Restricted deposits of financial institutions Froperty and equipment Total non-current assets LIABILITIES AND FUND BALANCES Current liabilities Accounts payable and accrued expenses Advances from Program fund Current portion of long-term loan Deposit payables Amounts due to donors Total current liabilities Non-current liabilities Long-term loan Provision for retirement benefits Total non-current liabilities Total non-current liabilities Fund balances Endowment fund balances		
Current investments Accounts receivable Receivables from Program fund Assets held on behalf of donors Other current assets Total current assets Non-current assets Restricted deposits of financial institutions Froperty and equipment Total non-current assets LIABILITIES AND FUND BALANCES Current liabilities Accounts payable and accrued expenses Advances from Program fund Current portion of long-term loan Deposit payables Amounts due to donors Total current liabilities Non-current liabilities Non-current liabilities Long-term loan Provision for retirement benefits Total non-current liabilities Total liabilities Total liabilities Fund balances Endowment fund balances		
Accounts receivable Receivables from Program fund Assets held on behalf of donors Other current assets Total current assets Non-current assets Restricted deposits of financial institutions Froperty and equipment Total non-current assets LIABILITIES AND FUND BALANCES Current liabilities Accounts payable and accrued expenses Advances from Program fund Current portion of long-term loan Deposit payables Amounts due to donors Total current liabilities Non-current liabilities Non-current liabilities Long-term loan Provision for retirement benefits Total non-current liabilities Total liabilities Total liabilities Fund balances Endowment fund balances	310,305,044	247,816,45
Receivables from Program fund Assets held on behalf of donors Other current assets Total current assets Non-current assets Restricted deposits of financial institutions 5, 14 Property and equipment Total non-current assets Total assets LIABILITIES AND FUND BALANCES Current liabilities Accounts payable and accrued expenses Advances from Program fund Current portion of long-term loan Deposit payables Amounts due to donors Total current liabilities Non-current liabilities Non-current liabilities Long-term loan Provision for retirement benefits Total non-current liabilities Total liabilities Fund balances Endowment fund balances	459,151,781	369,923,09
Assets held on behalf of donors Other current assets Total current assets Non-current assets Restricted deposits of financial institutions Froperty and equipment Total non-current assets Total assets LIABILITIES AND FUND BALANCES Current liabilities Accounts payable and accrued expenses Advances from Program fund Current portion of long-term loan Deposit payables Amounts due to donors Total current liabilities Non-current liabilities Long-term loan Provision for retirement benefits Total non-current liabilities Total liabilities Fund balances Endowment fund balances	69,905,510	71,878,99
Other current assets Total current assets Non-current assets Restricted deposits of financial institutions 5, 14 Property and equipment 7 Total non-current assets Total assets LIABILITIES AND FUND BALANCES Current liabilities Accounts payable and accrued expenses Advances from Program fund Current portion of long-term loan Deposit payables Amounts due to donors 10 Total current liabilities Non-current liabilities Long-term loan Provision for retirement benefits 11 Total non-current liabilities Total liabilities Fund balances Endowment fund balances	38,680,682	53,974,83
Non-current assets Restricted deposits of financial institutions Froperty and equipment Total non-current assets Total assets LIABILITIES AND FUND BALANCES Current liabilities Accounts payable and accrued expenses Advances from Program fund Current portion of long-term loan Deposit payables Amounts due to donors Total current liabilities Non-current liabilities Non-current liabilities Total non-current liabilities Total non-current liabilities Total non-current liabilities Fund balances Endowment fund balances	381,282,372	362,139,17
Restricted deposits of financial institutions 5, 14 Property and equipment 7 Total non-current assets Total assets LIABILITIES AND FUND BALANCES Current liabilities Accounts payable and accrued expenses 8 Advances from Program fund Current portion of long-term loan 9 Deposit payables Amounts due to donors 10 Total current liabilities Non-current liabilities Non-current liabilities Long-term loan 9 Provision for retirement benefits 11 Total non-current liabilities Total liabilities Fund balances Endowment fund balances	31,471,202	22,012,48
Restricted deposits of financial institutions Property and equipment Total non-current assets Total assets LIABILITIES AND FUND BALANCES Current liabilities Accounts payable and accrued expenses Advances from Program fund Current portion of long-term loan Deposit payables Amounts due to donors Total current liabilities Non-current liabilities Long-term loan Provision for retirement benefits Total non-current liabilities Total non-current liabilities Total liabilities Fund balances Endowment fund balances	1,290,796,591	1,127,745,03
Property and equipment Total non-current assets Total assets LIABILITIES AND FUND BALANCES Current liabilities Accounts payable and accrued expenses Advances from Program fund Current portion of long-term loan Deposit payables Amounts due to donors Total current liabilities Non-current liabilities Long-term loan Provision for retirement benefits Total non-current liabilities Total liabilities Fund balances Endowment fund balances		
Property and equipment Total non-current assets Total assets LIABILITIES AND FUND BALANCES Current liabilities Accounts payable and accrued expenses Advances from Program fund Current portion of long-term loan Deposit payables Amounts due to donors Total current liabilities Non-current liabilities Long-term loan Provision for retirement benefits Total non-current liabilities Total liabilities Fund balances Endowment fund balances	5,000,000	5,400,00
Total non-current assets Total assets LIABILITIES AND FUND BALANCES Current liabilities Accounts payable and accrued expenses Advances from Program fund Current portion of long-term loan Deposit payables Amounts due to donors Total current liabilities Non-current liabilities Long-term loan Provision for retirement benefits Total non-current liabilities Total liabilities Fund balances Endowment fund balances		568,526,50
LIABILITIES AND FUND BALANCES Current liabilities Accounts payable and accrued expenses Advances from Program fund Current portion of long-term loan Deposit payables Amounts due to donors Total current liabilities Non-current liabilities Long-term loan Provision for retirement benefits Total non-current liabilities Fund balances Endowment fund balances	528,125,957	573,926,50
LIABILITIES AND FUND BALANCES Current liabilities Accounts payable and accrued expenses Advances from Program fund Current portion of long-term loan Deposit payables Amounts due to donors Total current liabilities Non-current liabilities Long-term loan Provision for retirement benefits Total non-current liabilities Fund balances Endowment fund balances	1,818,922,548	1,701,671,54
Current liabilities Accounts payable and accrued expenses Advances from Program fund Current portion of long-term loan Deposit payables Amounts due to donors Total current liabilities Non-current liabilities Long-term loan Provision for retirement benefits Total non-current liabilities Fund balances Endowment fund balances	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Current liabilities Accounts payable and accrued expenses Advances from Program fund Current portion of long-term loan Deposit payables Amounts due to donors Total current liabilities Non-current liabilities Long-term loan Provision for retirement benefits Total non-current liabilities Fund balances Endowment fund balances		
Advances from Program fund Current portion of long-term loan Deposit payables Amounts due to donors Total current liabilities Non-current liabilities Long-term loan Provision for retirement benefits Total non-current liabilities Total liabilities Fund balances Endowment fund balances		
Advances from Program fund Current portion of long-term loan Deposit payables Amounts due to donors Total current liabilities Non-current liabilities Long-term loan Provision for retirement benefits Total non-current liabilities Total liabilities Fund balances Endowment fund balances	220,824,403	178,978,02
Current portion of long-term loan Deposit payables Amounts due to donors Total current liabilities Non-current liabilities Long-term loan Provision for retirement benefits Total non-current liabilities Total liabilities Fund balances Endowment fund balances	350,491,141	197,195,75
Deposit payables Amounts due to donors Total current liabilities Non-current liabilities Long-term loan Provision for retirement benefits Total non-current liabilities Total liabilities Fund balances Endowment fund balances	2,309,417	2,309,41
Non-current liabilities Long-term loan Provision for retirement benefits Total non-current liabilities Total liabilities Fund balances Endowment fund balances	7,741,653	5,465,57
Non-current liabilities Long-term loan Provision for retirement benefits 11 Total non-current liabilities Total liabilities Fund balances Endowment fund balances	381,282,372	362,139,17
Long-term loan Provision for retirement benefits 11 Total non-current liabilities Total liabilities Fund balances Endowment fund balances	962,648,986	746,087,93
Long-term loan Provision for retirement benefits 11 Total non-current liabilities Total liabilities Fund balances Endowment fund balances		
Provision for retirement benefits 11 Total non-current liabilities Total liabilities Fund balances Endowment fund balances	13,856,500	16,165,91
Total non-current liabilities Total liabilities Fund balances Endowment fund balances	10,816,530	12,447,91
Fund balances Endowment fund balances	24,673,030	28,613,82
Endowment fund balances	987,322,016	774,701,75
Endowment fund balances		
Capital funds balances	145,141,017	144,688,19
	571,757,359	650,895,96
General reserve fund	114,702,156	131,385,63
Total fund balances	831,600,532	926,969,78
Total liabilities and fund balances	1,818,922,548	1,701,671,540

Statements of revenues and expenses

For the year ended 31 December

		3 i Dece	IIIDEI
	Note	2022	2021
		(in Ba	ht)
Income			
Tuition income and other fees		379,992,740	377,819,780
Research grants and contract service income		720,350,420	298,203,516
Support operations income		156,578,240	134,154,228
Training income		333,192,697	207,515,813
Other contributions		18,508,201	14,606,233
Faculty secondments income		-	320,000
Total income		1,608,622,298	1,032,619,570
Expenses			
Employee benefit expenses	12	660,618,832	548,443,391
Materials, supplies and services expenses		600,391,904	265,546,983
Contracted services expenses		232,548,915	159,367,977
Communication and travel expenses		75,778,993	41,841,259
Utilities and insurance expenses		54,236,668	46,713,413
Faculty secondments expenses		-	320,000
Total expenses		1,623,575,312	1,062,233,023
Income under expenses		(14,953,014)	(29,613,453)
Depreciation	7	(107,456,623)	(108,818,043)
Income under expenses including depreciation		(122,409,637)	(138,431,496)
Non operating income and expenses			
Interest income		4,253,022	4,145,414
Gain (loss) on exchange rate		(1,559,886)	2,849,826
Income under expenses		(119,716,501)	(131,436,256)

BALANCES AS AT 1 JANUARY ADDITIONS (DEDUCTIONS): Income over (under) expenses for the year (AITTH)	2	Unrestricted Current fund 107,276,556 3,351,195	Unrestricted Fund-General Fund-General Fund-General Fund-General Fundamental Fundament	Endowment fund	Program fund	Integrated	Property and	fund - General	31 December	31 December
BALANCES AS AT 1 JANUARY ADDITIONS (DEDUCTIONS): Income over (under) expenses for the year (AITTH)	5.	107,276,556 3,351,195 110,627,751				facility management	ednibment	reserve	2022	2021
BALANCES AS AT 1 JANUARY ADDITIONS (DEDUCTIONS): Income over (under) expenses for the year (AITTH)	23	107,276,556 3,351,195 110,627,751	- - 700 N83 8			(in Bath)				
ADDITIONS (DEDUCTIONS): Income over (under) expenses for the year (AITTH)	55	107,276,556 3,351,195 110,627,751	2 K84 047	144,688,190	,	,	650,895,960	131,385,632	926,969,782	1,040,241,979
Income over (under) expenses for the year (AITTH)	13	107,276,566 3,351,195 110,627,751	8 584 047							
	13	3,351,195	,to,'too,'o	452,827	641,678	(135,651,777)	(101,585,399)	1	(120,282,068)	(134,720,653)
Income over (under) expenses for the year (AITVN)		110,627,751	(3,816,306)	•	1,547,132		(516,454)	•	565,567	3,284,397
Total additions (deductions) for the year		,	4,767,741	452,827	2,188,810	(135,651,777)	(102,101,853)	1	(119,716,501)	(131,436,256)
Adjusted gain on foreign currency translation of AITVN		1	•	•	•	•	17,929	1,383,999	1,401,928	4,635,283
Total		110,627,751	4,767,741	145,141,017	2,188,810	(135,651,777)	548,812,036	132,769,631	808,655,209	913,441,006
INCREASE CAPITAL:										
Capital from funds held on behalf of others		•	•	•	•	•	2,577,929	•	2,577,929	1,739,347
Capital for Program fund		•	•	•	20,367,394	•	•	•	20,367,394	11,789,429
Total		'	•	•	20,367,394	•	2,577,929	•	22,945,323	13,528,776
TRANSFER TO (FROM) OTHER FUNDS:										
Unrestricted current fund		•		1	•	•	•	110,627,751	110,627,751	146,060,896
Unrestricted fund - General		•	1	•	•	•	•	4,767,741	4,767,741	(29,725,403)
Restricted funds - Program fund		•	•	1	•	•	20,367,394	2,188,810	22,556,204	8,665,639
Unrestricted fund - Intergrated facility management		•	•	•	•	•	•	(135,651,777)	(135,651,777)	(138,440,442)
Restricted fund - General reserve		(110,627,751)	(4,767,741)	•	(2,188,810)	135,651,777	•	•	18,067,475	25,228,739
Capital fund - Property and equipment - liquid assets			•	•	(20,367,394)		•	•	(20,367,394)	(11,789,429)
Net		(110,627,751)	(4,767,741)	1	(22,556,204)	135,651,777	20,367,394	(18,067,475)		1
Balances as at 31 December			,	145,141,017	,	·	571,757,359	114,702,156	831,600,532	926,969,782

Statements of cash flows

For the year ended 31 December

		0 1 2000111	
	Note	2022	2021
		(in Baht	
CASH FLOWS FROM OPERATING ACTIVITIES			
Opening fund balances		926,969,782	1,040,241,979
Closing fund balances		831,600,532	926,969,782
Movement in fund balances		(95,369,250)	(113,272,197)
Adjustments to reconcile movement of fund balances			
(Reversal) doubtful debts expenses	6	7,279,106	(1,251,970)
Depreciation	7	107,456,623	108,818,043
Interest income		(4,253,022)	(4,145,414)
Unrealised (gain) loss on exchange rate		1,124,397	(3,173,950)
(Reversal) provision for retirements benefits	11	(135,683)	129,000
Movement in fund balances from operating activities before changes in operating assets and liabilities		16,102,171	(12,896,488)
Changes in operating assets and liabilities:			
Accounts receivable		(6,021,206)	(12,251,876)
Receivables from Program fund		15,294,148	15,218,152
Other current assets		(9,458,716)	(4,853,805)
Accounts payable and accrued expenses		41,846,383	20,426,026
Advances from Program fund		153,295,391	12,548,527
Deposit payables		2,276,080	22,128
Provision for retirements benefits paid	11	(1,495,697)	(3,532,050)
Net cash from operating activities		211,838,554	14,680,614
CASH FLOWS FROM INVESTING ACTIVITIES			
Interest received		4,253,022	4,145,414
Increase (decrease) in current investments		(89,228,682)	96,447,452
Decrease (increase) in restricted deposits of financial institutions		400,000	(325,000)
Acquisition of property and equipment	7	(61,969,626)	(62,925,354)
Net cash (used in) from investing activities		(146,545,286)	37,342,512
CASH FLOWS FROM FINANCING ACTIVITES			
Payment of long-term loan	9	(2,309,417)	(2,309,417)
Net cash used in financing activites		(2,309,417)	(2,309,417)
Net increase in cash and cash equivalents		62,983,851	49,713,709
Cash and cash equivalents at beginning of year		247,816,455	198,171,856
Effects of exchange rate changes on balances held in foreign currencies		(495,262)	(69,110)
Cash and cash equivalents at end of year	4	310,305,044	247,816,455

Statements of financial position classified by funds

					Ī	Cotointogral	-				
		-		Restricted funds	d funds	fund	Capital funds -	Restricted		Total	al
	Note	Unrestricted Current fund	Unrestricted fund-General	Endowment fund	Program fund	Integrated facility management	Property and equipment	runds - General reserve	Agency fund	31 December 2022	31 December 2021
						(in Bath)	<u>당</u>				
ASSETS											
Current assets											
Cash and cash equivalents	4	59,604,900	1,638,109	705	205,096,297	6,755,013	1,226,220	35,983,800	•	310,305,044	247,816,455
Current investments	5	74,491,603	763,995	145,137,925	93,326,653	1	66,713,249	78,718,356	•	459,151,781	369,923,099
Accounts receivable	9	11,795,764	289,427	•	45,956,637	11,863,682	•	1	•	69,905,510	71,878,991
Receivables from Program fund		•	•	•	38,680,682	1	•	•	•	38,680,682	53,974,830
Assets held on behalf of donors	10	•	•	•	•	•	•	•	381,282,372	381,282,372	362,139,171
Other current assets		18,985,672	875,852	2,387	11,284,057	223,234	100,000	1	•	31,471,202	22,012,486
Total current assets		164,877,939	3,567,383	145,141,017	394,344,326	18,841,929	68,039,469	114,702,156	381,282,372	1,290,796,591	1,127,745,032
Non-current assets											
Restricted deposits of financial institutions	5, 14	,	•	•	5,000,000	•	•	•	•	5,000,000	5,400,000
Property and equipment	7	1	•	•	•	1	523,125,957	1	•	523,125,957	568,526,508
Total non-current assets		1	•	•	5,000,000	•	523,125,957	1	1	528,125,957	573,926,508
Total assets		164,877,939	3,567,383	145,141,017	399,344,326	18,841,929	591,165,426	114,702,156	381,282,372	1,818,922,548	1,701,671,540
LIABILITIES AND FUND BALANCES											
Current liabilities											
Accounts payable and accrued expenses	80	153,613,846	2,135,581	•	48,434,603	13,398,223	3,242,150	•	•	220,824,403	178,978,020
Advances from Program fund		•	1	1	350,491,141	1	1	•	1	350,491,141	197,195,750
Current portion of long-term loan	6	ı	1	1	1	1	2,309,417	ı	1	2,309,417	2,309,417
Deposit payables		866,145	1,431,802	•	•	5,443,706	•	•	•	7,741,653	5,465,573
Amounts due to donors	10	•	•	•	•	•	•	•	381,282,372	381,282,372	362,139,171
Total current liabilities		154,479,991	3,567,383	1	398,925,744	18,841,929	5,551,567	1	381,282,372	962,648,986	746,087,931
Non-Current liabilities											
Long-term loan	6	1	•	•	•	1	13,856,500	1	•	13,856,500	16,165,917
Provision for retirement benefits	1	10,397,948	•	•	418,582	•	•	•	•	10,816,530	12,447,910
Total non-current liabilities		10,397,948	'	'	418,582	'	13,856,500		•	24,673,030	28,613,827
Total liabilities		164,877,939	3,567,383	•	399,344,326	18,841,929	19,408,067		381,282,372	987,322,016	774,701,758
Fund balances											
Endowment fund balances			•	145,141,017	•	•	•	•	•	145,141,017	144,688,190
Capital funds balances		•	1	•	1	1	571,757,359	1	1	571,757,359	650,895,960
General reserve		1	'	'	•	•	•	114,702,156	'	114,702,156	131,385,632
Total fund balances		•		145,141,017			571,757,359	114,702,156	•	831,600,532	926,969,782
Total liabilities and fund balances		164,877,939	3,567,383	145,141,017	399,344,326	18,841,929	591,165,426	114,702,156	381,282,372	1,818,922,548	1,701,671,540

Statements of revenues and expenses claasified by funds

				Restricted funds	spunj p	Unrestricted		Restricted	Total	le
2	Note	Unrestricted Current fund	Unrestricted fund-General	Endowment	Program fund	Integrated Facility	Capital hnd - property and equipment	fund - General reserve	31 December	31 December
						Management			7707	1 707
				(in Bath)						
INCOME										
Tuition income and other fees		365,852,287	1	1	14,140,453	1	1		379,992,740	377,819,780
Research grants and contract service income		4,621,144	274,500	1	715,454,776	1	•	•	720,350,420	298,203,516
Support operations income		2,184,712	81,212,195	1	•	73,181,333	1	•	156,578,240	134,154,228
Training income		•	242,809	1	332,949,888	1	•	•	333, 192, 697	207,515,813
Other contributions		8,841,924	4,109,576	201,931	•	1	5,354,770	•	18,508,201	14,606,233
Faculty secondments income		•	•	1	•	1		•	1	320,000
Totalincome		381,500,067	85,839,080	201,931	1,062,545,117	73,181,333	5,354,770	-	1,608,622,298	1,032,619,570
EXPENSES										
Employee benefit expenses	12	244,181,447	24,927,460	1	378,738,174	12,771,751	•	•	660,618,832	548,443,391
Materials, supplies and services expenses		80,818,932	5,809,479	94,316	497,049,031	16,620,146	1		600,391,904	265,546,983
Contracted services expenses		33,546,488	19,719,170	ı	115,304,717	63,978,540	1	•	232,548,915	159,367,977
Communication and travel expenses		8,089,993	1,327,204	ı	65,820,710	541,086	1	1	75,778,993	41,841,259
Utilities and insurance expenses		298,179	(1,178,885)	ı	3,443,675	51,673,699	1	•	54,236,668	46,713,413
Faculty secondments expenses		•	•	1	•	-	-	•	-	320,000
Total expenses		366,935,039	50,604,428	94,316	1,060,356,307	145,585,222	•	•	1,623,575,312	1,062,233,023
		r C	200		9	(000 007 01)	r		(4.6)	(0.00)
income over (under) expenses before anocation		14,505,028	35,234,652	619/01	2,188,810	(72,403,889)	5,354,770	•	(14,953,014)	(29,613,453)
Allocation costs		(93,425,881)	31,802,576	1		61,623,305	1		1	ı
Income over (under) expenses		107,990,909	3,432,076	107,615	2,188,810	(134,027,194)	5,354,770	•	(14,953,014)	(29,613,453)
Depreciation	7	•	•	•	•	•	(107,456,623)	•	(107,456,623)	(108,818,043)
Income over (under) expenses including depreciation		107,990,909	3,432,076	107,615	2,188,810	(134,027,194)	(102,101,853)	•	(122,409,637)	(138,431,496)
NON OPERATING INCOME AND EXPENSES										
Interest income		3,204,427	2,327,966	345,212	•	(1,624,583)	1	1	4,253,022	4,145,414
Gains (losses) on exchange rate		(567,585)	(992,301)	1	•	-	-	•	(1,559,886)	2,849,826
Income over (under) expenses		110,627,751	4,767,741	452,827	2,188,810	(135,651,777)	(102,101,853)	-	(119,716,501)	(131,436,256)

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 April 2023.

Asian Institute of Technology Notes to the financial statements For the year ended 31 December 2022

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,

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 (TFAC) 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 Institute'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.

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 including non-monetary assets and liabilities denominated in foreign currencies are translated to Thai Baht at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated at the exchange rate at the reporting date.

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, fixed deposits which deposits type less than or equal to 3 months 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. No depreciation is provided on 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 indica-

tion 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 are recognised on an accrual basis.

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 are recognised as goods or services are provide.

Training income are recognised as services are provided.

Other contributions (donations) recognised on a cash basis 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.

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 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

	2022	2021
	(in tho	usand Baht)
Cash on hand	46	-
Cash at banks - current accounts	18,424	144,424
Cash at banks - saving accounts	198,013	18,043
Cash at banks - fixed deposit accounts	93,822	85,350
Total	310,305	247,817

5. Current investments

	2022	2021
	(in tho	usand Baht)
Fixed deposits at financial institutions	464,152	375,323
Less Deposits pledged as collateral	(5,000)	(5,400)
Net	459,152	369,923

At 31 December 2022, fixed deposits of Baht 5.0 million (2021: Baht 5.4 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

	2022	2021
	(in thou	isand Baht)
Tuition and other fees	24,494	35,653
Others (mainly from research grants and contract service		
income)	51,926	52,325
•	76,420	87,978
Less allowance for doubtful		
accounts	(6,514)	(16,099)
Net	69,906	71,879
Bad debts	16,864	<u> </u>
Doubtful debts expenses for the		
year (reversal)	7,279	(1,252)

7. Property and equipment

	Campus development	Building and building improvement	Furniture and equipment	Transportation equipment	Library assets	Assets under construction	Total
			(in thousand Bah	t)			
COST							
At 1 January 2021	582,844	1,017,868	597,379	20,819	8,903	16,701	2,244,514
Additions	7,798	-	22,117	133	461	32,416	62,925
Transfers	35,311	-	508	-	-	(35,819)	-
Foreign currency translation	-	239	472	128	-	-	839
At 31 December 2021							
and 1 January 2022	625,953	1,018,107	620,476	21,080	9,364	13,298	2,308,278
Additions	3,829	62	35,261	-	431	22,387	61,970
Transfers	17,142	-	660	-	-	(17,802)	-
Foreign currency translation	40	81	184	43	-	-	348
At 31 December 2022	646,964	1,018,250	656,581	21,123	9,795	17,883	2,370,596
ACCUMULATED DEPREC	CIATION		-			-	
At 1 January 2021	318,946	781,299	506,735	17,021	6,163	_	1,630,164
Depreciation charge for	2 . 2,2 . 3	,	,	,	5, 100		1,222,121
the year	53,282	18,405	34,465	1,180	1,485	-	108,817
Foreign currency							
translation	(16)	453	205	128	-	-	770
At 31 December 2021 and 1 January 2022	372,212	800,157	541,405	18,329	7,648	-	1,739,751
Depreciation charge for the year	55,490	15,284	34,736	1,024	923	-	107,457
Foreign currency translation	(34)	87	164	45			262
At 31 December 2022	427,668	815,528	576,305	19,398	8,571		1,847,470
	727,000	0 10,020	370,305	19,080	0,071	<u>-</u>	1,047,470
NET BOOK VALUE	050 744	047.050	70.071	0.754	4 740	40.000	500 505
At 31 December 2021	253,741	217,950	79,071	2,751	1,716	13,298	568,527
At 31 December 2022	219,296	202,722	80,276	1,725	1,224	17,883	523,126

The gross amount of fully depreciated property and equipment that was still in use as at 31 December 2022 amounted to Baht 1,083 million (2021: Baht 828 million).

8. Accounts payable and accrued expenses

	2022	2021
	(in thousand Baht)	
Advance from students	144,819	101,381
Accrued staff expenses	24,628	29,459
Accounts payable from operation	23,952	28,164
Accrued operating expenses	20,416	13,424
Withholding tax payable	4,432	3,951
Provision for insured saving fund		
tax	-	6
Others	2,577	2,593
Total	220,824	178,978

9. Loan

In August 2017, the institute has a loan, amounting to Baht 27.71 million 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 2022 and 2021 and revenues and expenses for the years then ended were as follows

	2022	2021
	(in thousand Baht)	
Funds received from donors	372,142	486,137
Application of funds		
 Salaries and other benefits 	4,648	6,171
Scholarships	378,109	414,631
 Contracted services 	37,123	32,147
Communication, travel and utility expenses	4,004	2,473
Total funds applied	423,884	455,422
Income over (under) expenses for the year	(51,742)	30,715
Assets held on behalf of donors		
Cash and deposits at financial institutions	153,028	151,766
Current investments	224,076	203,946
Accounts receivable and other current assets	4,178	6,427
Total assets held on behalf of donors	381,282	362,139
Balance at 1 January:		
Amounts due to donors	304,013	275,038
 Amounts due from donors - AITVN 	(88)	(79)
Income over (under) expenses for the year	(51,742)	30,715
Transfers to other funds	(2,578)	(1,739)
Foreign currency translation	(8)	(10)
Balance at 31 December	249,597	303,925
Other liabilities	131,685	58,214
	131,685	58,214
Total amounts due to donors	381,282	362,139

11 Provision for retirement benefits

	2022	2021	
	(in thousand Baht)		
At 1 January	12,448	15,851	
Additions	34	129	
Reversal	(170)	-	
Paid	(1,495)	(3,532)	
At 31 December	10,817	12,448	

12. Employee benefit expenses

	2022	2021
	(in thousand Baht)	
Wages and salaries	630,818	518,674
Contribution to provident fund	20,632	20,829
Personal income tax of employees	3,825	4,142
Social security costs	3,811	3,275
Others	1,533	1,523
Total	660,619	548,443

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 with the Ministry of Finance as juristic entities 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:

	2022	2021
	(in thousand Baht)	
Income	60,433	41,378
Expenses	(59,867)	(38,094)
Income over expenses	566	3,284

Financial statements of the branch for the years ended 31 December 2022 and 2021 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 which the Institute paid a rental at the contract date; 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 2022, the scholarship commitment amounted to totaling Baht 76.5 million (2021: Baht 76.5 million).

As at 31 December 2022 and 2021, the Institute had:

	2022	2021		
	(in thousand Baht)			
NON-CANCELLABLE OPERATING LEASE COMMITMENTS				
Within 1 year	4,068	4,068		
1-5 years	-	4,068		
Total	4,068	8,136		

OFFICE RENTAL AGREEMENT

The Company had entered into a rental agreement with Gate-

way Estate Co., Ltd. for office building for a period of 2 years commencing from 1 January 2022 to 31 December 2023. These agreements shall be valid until they are terminated by written notice given at least 1 month prior to the effective date of termination.

BANK GUARANTEES

At 31 December 2022, 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 0.16 million (2021: Baht 0.46 million). These bank guarantees were collateralised by Institute's fixed deposits as discussed in Note 5.

OTHERS

At 31 December 2022, the Institute had obtained credit facilities for bank overdraft totaling

Baht 5.0 million (2021: Baht 5.0 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 (2021: fixed deposits plus 1.25% per annum).

SERVICE AGREEMENT

The Institute has entered into service agreements with various companies, some of which had expired in 2022. 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.

PARTIES	CONTRACT DATE	CONTRACT DURATION	CONTRACT PERIOD
SN Service Solutions Co., Ltd.	1 July 2020	2 years 6 months	31 December 2022*
Green Tree Arborist Co., Ltd.	1 January 2020	3 years	31 December 2022*
SN Service Solutions Co., Ltd.	1 July 2020	2 years 6 months	31 December 2022*
SN Service Solutions Co., Ltd.	1 January 2022	1 year	31 December 2022*
VP Service Management Co., Ltd.	1 January 2022	1 year	31 December 2022*
Securitas Security Guard (Thailand) Limited	1 February 2020	3 years	31 January 2023
	SN Service Solutions Co., Ltd. Green Tree Arborist Co., Ltd. SN Service Solutions Co., Ltd. SN Service Solutions Co., Ltd. VP Service Management Co., Ltd. Securitas Security Guard	SN Service Solutions Co., Ltd. Green Tree Arborist Co., Ltd. SN Service Solutions Co., Ltd. SN Service Solutions Co., Ltd. SN Service Solutions 1 January 2022 Co., Ltd. VP Service Management Co., Ltd. Securitas Security Guard 1 February 2020	SN Service Solutions Co., Ltd. Green Tree Arborist Co., Ltd. SN Service Solutions Co., Ltd. 1 January 2020 2 years 6 months 2 years 3 years 2 years 6 months 2 years 3 years 2 years 6 months 2 years 3 years 4 year 2 years 6 months 2 years 6 years 7 year 2 years 7 year 2 years 8 years 9 years 1 January 9 year

^{*}There were new contracts for continued service in 2023.

Faculty Members

EMERITUS PROFESSORS

Amin, A.T.M. Nurul

B.B. M.A., Univ. of Dhaka, Bangladesh; M.A., Ph.D., Univ. of Manitoba, Canada

Annachhatre, Ajit P.

B.Tech., Ph.D., Indian Inst. of Tech., Kanpur, India

Balasubramaniam, A.S.

B.Sc., Ceylon Univ., Sri Lanka; Ph.D., Cambridge Univ., UK

Bergado, Dennes T

B.S.C.E., Mindanao State Univ., Philippines; M.Eng., AIT, Thailand, Ph.D., Utah State Univ., USA

Edwards, Peter

B.Sc., Liverpool Univ., UK; Ph.D., Univ. of Texas, USA

Exell, Robert H.B.

B.A., M.A., D.Phil., Oxford Univ., UK

Gupta, Ashim Das

B.Eng., Assam Engineering College, India; M.Eng.; D.Eng., AIT, Thailand

Jindal, Vinod

B.Sc. A.E., Pantnagar; M.S., University of Nebraska, USA; Ph.D., Pennsylvania State Univ., USA

Kanok-Nukulchai, Worsak

B.Eng., Chulalongkorn Univ., Thailand; M.Eng., AIT, Thailand; Ph.D., Univ. of California (Berkeley), USA

Karasudhi, Pisidhi

B.Eng., Chulalongkorn Univ.; M.Eng., Chulalongkorn-SEATO Graduate School of Engineering, Thailand; Ph.D., Northwestern Univ., USA

Nutalaya, Prinya

B.A.; M.S., Ph.D., Univ. of Colorado, USA

Polprasert, Chongrak

B. Eng., Chulalongkorn Univ., Thailand; M.Eng., AIT, Thailand; PhD., University of Washington, USA

Routray, Jayant K.

B.Sc. (Hons.)., Ravenshaw College; M.Sc., Ph.D., Utkal Univ.; M.R.P., Indian Inst. of Tech., Kharagpur, India

Shrestha, Ram M.

B.E., Univ. of Baroda; B.L.L., Tribhuvan Univ., Nepal; M.Eng., D.Eng., AIT, Thailand

Singh, Gajendra

B.Sc. A.E, Pantagar; M.S., Rutgers; Ph.D, California (Davis), USA

Tabucanon, Mario T.

B.S.E.E., B.S.M.E., Cebu Inst. of Tech., Philippines; M.Eng., D.Eng., AIT, Thailand

Tingsanchali, Tawatchai

B.Eng., Chulalongkorn, M.Eng., D.Eng., AIT

Weber, Karl E.

M.A., Dr. Phil, Heidelberg Ruperto-Carola University in Heidelberg, Germany.

REGULAR FACULTY

Ahmad, Mokbul Morshed B.Sc, M.Sc., Dhaka Univ., Bangladesh; M.Sc., AIT, Thailand; Ph.D., Univ. of Durham, UK

Professor (Economic Geography; Regional and Rural Development Planning; Community Development; Non-Governmental Organizations; Civil Society; Globalization; Climate Change Adaptation)

Department Head, Department of Development & Sustainability, School of Environment, Resources & Development

Anal, Anil Kumar

Doctor of Veterinary Medicine, Univ. of Agriculture, Pakistan; M.Sc., Ph.D., AIT, Thailand

Professor (Food Engineering & Bioprocess Technology, Food and Pharmaceutical Biotechnology, Dairy and Meat Process Technology, Food Colloids and Biopolymers, Functional Foods, Risk Analysis and Safety in Food Supply Chain and Processing; Bionano encapsulation; Nanotechnology Applications in Food Industries; Bionanotechnology; Agriculture & Food Technology; Functional Properties of Proteins and Polysaccharides)

Department of Food, Agriculture & Bioresources, School of Environment, Resources & Development

Anutariya, Chutiporn

B.S., Chulalongkorn Univ., M.Sc., Ph.D., AIT, Thailand

Associate Professor (Database and Information Systems; Learning Technologies; Knowledge Representation and Knowledge Management; Open Data and Open Government Data; Semantic, Ontology and Linked Data Technologies)

Department Head, Department of Information & Communications Technologies, School of Engineering & Technology, Associate Dean, SET

Babel, Mukand S.

B.Eng., Rajasthan Agr. Univ., India; M.Eng., D.Eng., AIT, Thailand

Visiting Professor (Hydrologic and Water Resources Modeling as

Applied to Integrated Water Resources Management; Watershed Modeling and Management; Water Resources Allocation and Management; Water Resources and Socioeconomic Development; Water Supply System and Management; Climate Change Impact and Adaptation; Groundwater Resources Management; Flood and Drought Analysis, Forecasting and Management; Drought Forecasting and Management)

Department of Civil & Infrastructure Engineering, School of Engineering & Technology

Director, Center for Water and Climate Adaptation, SET

Badir, Yuosre F.

B.Sc., Univ. of Garyounis, Libya; M.Sc., Univ. of Putra Malaysia, Malaysia; M.Sc., Swiss Federal Inst. of Tech., Switzerland

Associate Professor (Managing Technology; Innovation & New Product Development)

Director of Doctoral Programs, School of Management

Bhujel, Ram C.

B.Sc., Institute of Agriculture and Animal Science, Nepal; M.Sc., Ph.D., AIT, Thailand

Research Associate Professor (Biostatistics and Research Design; Curriculum Development; Women in Aquaculture; Broodstock Nutrition; Management and Fry Production; Technology Transfer/ Extension)

Department of Food, Agriculture & Bioresources, School of Environment, Resources & Development

Director, Aqua Center, SERD

Bora, Tanujjal

B.Tech., North Eastern Regional Institute of Science & Technology, India; M.Eng., D.Eng., AIT, Thailand

Assistant Professor (Energy Materials, Nanosensors, MEMS/NEMS Device Physics, Nanoengineered Materials for Energy, Environment & Biomedical Applications, Innovation & Research Relating to Solar Cells, Sensors, and coatings)

Department of Industrial Systems Engineering, School of Engineering & Technology

Director, Center of Excellence in Nanotechnology

Chao, Kuo-Chieh

B.Sc., National Chung-Hsing Univ., Taiwan; M.Sc., Ph.D., Colorado State Univ., USA

Associate Professor (Expansive and collapsible soilsCollapsible Soils evaluation; soil improvement methods; unsaturated soil modeling; sustainability; landslideSoil Improvement Methods; Unsaturated Soil Modeling; Sustainability; Landslide and debris flow investigation, soil behaviorDebris Flow Investigation, Soil Behavior under dynamic loading; constructionDynamic Loading; Construction and design defect investigationDesign Defect Investigation, and tailings reclamationTailings Reclamation)

Department of Civil & Infrastructure Engineering, School of Engineering & Technology

Charoenngam, Chotchai

B.Eng., King Mongkut's Inst. of Tech., Thailand; M.S., Univ. of Kansas, USA, Ph.D., Univ. of Texas, USA

Associate Professor (Project Planning; Scheduling and Controls; Construction Productivity Improvement; Public Private Partnership Project; Project Financing)

Department of Civil & Infrastructure Engineering, School of Engineering & Technology

Chatterjee, Joyee

B.A., Delhi Univ., India; M.A., Ph.D., Univ. of Southern California, USA

Assistant Professor (Gender and Development Communication; Global Health Communication; Gender; Culture and Social Issues in South Asia)

Department of Development & Sustainability, School of Environment, Resources & Development

Cruz. Simon Guerrero

B.Sc., Universidad de Guadalajara, Mexico., M.Sc., UNESCO IHE Institute for Water Education, The Netherlands, M.Eng., Erasmus Mundus consortium formed by Gent Universiteit, Belgium & Vysoká škola chemicko-technologická v Praze, Czech Republic, Ph.D., Radboud Universiteit Nijmegen, The Netherlands

Assistant Professor (Environmental Chemistry and Laboratory, Environmental Microbiology and Laboratory, Environmental Impact Assessment)

Department of Energy, Environment & Climate Change, School of Environment, Resources & Development

Dailey, Matthew M.

B.S., M.S., North Carolina State Univ., USA; Ph.D., Univ. of California (San Diego), USA

Professor (Machine Vision & Learning; Robotics; Software Engineering; Opensource Software Development)

Department Head, Department of Information & Communications Technologies, School of Engineering & Technology

Chief Technology Officer, AIT Artificial Intelligence Technology Center

Datta, Avishek

B.Sc., M.Sc., Bidhan Chandra Krishi Viswavidyalaya; Ph.D., Univ. of Nebraska-Lincoln, USA

Professor (Agricultural Environments; Crop Productivity Management; Crop Ecophysiology and Modeling; Advanced Agricultural Experimentation)

Department Head, Department of Food, Agriculture & Bioresources, School of Environment, Resources & Development

Dhakal, Shobhakar

B. Eng., National Institute of Technology Surat, India; M.Eng., Asian Institute of Technology, Thailand; Ph.D., The Univ. of Tokyo, Japan

Professor (Modeling of Energy and carbon Emissions; Scenarios Policy Analyses)

Department of Energy Environment & Climate Change, School of Environment, Resources & Development

Vice President of Academic Affairs

Dobkin, Paige

B.A., Pennsylvania State University, U.S.A.; USA; M.B.A., SDA Bocconi School of Management, Italy

Visiting Faculty

School of Management

Doneys, Philippe

B.A., Univ. of Toronto, Canada; M.A., Univ. of London, UK; Ph.D., Institut d'Études Politiques de Paris, France

Associate Professor (Empowerment; Gender and Politics: Gender and Migration; Gender and technologies; Masculinity; Gender-based Violence)

Department of Development & Sustainability, School of Environment, Resources & Development

Dong, Ha Thanh

B.Sc., Nha Trang Univ., Vietnam; M.Sc., Ph.D., Chulalongkorn Univ., Thailand

Assistant Professor (Aquatic Animal Health; Emerging Infectious Diseases; Fish Immunology & Vaccines; Applied Microbiology & Biotechnology)

Department of Food, Agriculture and Bioresources, School of Environment, Resources & Development

Dung, Phan Minh

M.Sc., Ph.D., Univ. of Tech., Dresden, Germany

Visiting Faculty (Computer and Network Security; Autonomous Computing; Logic Programming; Artificial Intelligence)

Department of Information & . Communications Technologies, School of Engineering & Technology

Ekpanyapong, Mongkol

B.Eng., Chulalongkorn Univ., Thailand; M.Eng., AIT, Thailand; M.Sc., Ph.D., Georgia Institute of Technology, USA

Associate Professor (Embedded Systems; Computer Architecture, VLSI design (Low power design); Physical VLSI design; High Performance Computing; GPGPU; DSP)

Department Head, Department of Industrial Systems Engineering, School of Engineering & Technology

Director, AIT Artificial Intelligence **Technology Center**

Endress, Tobias

B.B. A., Avans University for Professionals, Netherlands; M.A., Berlin University of the Arts - University of St. Gallen, Berlin; PhD. University of Gloucestershire, United Kingdom

Assistant Professor (Business, Economics, Finance and Technology)

Director of Business Analytics & Digital Transformation Program, School of Management

Esichaikul, Vatcharaporn

B.Acc., Chulalongkorn Univ., Thailand; M.B.A., Oklahoma State Univ., USA; Ph.D., Kent State Univ., USA

Associate Professor (Electronic Commerce/Flectronic Business: Webbased Information Systems, Hypermedia; Electronic Government)

Department of Information & Communications Technologies, School of Engineering & Technology

Hadikusumo, Bonaventura. H.W.

B.Eng., Univ. of Diponegoro, Indonesia; M.Eng., AIT; Ph.D., Univ. of Hong Kong, China SAR

Professor (Construction Information Technology; Construction Project Management; Construction, Site Safety, Virtual Reality application in construction; Web-based project design and management; System Dynamic Simulation in Construction; Construction site safety)

Department of Civil & Infrastructure Engineering, School of Engineering & Technology

Himanshu, Sushil Kumar

B. Tech., Sam Higginbottom University of Agriculture, Technology and Sciences, India; M. Tech., Ph.D., Indian Institute of Technology Roorkee, India

Assistant Professor (Precision Agriculture; Remote Sensing and GIS Applications in Agriculture; Big Data and Machine Learning in Agriculture; Hydrologic/Cropping System Modeling)

Department of Food, Agriculture and Bioresources, School of Environment, Resources and Development

Kanitpong, Kunnawee

B.S., Chulalongkorn Univ., Thailand; M.S., Univ. of Maryland at College Park, USA; Ph.D., Univ. of Wisconsin-Madison, USA

Professor (Road Traffic Safety; Accident Data Analysis; Highway Materials and Construction; Pavement Design and Analysis; and Pavement Management System)

Department of Civil & Infrastructure Engineering, School of Engineering & Technology

Karimi, Sahar

B.Eng., Islamic Azad University, Iran; MSc., PhD., University of Manchester, UK

Visiting Faculty

School of Management

Khan, Syed Shurid

B.B.A., North South University, M.B.A., IBA, University of Dhaka, M.A., PhD., University of Hawaii at Manoa, USA

Assistant Professor (Macroeconomics for Business, Financial Economics, Financial Fundamentals, International Trade, Economics)

School of Management

Koomsap, Pisut

B.Eng., Thammasat Univ., Thailand: M.Sc., Univ. of Louisville, USA; Ph.D., Pennsylvania State Univ., USA

Associate Professor (Sensing and Control for Manufacturing Processes and Systems; Laser Applications in Manufacturing; Rapid Prototyping; Condition-Based Maintenance: Continuous Improvement)

Department of Industrial Systems Engineering, School of Engineering & Technology

Koottatep, Thammarat

B.Eng., Chiangmai Univ.; M.Eng., D.Eng., AIT, Thailand

Professor (Decentralized Waste and Wastewater Treatment Systems; Ecoengineering Technology for Waste and Wastewater Treatment and Management; Environmental Health and Sanitation)

Department of Energy, Environment & Climate Change, School of Environment, Resources & Development

Co-Director, Global Water& Sanitation Center

Kouwenberg, Roy

MSc., PhD., Erasmus University Rotterdam, Netherlands

Visiting Faculty (Finance, Econometrics)

School of Management

Krishna, Chaitanya

B. Tech., Acharya Nagarjuna University, India; M.Tech., Indian Institute of Technology, Bombay, India; PhD., The University of Tokyo, Japan

Assistant Professor (Structural Engineering, building damage analysis, earthquake engineering, seismic retrofitting of masonry constructions, reinforced concrete design, modal analysis of building, mathematical modelling of disaster management, disaster response analysis Building Damage Analysis, Earthquake Engineering, Seismic Retrofitting of Masonry Constructions, Reinforced Concrete Design, Modal Analysis of Building, Mathematical Modeling of Disaster Management, Disaster Response Analysis)

Department of Civil Infrastructure Engineering, School of Engineering & Technology

Kumar, Sivanappan

B.E., Univ. of Madras, India; M.Eng., AIT, Thailand; Ph.D., Inst. Nat'l. Polytechnique, Toulouse, France

Professor (Renewable Energy Resources and Technologies; Climate Change and Greenhouse Gas Mitigation; Energy and Sustainable Development)

Department of Energy, Environment & Climate Change, School of Environment, Resources & Development

Kusakabe, Kyoko

B.A., Sophia Univ., Tokyo, Japan; M.Sc., Ph.D., AIT, Thailand

Professor (Gender, Cross Border Labor Migration and Mobility; Women in Informal Economy; Gender Issues in Borderlands; Gender Issues in Aquaculture and Fisheries; CBDRM & Gender Issues)

Department of Development & Sustainability, School of Environment, Resources & Development

Levermore, Roger John

B.A., Anglia Ruskin University, UK; MA, Univ. of Hull, UK; Ph.D., Univ. of Plymouth, UK

Associate Professor (Strategy, Leadership, Ethics/CSR, Scenario Planning, Africa Business and Sports Management)

Dean, School of Management

Loc, Ho Huu

B.Eng., Vietnam National University, Vietnam; M.Eng., Asian Institute of Technology, Thailand; M.Sc., University of Nice, Sophia-Antipolis, France; Ph.D., Kyoto University, Japan

Assistant Professor (Environmental Engineering, Water Engineering and Management, Hydro-informatics)

Department of Civil & Infrastructure Engineering, School of Engineering & Technology

Luong, Huynh Trung

B.Eng., Ho Chi Minh City Univ. of Tech., Vietnam; M.Eng., D.Eng., AIT, Thailand

Professor (Emergency Inventory Policies and Inventory Policies for Perishable Products; Supply Chain Design; Measures of Bullwhip Effect in Supply Chains; Availability-based and Reliability-based Maintenance; Fuzzy Quality Control Charts; Statistical Design of Experiments; Network Flows Related Problems)

Department of Industrial Systems Engineering, School of Engineering & Technology

Nagai, Masahiko

B.Sc., St. Cloud State Univ., USA; M.Sc., Asian Institute of Technology, Thailand; Ph.D., Univ. of Tokyo, Japan

Visiting Professor (Spatial Information Engineering: Remote Sensing, GIS, Image Processing, GPS and Mobile Mapping and Environmental Information Science: Data Interoperability, Ontology, Standardization and Database Management)

Department of Information & Communications Technologies, School of Engineering & Technology

Nguyen, Loc Thai

B.Sc., Can Tho Univ., Vietnam; M.Sc., AIT, Thailand; Ph.D., Ohio State Univ., USA

Associate Professor (Non-thermal Food Processing Technologies; Mathematical Simulation in Food Engineering; Transport Phenomena of Food Processes; Integrated Electrochemistrybased Biosensors; Novel Sensing Platforms Based on Nanomaterials)

Department of Food, Agriculture, & Bioresources, School of Environment, Resources & Development

Nguyen, Thi Phuoc Lai

B.A. Univ. of Hue, Vietnam; M.Sc., Univ. of Bologna, Italy; Ph.D., Univ. of Sassari, Italy

Assistant Professor (Coupled Human Environment Systems; Social Dimensions of Climate and Environmental Changes; Agri-environmental Policy, Water Governance)

Department of Development & Sustainability, School of Environment, Resources & Development

Ninsawat, Sarawut

B.Sc., Silpakorn Univ., Thailand; M.Sc., Asian Institute of Technology, Thailand; Ph.D., Osaka City Univ., Japan

Associate Professor (WebGIS; OGC Web Services & Specifications; Sensor Web; LBS; Mobile GIS Application)

Department of Information & Communications Technologies, School of Engineering & Technology

Nitivattananon, Vilas

B.Eng., Chulalongkorn Univ.; M.A., Thammasat Univ.; M.Eng., AIT, Thailand; Ph.D., Univ. of Pittsburgh, USA

Professor (Management of Infrastructure and Services; Waste Recycling and Systems Management; Urban Environmental Management; Water Engineering and Management; Economic and Environmental Assessment; Climate Change Risk Assessment and Adaptation; Disaster Management in Urban Infrastructure Planning)

Department of Development & Sustainability

Dean, School of Environment, Resources & Development

Ongsakul, Weerakorn

B.Eng., Chulalongkorn Univ., Thailand; M.S., Ph.D., Texas A&M Univ., USA

Professor (Artificial Intelligence Applications to Power Systems; Parallel Processing Applications; Power System Operation & Control; Power System Deregulation & Restructuring)

Department of Energy, Environment & Climate Change, School of Environment, Resources & Development

Pal, Indrajit

B.Sc., Jadavpur Univ., India; M.A., Garhwal Univ., India; M.Sc., Jadavpur Univ., India; Ph.D. Vidyasagar Univ., India

Associate Professor (Disaster Preparedness; Mitigation and Management, Disaster Risk Governance; Disaster Risk Reduction; Hazard, Risk and Vulnerability Assessment; GIS & Remote Sensing Applications in Disaster Risk Management; Climate Change Adaptation; Incident Command System and Participatory Disaster Risk Management)

Department of Civil & Infrastructure Engineering; Department of Development & Sustainability

Joint appointment with the School of Engineering & Technology and School of Environment, Resources & Development

Parnichkun, Manukid

B.Eng., Chulalongkorn Univ., Thailand; M.Eng., Ph.D., The Univ. of Tokyo, Japan

Professor (Robotics Control and Measurement; Design and Development of Hardware and Software of Mechatronic Devices; New Robot Mechanisms; Novel Control Algorithms; Innovative Measurement Concepts)

Department Head, Department of Industrial Systems Engineering, School of Engineering & Technology

BB. Sc., M. Sc., Vidyasagar Univ., India; MPhil, Ph.D., Jawaharlal Nehru Univ., India

Assistant Professor (Digital and ICT Innovation; Urban Resilience; Infrastructure planning; Urban Innovation)

Program Chair, Urban Innovation and Sustainability,

Department of Development and Sustainability, School of Environment, Resources and Development

Pussayanavin, Tatchai

B.Sc., King Mongkut's Institute of Technology, M.Sc., Ph.D., Asian Institute of Technology

Visiting Lecturer (Water and Wastewater Engineering)

Department of Energy, Environment & Climate Change, School of Environment, Resources and Development

Puttiwongrak, Avirut

B.Eng., KMUT'NB Thailand; M.Eng., AIT Thailand; Ph.D., Kyoto Univ. Japan

Assistant Professor (Geomechanics; Geotechnical Engineering; Geoexploration & environment Engineering)

Department of Civil & Infrastructure Engineering, School of Engineering & Technology

Ricco, Raffaele

M.S., Ph.D., Univ. of Padova, Italy

Assistant Professor (Nanoparticles; Metal-Organic Frameworks; Bio-composites; Sol-gel; Surface functionalization)

Department of Industrial Systems Engineering, School of Engineering & Technology

Roy, Joyashree

B.A., M.A., North Eastern Hill Univ., Shillong, India; Ph.D., Jadavpur Univ., Kolkata, India

Bangabandhu Chair Professor,
(Resource and Environmental
Economics, Economics of Climate
Change, Sustainable development,
Water Quantity and Quality Demand,
Water Pricing, Energy Demand
Modeling, Applied Quantitative
Economics, Valuing ecosystem Services,
Coastal ecosystem, Natural Resource
Accounting)

Department of Energy Environment & Climate Change, School of Environment, Resources & Development

Salam, P. Abdul

B.Sc. Eng. (Hons.), Univ. of Peradeniya, Sri Lanka; M.Eng., D.Eng., AIT, Thailand

Professor (Bioenergy; Renewable Energy; Energy Conservation and Efficiency; Energy, Environment, and Climate Change Issues; Heat Recovery Systems)

Department of Energy Environment & Climate Change, School of Environment, Resources & Development

Salin, K.R.

B.Sc., M.Sc., Kerala Agriculture Univ., India, Ph.D., Central Institute of Fisheries Educ., India

Associate Professor (Applied Genetics; Selective Breeding; Hatchery Management and Grow-out Techniques; Biofloc Technology; Climate Change in Fisheries and Aquaculture; GIS for Integrated Coastal Resources Management)

Department of Food, Agriculture, & Bioresources, School of Environment, Resources & Development

Sanguankotchakorn, Teerapat

B. Eng., Chulalongkorn Univ., Thailand; M.Eng., Ph.D., Tokyo Institute of Technology, Japan

Associate Professor (Data Communications; Broadband Integrated Services Digital Networks; Multimedia Communications and Systems; Network Quality of Service)

Department of Information & Communications Technologies, School of Engineering & Technology

Santoso, Djoen San

B.Eng., Parahyangan Catholic Univ., Indonesia; M.Eng., AIT, Thailand; Ph.D., Saitama Univ., Japan

Associate Professor (Infrastructure Management in Developing Countries; Construction Project Management; Public Transportation; Non-motorized Transportation; Risk Management)

Department of Civil & Infrastructure Engineering, School of Engineering & Technology

Sasaki, Nophea

B.Sc., Royal Univ. of Agriculture, Cambodia; M.Sc., Shinshu Univ. Japan; Ph.D., Gifu Univ., Japan

Professor (Forest Carbon Management; Selective Logging Forest Carbon Accounting and Modeling; Ecological Modeling; Low-Carbon Project Development; Integrated REDD+ Project Management; Biodiversity Conservation; Payment for Ecosystem Services; Climate Policy)

Department of Development & Sustainability, School of Environment, Resources & Development

Sharma, Deepak

B.Eng. Punjab Engineering College, India; M.Eng. and D. Eng., Energy Policy, AIT, Thailand.

Professor (Energy-Water-Food Security, Climate Change, Infrastructure, Institutions, Energy Market Reforms, Technology-Policy Interactions)

Department of Energy, Environment, and Climate Change, School of Environmental, Resources and Development

Director, Centre for Global Challenges

Shrestha, Rajendra Prasad

B.Sc., Haryana Agricultural Univ., India; M.Sc., D.Tech.Sc., AIT, Thailand

Professor (Sustainable Land management; Natural Resources Degradation and Environmental Indicators; Land Use & Climate, Geoinformatics)

Department of Development & Sustainability, School of Environment, Resources & Development

Shrestha, Sangam

M.Sc., Tribhuvan Univ., Nepal; M.Sc., AIT, Thailand; Ph.D., Univ. of Yamanashi, Japan

Professor (Climate Change and Adaptation; Integrated Water Resources Management; Hydrology and Water Quality Modeling; Groundwater Development and Management, Sustainable Water Management Policy)

Department Head, Department of Civil & Infrastructure Engineering, School of Engineering & Technology

Co-Director, Global Water & Sanitation Center

Silpasuwanchai, Chaklam

B. Sc. Sirindhorn International Inst. Of Tech; M. Eng. AIT, Thailand, Ph.D. Kochi Univ., Japan

Assistant Professor (Machine Learning; Neuroscience; Human-Computer Interaction)

Department of Information & Communications Technologies; School of Engineering & Technology

Singh, Jai Govind

B.Eng., Motilal Nehru National Institute of Technology, India; M.Tech.; Ph.D, Indian Institute of Technology, India

Associate Professor (Power System Planning; Operation and Control; FACTS Controllers; Restructuring of Electric Industry, Demand-side management; Grid Integration of Renewable Energy Resources; Power Distribution Systems; Smart Grid; Micro Grid)

Department Head, Department of Energy, Environment and Climate Change, School of Environment, Resources & Development

Sundaram, S. Mohana

B.Tech, Tamil Nadu Agricultural University, India; M. Tech., Indian Institute of Technology Kharagpur, India; Ph.D., Indian Institute of Technology Madras, India

Assistant Professor (Irrigation Water Management, Groundwater Recharge Estimation, Soil Moisture Monitoring and Modeling in Unsaturated zone, Chemical Leaching Modeling into the Groundwater Systems, Remote Sensing and GIS applications for Water Resources and Agriculture and Time Series and Geostatistical Modeling of Environmental Observations)

Department of Civil & Infrastructure Engineering, School of Engineering & Technology

Tangdamrongsub, Natthachet

B. Eng., Thammasat Univ., Thailand; MSE, Chalmers Univ. of Technology, Sweden; Ph.D., National Chiao Tung University, Taiwan

Assistant Professor (Data Assimilation, Satellite Remote Sensing and Gravimetry, Land Surface Modeling, Artificial Intelligence)

Department of Information & Communications Technologies, School of Engineering & Technology

Taparugssanagorn, Attaphongse

B.Eng., Chulalongkorn Univ., Thailand; MSc., Technische Universität Kaiserslautern, Germany; Dr. Tech, Univ. of Oulu, Finland

Associate Professor (Smart Energy Grids; Optimal Energy Scheduling; Smart Grid Communications Using Cognitive Radio-based Spectrum Sensing for Cognitive Radio Systems; MIMO-OFDMA Cooperative Relay Systems; Cognitive Radio-based Wide Coverage Rural Broadband on TV White Spaces; Resource Allocation for MIMOOFDMA Systems; Digital Image Processing)

Department of Information & Communications Technologies, School of Engineering & Technology

Trau, Dieter

Dipl. Ing. FH, Aachen University of Applied Science, Germany, Ph.D., Hong Kong University of Science & Technology, Hong Kong

Professor (Development of New Approaches and Platform Technologies for Bioanalytics, Biosensors, Diagnostics and Environmental Monitoring)

Department of Industrial Systems Engineering

Dean, School of Engineering & Technology

Director, AIT Entrepreneurship Center

Tripathi, Nitin Kumar

B.Tech., Regional Eng. College, India; M.Tech., IIT.; Ph.D., IIT., Kanpur, India

Professor (Remote Sensing and GIS for Disaster Mitigation; GIS; Remote Sensing: RFID and Vehicle Tracking; Indoor Positioning Systems; Environment, Disaster; Agriculture; Health; Applications)

Department of Information & Communications Technologies, School of Engineering & Technology

Director, Special Degree Programs

Tsusaka, Takuji

B. Eng. Univ. of Tokyo, Japan; M.A., Ph.D., National Graduate Institute for Policy Studies, Tokyo, Japan

Assistant Professor (Agricultural Economics, Natural Resources Economics, Poverty Reduction, Technology Adoption, Impact Evaluation, Spatial Econometrics, Gender in Smallholder Agriculture)

Department of Development and Sustainability, School of Environment, Resources & Development

Virdis, Salvatore G.P.

M.Sc., Univ. of Siena, Italy; Master DESS, Université Pierre et Marie Curie UOMC, France; Ph.D., Univ. of Siena, Italy

Associate Professor (Applied Geological Sciences and Remote Sensing: Geo-Information and Earth Observation Science; Remote/Proximal Sensing Techniques; Advanced Geospatial Modeling for Natural and Non-natural Processes from Field- to Landscape-scale on Range of Timescales from Seasonal to Decadal Processes; Dynamics of Physical Landscapes; Social and Human Dimensions of Geographical Problems)

Department of Information & Communications Technologies, School of Engineering & Technology

Visvanathan, Chettiyappan

B.Tech., IIT, Madras, İndia; M.Eng., AIT, Thailand; D.Eng., Inst. Nat'l. Polytech., Toulouse, France

Professor (Cleaner Production; Industrial Environment Management; Membrane Technology for Water and Wastewater Treatment; Solid Waste Management; Environmental Hazards Mitigation)

Department of Energy Environment & Climate Change, School of Environment, Resources & Development

Warnitchai, Pennung

B.Eng., Chulalongkorn Univ., Thailand; M.Eng., Ph.D., Tokyo Univ., Japan

Professor (Structural Dynamics; Earthquake Engineering: Seismic Hazard Assessment; Earthquake-resistant Design of Structures; Wind Engineering: Wind Effects on Structures; Aero-elasticity; Wind Tunnel Model Tests; Bridge Engineering: Control of Structural Vibration)

Department of Civil & Infrastructure Engineering, School of Engineering & Technology

Winijkul, Ekbordin

BB.Eng., Chiang Mai Univ., Thailand; M.Eng., AIT, Thailand; Ph.D., Univ. of Illinois at Urbana-Champaign, USA

Associate Professor (Air Pollution Emission Inventory; Household Emission Distribution and Mitigation Scenarios; Transportation Emission Reduction Strategies; Air Quality Monitoring and Modeling)

Department of Energy, Environment & Climate Change, School of Environment, Resources & Development

Witayangkurn, Apichon

B.Eng., King Mongkut's Institute of Technology, Thailand; M.Eng., Asian Institute of Technology, Thailand; D.Eng., University of Tokyo, Japan

Visiting Faculty (Large-Scale Spatial Data Processing & Mining; Trajectory Data Processing; Mobile Computing; Human Activity and Behavior Analysis; Parallel Processing; Cloud Computing Platforms; Sensor Networks; Real-time Monitoring Systems; Sensor-based Unmanned Aerial Vehicles: UAV)

Department of Information & Communications Technologies, School of Engineering & Technology

Xue, Wenchao

B.E., M.E., Tsinghua University., China; Ph.D., University of Tokyo, Japan

Associate Professor (Energy/Resource Productive Wastewater Treatment; Water/Wastewater Membrane and Electrochemical Technologies; Sustainable Watershed Management; **Environmental Emerging Contaminants)**

Department of Energy, Environment & Climate Change, School of Environment, Resources & Development

Director, Belt and Road Research Center

Yukongdi, Vimolwan

B.B.A, Assumption University, Thailand; M.B.A., University of Pittsburgh, USA; Ph.D., University of Melbourne, Australia

Associate Professor (Human Resources Management and Organizational Behavior)

Head of MBA Program, School of Management

Zulfigar, Farhad

B.Sc. (Hons.), M.Sc. (Hons.), University of Agriculture, Faisalabad, Pakistan.; M.S., Ph.D., Asian Institute of Technology, Thailand

Assistant Professor (Sustainability in Value Chains; Innovations for Sustainable Development; Water Management; Agriculture Policy Analysis; Climate Change; Food Security)

Department of Food, Agriculture and Bioresources, School of Environment, Resources & Development