NonSee Newsletter

Kasetsart University, Thailand

Volume 27 Issue 12
December 2021

The 10th Online Meeting of Advisory Committee of the Confucius Institutes, KU

Kasetsart University hosted the 10th Online Meeting of Advisory Committee of the Confucius Institutes on 15 November 2021 in the meeting room on the 10th floor of the Kasetsart Golden Jubilee Administration and Information Center Building, Kasetsart University. Dr. Chongrak Wachrinrat, President of Kasetsart University presided over and chaired the meeting. Kasetsart University faculty members participating in the meeting were Assistant Professor Dr. Kampanat Pensupar, Vice President for International Affairs; Associate Professor Dr. Chamaipak Tayjasanant, Assistant to the President for International Affairs; Assistant Professor Dr. Thongrob Ruenbanthoeng, Dean of the Faculty of Humanities; Dr. Nathakarn Thaveewatanaseth, Director of the Confucius Institute (Thai), Kasetsart University,Faculty of Humanities; Associate Professor Dr. Napasri Timyam, Deputy Dean for International Affairs, Faculty of Humanities; Assistant Professor Dr. Paphonphat Kobsirithiwara, Head of Department of Eastern Languages, Faculty of Humanities; Assistant Professor Dr. Kewalee Petchratip, Head of Chinese Section, Faculty of Humanities; Miss Araya Bijaphala, Director of International Affairs Division; and personnel of the International Affairs Division. Also attending the meeting were university administrators from Huaqiao University, the People's Republic of China led by Dr. Zeng Lu, Vice President of Huaqiao University together with Mr. Tu Wei, Director of the Department of Chinese Studies, Huaqiao University; Ms. Zeng Shanni, Director of International Exchange, Huaqiao University; Associate Professor Dr. Gao Humin, Director of the Chinese Confucius Institute at Kasetsart University; and Mr. Lei Yun, Head of the Chinese Office of International Studies, Huaqiao University.

There was supposed to be an advisory committee called the Advisory Committee of the Confucius Institute, Bangkok in accordance with the regulations governing the administration of the Confucius Institutes at Kasetsart University, No. 3, 2007, Section 2, Administration and Operations, Article 7 Subsection 7.1. The Rector is the Vice-Chairman. The rector of the partner university is the first vice chairman and the vice-rector of the university assigned by the rector as the second vice chairman and item 9, the advisory committee must hold a meeting at least once a year. However, due to the COVID-19 pandemic, the meeting cannot be held.

The 10th Online Meeting of the Advisory Committee of the Confucius Institutes at Kasetsart University began with the introduction of the list of participants and a speech by the Vice President of Huaqiao University, Chairman of China. Then Dr. Chongrak Wachrinrat, President of Kasetsart University, Chairman of Thailand gave a speech. Committee of the Confucius Institutes aims to report on the implementation of activities and projects to encourage Chinese language study and promote Chinese culture both inside and outside Kasetsart University during 2020-2021. This was followed by discussions about future plans of the Confucius Institutes and possible plans for collaboration between the two universities. The committee has agreed on the important role of the Institutes in offering training programs for Chinese teachers who will help not only promoting Chinese language and culture, but also enhancing amity between China and Thailand. Later, the Chinese and Thai directors of the Confucius Institute of Kasetsart University reported on the past 2 year's operations of the institute to the advisory committee of the Confucius Institute divided into 6 parts, namely the overall action plan, Chinese language teaching and training, cultural activities, financial statements, important projects in 2020-2021, and future work plans for 2022.

The Chinese and Thai parts of the Executive Committee jointly considered the report on the successful, excellent performance by considering the Confucius Institute Development Plan for the year 2022. Then there was a meeting summary and online pictures were taken together. Finally, Dr. Chongrak Wachrinrat, President of Kasetsart University, delivered closing remarks of the 10th Online Meeting of Advisory Committee of the Confucius Institutes. He said that he was delighted with the success of the projects and the performance of the Confucius Institute at Kasetsart University. In addition, Kasetsart University has maintained good cooperation and relationship with Huaqiao University for more than 15 years and hopes to find an opportunity to visit in the future in order to discuss further academic cooperation. Kasetsart University is pleased to provide full support for a collaborative partnership with Huaqiao University.





ON THE Cover

Green and Sustainable Electron Beam Processing for Industrial Applications

The Center of Radiation Processing for Polymer Modification and Nanotechnology (CRPN) at the Faculty of Science, Kasetsart University has been established under the national project-Technical Cooperation(TC) programme supported by the International Atomic Energy Agency (IAEA), United Nations (UN), Vienna, and Austria. Since 2016, Associate Professor Dr. Wanvimol Pasanphan, a head of the project, initiated the CRPN as a platform for promoting scientific and technological challenges of green technology using radiation processing for material research and development.

The national projects have been continuously supported by the IAEA through human resource development and procurement because the IAEA encourages the member states to promote and use radiation processing in various aspects, such as polymer modification, materials and nanotechnology for food and agriculture, environment, healthcare, and industrial applications.In 2016-2017, the first establishment of CRPN supported by TC/IAEA focused on enhancing effective utilization of radiation processing for polymer modification and nanotechnology in agricultural, medical and industrial applications (THA1010).In 2018-2019, the IAEA continuously supported the CRPN for strengthening capacities of radiation technologies in material applications (THA1011).

Currently (2020-2022), the CRPN is being supported by the IAEA to strengthen the capabilities of the low energy electron beam for enhanced economic competitiveness of products and industries (THA1014). To be a sustainable platform, the IAEA also supports the Electron Beam Facility installed at the CRPN, Faculty of Science, Kasetsart University. On this occasion, Dr. Chongrak Wachrinrat, President of Kasetsart University and Associate Professor Dr. Apisit Songsasane, Dean of Faculty of Science have kindly supported this international initiative of the CRPN as an asset of an excellent academic institution of science and technology and achieving the Sustainable Development Goals (SDGs). Fruitful support from the industrial partnership and collaboration (e.g., Mitr Phol Innovation & Research Center, SCG Chemical Co. Ltd., and other SME and startup companies) have made CRPN perform well and move forward to be a green and sustainable platform for material research and industries.

Presently, the CRPN provides expertise and coordinated research activities across national, international and academic-industrial linkages and empowers students in learning about and developing a green radiation processing for material research and industries. The CRPN is dedicated to making the best development of science and technology in this field in Thailand and internationally, and to leaving an improved sustainable platform at Kasetsart University. Missions of the CRPN includes 1) to educate and transfer knowledge to students, scientists, and young researchers, 2) to develop science, technologies, innovations and products, and 3) to establish industrial linkage and transfer the developed technologies to industries in the field of radiation and electron beam processing for polymer modification and nanotechnology to support the targeted applications (agriculture, food, environment, medical, healthcare and their related industries) and SDGs.

CONTENTS

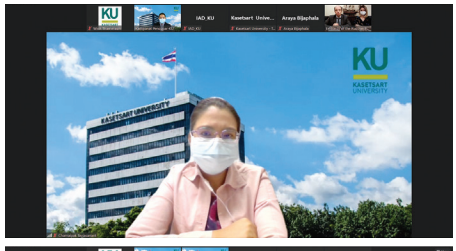
An online meeting between KU and the Embassy of Russian Federation

Representatives from the Embassy of the Russian Federation participated in an online discussion via Zoom with Kasetsart University officials on 9 November 2021 in an effort to improve the relationship and find new collaboration between Thailand and Russia. The meeting took place in the IAD meeting room on the 10th floor of the Kasetsart Golden Jubilee Administration and Information Center Building, Kasetsart University. University participants included Assistant Professor Dr. Kampanat Pensupar, Vice President for International Affairs, Associate Professor Dr. Chamaipak Tayjasanant, Assistant to the President for International Affairs, and Miss Araya Bijaphala, Director of International Affairs Division. Representatives from the Embassy of the Russian Federation in the Kingdom of Thailand included Mr. Stepan Golovin, Senior Counsellor and Deputy Head of Mission and Miss Anastasia Makhiboroda, Second Secretary (Agriculture).

Mr. Stepan Golovin gave crucial information about the close relationship between Thailand and Russia and discussed the increasing number of agricultural products that Russia imports from Thailand, which has led to the need for collaboration in agricultural development and research. Furthermore, the Embassy of the Russian Federation also supported humanitarian and educational aspects by providing scholarships for Thai students to study in Russia. Simultaneously, Assistant Professor Dr. Kampanat Pensupar gave an overview of Kasetsart University and its expertise in agricultural-related fields of studies, and also elaborated more on the U2T (university to sub-district) project and the Kasetsart University Business Incubation Center (KU-BIC) in which students provide activities for the community.

Miss Anastasia Makhiboroda also shared some thoughts on the past relationship between Kasetsart University and Russia. Then Associate Professor Dr. Chamaipak Tayjasanant provided more information about the Russian Language course for tourism under the Faculty of Humanities, and the possibility of establishing a Russian Studies Center under the Faculty of Social Sciences in the future.

In conclusion, both sides agreed to initiate a new collaborative activity by conducting a MoU, which Kasetsart University is willing to send the draft version to the Embassy of the Russian Federation promptly.



What's Next?

The 60th Kasetsart University Annual Conference

Kasetsart University together with a network of partners is pleased to invite researchers to attend the 60th Kasetsart University Annual Conference entitled "Next Normal KASETSART: Turning Crisis into Sustainability" to drive an educated society towards the future. It aims to create a society that uses knowledge as a stimulus to spark change in relevant contexts.

Interested researchers can participate in the meeting and present research in 12 fields, namely Plants, Animals, Veterinary Medicine, Fisheries, Agricultural Extension and Home Economics, Science, Engineering and Architecture, Agro-Industry, Natural Resources and Environment, Education, Economics and Business Administration, and Humanities and Social Sciences.

In addition, researchers can submit full article research for request for publication of the E-proceedings of the KU Annual Conference Journal of Agriculture and Natural Resources (ANRES) (SCOPUS, Q2), Kasetsart Journal of Social Sciences (KJSS) (SCOPUS, Q2), and Journal of Fisheries and Environment (SCOPUS, Q4).

The 60th Kasetsart University Annual Conference is scheduled to be held online from 21-23 February 2022 via Cisco Webex system. For more information, follow the link: https://annualconference.ku.ac.th or inquire by email: KUannualconf@gmail.com

The first student in Thailand won the 3rd prize for world-class sustainable architecture

The work “Coastal Reborn: A symbiosis of architecture and environment” created by Mr. Dolathep Chetty received 3rd prize in the "Lafarge Holcim Awards" in the Next Generation Prize under 30 years old category. The architectural design created by Mr. Dolathep, a student in the Faculty of Architecture, integrates multiple sciences. Assistant Professor Dr. Cuttaleeya Jiraprasertkun, Department of Architecture is an advisor. The forum is a sustainable design and construction competition where Dolathep is the first Thai to receive this award alongside winners from world-class universities. All entries have been submitted for the contest with more than 4,000 pieces from 121 countries around the world.

Mr. Dolathep discussed his work “Coastal Reborn: A symbiosis of architecture and environment”, a bachelor’s thesis titled “The symbiosis of architecture and environment through the process of ecological reclamation: Khlong Dan Community, Samut Prakarn Province” in 2018. Mr. Dolathep’s motivation for this project began with an interest in environmental problems that actually occur in Thailand by proposing a solution to the problem of erosion of the coast of the upper Gulf of Thailand Khlong Dan community area in Samut Prakan Province. This area has experienced one of the most severe coastal erosion rates in Thailand over the past 60 years.

From the study, it was revealed that this coastal erosion problem is linked to the problem of loss of habitat and livelihood for fishermen. In addition, the decline in biodiversity has also resulted in the shift of the indigenous fishery occupational system to a closed-system shrimp farming system that relies on chemicals until it collapses due to epidemic problems. The formerly fertile mangrove forests were transformed into the deserted shrimp farms they have become today. A solution to coastal erosion was found through the construction of rock dams, which is heavy material encapsulated in the existing sand sausage. This does not solved the problem in the long term because the rock will gradually collapse and because the clay soil is soft, it will also cause turbid sediment of the muddy soil. This affects the habitat and the benthic and aquatic animals in that area and can lead to extinction. This thesis also questions the lack of interaction of the people, spaces, and infrastructures.

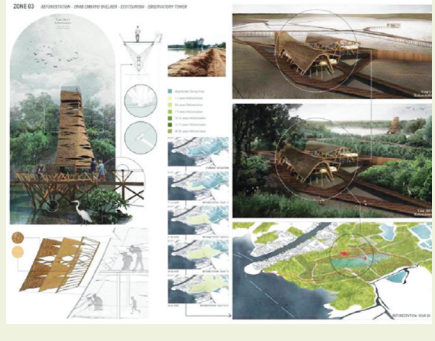
An understanding of the problematic system led to the presentation of this idea. The architecture in "Symbiosis of Architecture and Environment,” will act as a stimulant for the natural system to heal itself. It only plays a role in helping to connect the relationship between people and nature to coexist in balance. There are three main parts of the design work:

1. Dam structure with triangular floating waves fused with fishermen's shelters and pontoon nets designed to line the seashore to slow down the waves that collide into the coastal zone.

2. The bamboo planting line at the coastal boundary serves to absorb waves and trap sediment for mangrove planting. In this area, nature trails, sea coasts, and crab bank buildings are also built for conservation.

3. Replanting mangrove forests on abandoned shrimp farms, developed in conjunction with the construction of mangrove forest paths, clams bank building for conservation and bird watching tower.

This thesis marks the integration of knowledge through advice from experts in many sciences at Kasetsart University, including water resource engineering, forestry, fisheries, civil engineering, architecture, and landscape architecture. It has been used to design a project that covers both the hydraulic dimensions of reducing the wave force, replanting mangrove forests to serve as a long-term natural wave barrier, nursery of crabs and clams for conservation, ecotourism of mangrove forests and green architecture design for a sustainable environment. His work can be an example for students' thesis writing.





"Thap Boek To" @Phu Thap Boek

Natural abundance of Phetchabun Research Station, Faculty of Agriculture, Kasetsart University is another area suitable for researching Arabica coffee. Phu Thap Boek is an 8 rai plot of the Phetchabun Research Station located 1,300 meters above sea level. The area is planted with Catimore Arabica coffee varieties because it is a high yielding variety resistant to diseases and pests. When processed, the coffee has a pleasant aroma. It is a favorite of many people who have tasted it. In addition to planting for research in the area, Phetchabun Research Station also promotes and offers advice on coffee planting and care for farmers on Phu Thap Boek.

The method of growing coffee must start with seed preparation. Red, ripe coffee beans must be selected from parental plants with the best characteristics. The parental coffee plants must have a short shrub, frequent joints, and large seeds and, most importantly, must be resistant to disease. Once the coffee beans are sorted according to the desired characteristics, they are then polished to separate the husks from the shells and soaked in water for 1 night, rinsed with clean water and dried. After that, the prepared coffee beans are planted in rows in the nursery plot. It takes about 45-50 days for the seeds to begin to germinate and emerge above the ground. The shade tree must be planted together with the coffee plant in order to block the wind, allowing the coffee plant to grow. The shade tree also must be able to block the sunlight for the coffee plant. The coffee plantation plot tried using Thong Lang, a common Indian Coral Tree (scientific name *Erythrina variegate* Linn). Leguminosae and macadamia trees, common name Macadamia, is a perennial plant in the family Proteaceae (the scientific name is *Macadamia integrifolia*), a shade tree used to extend the maturity of the coffee which results in the accumulation of various essences to improve the taste of the coffee.

Coffee Processing is done after picking the ripe coffee from the tree and then going through various steps and methods from the peel and pulp of the fruit to desiccation and fermentation of coconut shell coffee beans to be ready to be polished to obtain quality coffee beans. There are various methods to remove the seed from the cherry. Most of them are handled by the main processes, namely the natural dry process and the washed process. Each method will produce different quality coffee. The Phetchabun Research Station uses the washed process method, whereby the coffee beans are put into the machine and the bark is removed. The resulting part is called "Parchment coffee." Parchment coffee needs to be soaked in water for another 1-2 days, then the sticky mucus must be scrubbed off with a slime scrubber and rinsed with clean water. The shell seeds are then dried for another 7-10 days to allow the shell seeds to have a relative humidity of not more than 13%. Then they are packed in a well-ventilated mesh bag and aged in a room with good ventilation for 6 months to 1 year before the coffee beans can be processed.

The name of the coffee "Thap Boek To" was initiated by Dr. Chongrak Wachrinrat, the President of Kasetsart University. It comes from the concept of learning from nature on highlands and playing on words to make a synonym with the name of the research station. The taste of the unique "Thap Boek To" coffee grown on the station should not be missed. It's a must-visit for coffee drinkers once in a lifetime. Let's experience it! Try the skill of roasting coffee with a charcoal stove, grind and brew the coffee to taste the aromatic cinnamon while experiencing the cool and relaxing atmosphere on the high mountain at Phu Thap Boek at Phetchabun Research Station. We guarantee to impress all visitors, especially this winter from November to January. Tourists should not miss the morning mist and enjoy a good coffee called " Thap Boek To."




SEARCA 2021 Youth COVIDeo Contest

Miss Benjarat Soowit, or Pear, a KU Student Ambassador batch 2 (KUSAm#2) from the Faculty of Humanities attended the SEARCA 2021 Youth COVIDeo Contest and won 3rd prize among 10 finalists!

The 2021 Youth COVIDeo contest finalists with the SEARCA staff during the Virtual Awarding Ceremony.

Check out her video clip here https://www.facebook. comwatch/?v=1210815239400594

A team of KU students brings AiGRIBOT's work to show at the Startup Thailand League 2021 event

Students of the Faculty of Engineering and the Faculty of Economics at Kasetsart University brought 3D robots for agriculture (AiGRIBOT) to exhibit at the Startup Thailand League 2021: Demo Day event. They received additional funding from the Startup Thailand League 2021 project by the National Innovation Agency (Public Organization) at the Event Hall at True Digital Park.

The students who own the work consist of Mr. Panupong Thanarukwuttikorn, Department of Industrial Engineering; Mr. Benjamin Mekkerdchoo, Department of Mechanical Engineering; Mr. Narut Jaroensombut, Department of Mechanical Engineering; Mr. Kritsana Netpugdee, Department of Electrical Engineering; Ms. Nanthakarn limkool, Department of Computer Engineering; and Ms. Thipvarinthorn Supatchayaakkarima, a student of the Faculty of Economics.

The Agricultural 3D Robot (AiGRIBOT) is a high-precision hybrid robot able to work on agricultural plots effectively. The accuracy is higher than that of human labor. It is designed to look like a CNC (Computer Numerical Control) machine that can work automatically with a computer controlled 3D robot. It can be scaled according to the size of the farmland and the size can be adjusted to cover the agricultural plot in the part that needs to be harvested. It also has the ability to protect plants, eliminate weeds, maintain crops and manage data efficiently. The aforementioned robot is a project that received a grant to extend the work of 3D robots for agriculture (AiGRIBOT) by bringing the work to the contest and presenting an online business plan as part of the Angel Fund 2021 project. This project was a collaboration between the Ministry of Industry, the Department of Industrial Promotion, Delta Electronics (Thailand) Public Company Limited and Samart Corporation Public Company Limited. The purpose was to develop startups from a project linking funding sources for entrepreneurs and new businesses.

Did you Know

Do you wonder why we use Krathong candles this year?

Today we will clarify for everyone's curiosity. Let's see the answer!

Generally, people may think that candle Krathong is better than the traditional one because of its beautiful shining light, don't they? In fact, it not only has a nice appearance, but also helps us to avoid contaminating the environment because they are meltable and recyclable. Moreover, the candle will become tears floating on the water surface when it burns out. Therefore, the candle Krathong is easier to clean up as it can reduce the problems of waste in the water.

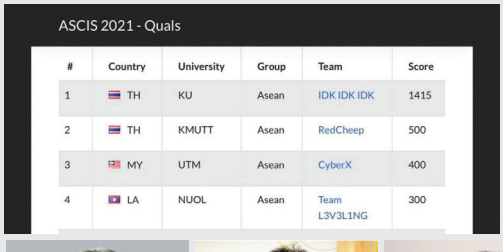
Even though a candle Krathong is more complex to make than other kinds of Krathongs, it is one of the best ways to save the environment. This year, we have focused our vision on the environmental impacts. We want to take part in helping to reduce waste from Krathong. Therefore, Candle Krathong is the solution to this year's festival.

KU students representing Thailand won the 1st prize in ASEAN Group

The Southeast Asia Cyber Skills Competition, IDK IDK IDK team from Kasetsart University won the 1st prize in ASEAN group and 2nd prize in the Qualifying round. The team represented Thailand in the Final Round of the Southeast Asia Regional Cyber Skills Competition in the program "The 3rd ASEAN Students Contest on Information Security in 2021" organized by Vietnam via an online system on 16 October 2021. The Office of the National Cyber Security Commission (NSC) sent 10 representatives of Thailand to participate in the competition. The contestants were divided into 3 groups as follows: VN1 group, educational institutions from North Vietnam, VN2 group, educational institutions from South Vietnam, and the ASEAN group consisting of educational institutions from ASEAN countries (Excluding Vietnam) including Thailand, Brunei, Laos, Malaysia, Myanmar, Singapore and Indonesia.

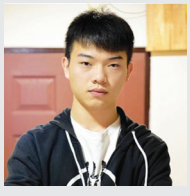
The IDK IDK IDK team from Kasetsart University won the 1st prize in the ASEAN group and the 2nd prize in the Qualify round. They represented Thailand in the final round of the Final Round. The RedCheep team from King Mongkut's University of Technology Thonburi received 2nd prize in the ASEAN group and 3rd prize in the Qualify round. In addition, the consolation prize in the Qualifying round was the R0bocop team and the STDio team from the Royal Police Academy.

The IDK IDK IDK team of the Department of Computer Engineering, Faculty of Engineering at Kasetsart University consisted of Mr. Pitchawat Laknathiti; Mr. Ittikorn Punsiri, 4th year student; Mr. Thanakrit Mek-on, 3rd year student; and Mr. Thanaphon Densiridecha, 2nd year student. Assistant Professor Dr. Paruj Ratanaworabhan, Department of Computer Engineering, Faculty of Engineering was the advisor. Previously, the IDK IDK IDK team won the first prize from the contest Thailand Cyber Top Students 2021, organized by the Office of the National Cyber Security Commission (NSC) together with the Ministry of Digital Economy and Society and partner agencies. The competition was held on 28 August 2021 and was selected to represent Thailand along with 9 other teams to participate in the Southeast Asia regional cyber skills competition in the program "The 3rd ASEAN Students Contest on Information Security" in 2021 in the ASEAN level in Vietnam.


ASCIS 2021 - Quals

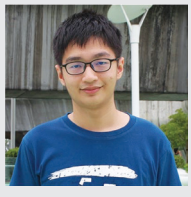
#	Country	University	Group	Team	Score
1	TH	KU	Asean	IDK IDK IDK	1415
2	TH	KMUTT	Asean	RedCheep	500
3	MY	UTM	Asean	CyberX	400
4	LA	NUOL	Asean	Team L3V3L1NG	300


Assistant Professor Dr. Paruj Ratanaworabhan


Mr. Pitchawat Laknathiti


Mr. Ittikorn Punsiri


Mr. Thanakrit Mek-on


Mr. Thanapoltorn Densiridecha

INTERNATIONAL AFFAIRS DIVISION
www.iad.intaff.ku.ac.th

ADVISOR & EDITOR IN CHIEF : Hathaitus SEMCHUCHOT
ASSISTANT EDITOR : Supawadee KAEWPUANGSEK | Nithikarn PONGSATHIDPORN
EDITORIAL STAFF : Montana Boonpooh WUDJINDAKUL | Thienthong WACHIRAWICHAI | Thiwara THATTHANA | Rujira PONGJETSUPAN | Achiraya Nunes GALANTE
PHOTOGRAPHER : Wisit THAMMASRI
GRAPHIC DESIGN : Global GE Co.,Ltd. | E-mail : pasda2007@gmail.com

PUBLISHED BY
INTERNATIONAL AFFAIRS DIVISION,
OFFICE OF THE UNIVERSITY,
KASETSART UNIVERSITY
50 Ngamwongwan Road, Chatuchak, Bangkok 10900, Thailand
+66 2942 8171-3, +66 2942 8858
Fax : +66 2942 8170, +66 2942 8726
fro@ku.th

The Yellow Flamboyant *(Peltophorum pterocarpum)* is the symbolic tree of Kasetsart University Thai people call it "NONSEE"