King Mongkut's University of Technology North Bangkok

International News

No. 99 Quarterly April - June 2023

KMUTNB Researchers won 3 Internationally Outstanding Inventors Awards





Gold Medal from the 48th International Exhibition of Inventions, Switzerland

Asst. Prof. Dr. Mahasak Ketcham, a lecturer of Faculty of Information Technology and Digital Information, won the gold medal at "the 48th International Exhibition of Inventions" organized during 6 - 30 April 2023 in Geneva. His award-wining invention is the virtual reality game for stroke rehabilitation. This is the biggest international exhibition for inventions, providing a platform for showcasing new inventions. The event was joined by industrial and commercial companies, inventors and researchers across the world.

Gold Medal from INTARG 2023, Poland

Assoc. Prof. Dr. Sasithorn Kongruang (middle), a lecturer of Faculty of Applied Science, was granted the Gold Award for her invention of Egg White Protein Hydrolysate Product, at the 16th International Invention and Innovation Show. This event was held from 24 - 25 May 2023 in Katowice, Poland. The event is under the patronage of the Polish Government, and leading international organizations, like the World Intellectual Property Organization (WIPO), International Federation of Inventors Associations (IFIA).

Gold Medal from the 34th International Invention, Innovation and Technology Exhibition (ITEX'23), Malaysia

Asst. Prof. Dr. Peerapong Pornwongthong, a faculty member of Faculty of Applied Science, won the gold award for the invention of "MEMBRANOX" from the ITEX'23, being held from 11 - 12 May 2023. This is the Asia's leading invention, innovation and technology exhibition initiated by the Malaysian Invention and Design Society (MINDS) since 1989 to feature the best innovations from Asia.



Inside	
Academic Cooperation	p.2
Academic Cooperation	p.3
Academic Cooperation	p.4
Academic Cooperation	p.5
Campus News	p.6
Campus News	p.7
TGGS	

KMUTNB's Journal of Applied Science and Engineering Progress (ASEP) Receives Outstanding Performance on "High Citation Award"



Picture from 1-r: Assoc. Prof. Dr. Malinee Sriariyanun (1st), Assistant to the President for University Development towards Internationalization and Special Affairs, KMUTNB, Prof. Dr.-Ing. habil. Suchart Siengchin (2nd), KMUTNB President and the editor of the journal, recieve the award from Dr. Chai Wutiwiwatchai (3rd), Ex- the journal has been recognized for its ecutive Director of National Electronics and Computer Technology exceptional performance, continuous Center (NECTEC), at the award ceremony on 26 May 2023.

On 26 May 2023, at the TCI-TSRI Collaboration Project Conference, Eastin Grand Payathai Hotel, Bangkok, the KMUTNB's Journal of Applied Science and Engineering Progress (ASEP) which is published and sponsored by KMUTNB, has been recognized for its exceptional performance at the TCI-TSRI Collaboration Project Conference by being granted "the High Citation Award."

This journal, under the editorship of Prof. Dr.-Ing. habil. Suchart Siengchin, was awarded the Outstanding Performance Award, a testament to its continuous improvement and significant contributions to the field.

The winning of this award reflects that improvement and significant contribu-

tions to the field of applied science and engineering. Also, in 2019, the journal achieved another significant milestone by being accepted into the SCOPUS database.

The 15th National Conference on Technical Education and The 10th International **Conference on Technical Education**



Prof. Dr. Noureddine Takorabet, head of Research Centre "Groupe de Recherché en Energie Electrique de Nancy (GREEN), is giving a keynote lecture.

During 8 - 9 June 2023, the Faculty of Technical Education organized the 15th National Conference on Technical Education and the 10th International Conference on Technical Education at KMUTNB, Bangkok Campus. It was a Hybrid Conference. Prof. Dr. Noureddine Takorabet, a head of Research Centre "GREEN," University of Lorraine, France, was invited to be the keynote speaker on the topic "The Future Trend of Hybrid-Electric Aircrafts Developments in European Union."

The opening ceremony of the conference was presided over by Prof. Dr. Somrerk Chandra-ambhorn (top left corner), Vice

President for Research and Information Technology. At this conference, there were both Thai and foreign students, professors, researchers and industry stakeholders engaging in discussions on sustainable technologies and practices. The conference seeks to assess the potential of innovations in fostering long-term resilience and promoting collaboration for a more environmentally conscious future.

Clemson University, USA



On 25 April 2023, Prof. Dr. Margaret M. Wiecek (5th from 1-r), School of Mathematical and Statistical Sciences, Clemson University, USA, visited KMUTNB to give a special lecture to students and researchers. It was held both onsite and online on the topic "Decision making under conflict and uncertainty: parametric and robust paradigms in multi-objective optimization" at College of Industrial Technology.

MoU Signing with Schneider Electric (Thailand) Limited



On 26 May 2023, the MoU Signing Ceremony between Thai-French Innovation Institute (TFII), KMUTNB, and Schneider Electric was held at Ratchaphruek Meeting Room, Navamindra Rajini Building. The KMUTNB side was represented by Prof. Dr. Teravuti Boonyasopon (middle), Chairman of KMUTNB Council Committee and Prof. Dr. -Ing. habil. Suchart Siengchin (1st from 1-r), President of KMUTNB, while the Schneider Electric side was led by Mr. Stephane Nuss (3rd from 1-r), Cluster President, Thailand, Myanmar, and Laos. This is the renewal of the third MoU which signifies the commitment to create the synergy between the academic and industry sides.

Victoria University College, Myanmar



On 22 June 2023, at Palmthong Meeting Room, College of Industrial Technology, Assoc. Prof. Smith Songpiriyakij (2nd from l-r), Dean of College of Industrial Technology (CIT), KMUTNB, and Dr. Phyo Thizar Thien (3rd from l-r), Dean of Faculty of Engineering, Victoria University College, signed the MoU between KMUTNB and VUC which is the 2nd renewal of MoU partnership. The MoU was signed in the presence of Assoc. Prof. Dr. Rattanakorn Phadungthin, (4th from l-r) Associate Dean of CIT, and Asst. Prof. Dr. Rathavoot Ruthankoon (1st from l-r), Head of Department of Civil and Environmental Engineering Technology, CIT.

The Launching of CubeSat Satellite by NBSPACE



NBSPACE, a start-up company under KMUTNB, has delivered a 6U CubeSat satellite to a customer in South Korea and it was successfully launched into the orbit on 25 May 2023 by the Nuri Rocket from Naro Space Center in South Korea. Mr. Apiwat Jirawattanaphol (1st from 1-r), a co-founder and CEO of NBSPACE, was KMUTNB alumni and member of the team that developed and built the KNACKSAT satellite in 2018. The company aims to provide space solution and to contribute to the development of Thailand's Space Industry.



Industrial Meister in Mechatronics Examination

During 20 to 23 June 2023, German-Thai Chamber of Commerce (GTCC) organized the Industrial Meister in Mechatronics Examination for 4 examinees from Pathumthani Brewery Co., Ltd. at Navamindra Rajini Building, KMUTNB. They participated KMUTNB's Thai-German Highly Skilled Techni-

cal Trainer Development Program and additional training course regarding to Industrial Meister in Mechatronics Training course in German standard. It is a pilot program continuing from CIM Integrated Expert, Mr. Paul koelker, work with KMUTNB team to improve the course being supporting by GIZ and KMUTNB. KMUTNB provides and improves a curriculum training course which its matching and qualify to exam Meister in German standard and GTCC provides a process of examination regarding to German Standard.

Université de Lorraine, France



On 8 June 2023, Prof. Dr. Noureddine Takorabet, Director of Groupe de Recherche en Energie Electrique de Nancy (GREEN), Université de Lorraine, France, visted KMUTNB to have a meeting with Prof. Dr. -Ing. habil. Suchart Siengchin, KMUTNB President, and the team of executives, such as Prof. Dr. Saowanit Sukparungsee, Vice President for Academic Affairs, Asst. Prof. Dr. Suphot Chunwiphat, Dean of KMUTNB's Graduate College and Prof. Dr. Phatiphat Thounthong, a Senior

Researcher of National Research Council of Thailand (NRCT) to discuss about the progress of the Electrical Engineering Thai-French Research Center" (EE-TFRC) project and the Doctoral Dual Degree Program in Electrical engineering and energy which are the cooperation between KMUTNB and Université de Lorraine, Prof. Dr. Phatiphat Thounthong, KMUTNB representative and Prof. Dr. Noureddine Takorabet, UL representative, are co-ordinators of the EE-TFRC project.

On this occasion, Prof. Dr. Noureddine Takorabet invited KMUTNB to organise the ICOME'24 International Conference in Bangkok in 2024. KMUTNB President and the KMUTNB Executive team agree to host this conference, and it will be a part of events to celebrate the KMUTNB's 65th Founding Anniversary in 2024.

Hamburg University of Applied Sciences, Germany



Picture: from l-r Asst. Prof. Dr. -Ing Sunantha Sodsee (6th), Dean of possible collaboration with the team of Faculty of Information Technology and Digital Innovation, Prof. Dr. faculty members. Prof. Dr. Stephan Stephan Pareigis (7th), Asst. Prof. Dr. Perapong Pornwongthong (9th), Pareigis came to Thailand to be a keynote Assistant to the President for Innovative Research and Development and speaker for the IC²IT2023 Conference Asst. Prof. Dr. Amornphun Phunopas (10th), Associate Dean for Research co-sponsored by KMUTNB during 18 and Innovation, Faculty of Engineering.

On 16 May 2023, Prof. Dr. Stephan Pareigis, a head of Department of Computer Science, Hamburg University of Applied Sciences, Germany, had a meeting with Dean of Faculty of Information Technology and Digital Innovation and team of Production & Robotics Engineering Department, Faculty of Engineering. In the mean time, he visited its laboratories.

They all discussed about the future 19 May 2023.

FernUniversität in Hagen, Germany



On 8 May 2023, Prof. Dr. – Ing. Herwig Unger, Chair of Communication Networks, FernUniversität in Hagen, Germany, had a meeting with Prof. Dr.-Ing. habil. Suchart Siengchin, KMUTNB President, to inform about the outcome of ongoing cooperative projects between Faculty of Industrial Technology and Management (FITM), KMUTNB Prachinburi Campus and FernUniversität in Hagen, and the operation of Creative Lab at Prachinburi Campus. In the near future, FernUniversität in Hagen has a plan to grant a scholarship to selected students from FITM to do internship in Germany.

McMaster University, Canada



On 31 May 2023, Asst. Prof. Dr. Wattana Kaewmanee (1st from 1-r), Director of the Thai-French Innovation Institute, and Prof. Dr. habil. Phatiphat Thounthong (3rd from 1-r), Head of Renewable Energy Research Centre (RERC) and Coordinator of EE-TFRC project warmly welcomed Prof. Dr. Babak Nahid-Mobarakeh (middle), a faculty member of McMaster University, Canada. He visited laboratories of RERC and gave a special lecture on "Introduction to Model-Predictive Control: Case Study-Control of Permanent Magnet Synchronous Motor" to KMUTNB students and researchers. They discussed to find matching coopera tion between both universities in the near future.

National University of Singapore, Singapore



On 22 May 2023, at Faculty of Engineering, Asst. Prof. Dr. Tanaporn Rojhirunsakool (2nd from 1-r), Assistant Dean for International Affair and Public Relations welcomed a delegation from University of Singapore (NUS) which was led by Prof. Li Haobin (5th from 1-r) and Mr. Ryan Hwee Wang Goh. The NUS delegates had a meeting with the executive team of Faculty of Engineering,

and representatives of Materials Handling and Logistics Engineering Department and Production & Robotics Engineering Department, to disscuss about the potntial area of academic collaborations.

Vietnam-Korea University of Information and Communication Technology, Vietnam



On 24 May 2023, Prof. Huynh Cong Phap (6th from l-r), President of VKU, and his team visited KMUTNB to discuss about the cooperative activities and MoU signing with the team of KMUTNB's executives led by Ms. Sikan Kulchonchan (5th from l-r), Vice President for International Affairs, and Asst. Prof. Dr. -Ing. Sunantha Sodsee (7th from l-r), Dean of Faculty of Information Technology and Digital Innovation.

German-Thai Chamber of Commerce (GTCC)



On 30 June 2023, Mr. Markus Hoffmann (6th from l-r of back line) and Dr. Kamonsak Suradom (3rd from l-r of back line) from GTCC, led Mr. Eric Moskwa (3rd from l-r of front line), CEO of Rhein Köster GmbH, Germany and his team to meet Ms. Sikan Kulchonchan (2nd from l-r of front line), Asst. Prof. Dr. Peerapong Pornwongthong (1st from l-r of front line), Assistant to the President for In-

novative Research and Development, and representatives from Department of Production and Robotic Engineering, Faculty of Engineering, to discuss about the possible cooperative activities.

Campus News

Management and Science University (MSU), Malaysia

On 23 May 2023, KMUTNB hosted the International Cultural Exchange Program for over 100 students of Management and Science University, Malaysia. The program commenced with a welcome remarks by Asst. Prof. Somchai Vetchakam (top left corner), Advisor of the President for Student Affairs and Alumni Relations at Pradoo Dang Hall, Anek Prasong Building. During their visit, the MSU students and KMUTNB students had the unique chance to engage in an exchange of Malaysian and Thai traditions and cultures. The program was joined by the KMUTNB students from the Thai traditional performance club, Thai traditional music club, and representatives of students form different faculties.



Group Picture: On 23 May 2023, at Pradoo Dang Hall, KMUTNB students and MSU students took picture after joining activities together.

Sepuluh Nopember Institute of Technology, Indonesia



During 6-10 June 2023, KMUTNB cooperated with Sepuluh Nopember Institute of Technology (ITS) to host the International Staff Mobility Program 2023. The program was joined by delegates from ITS and supporting staff from faculties and offices across KMUTNB. During the program, the participants had a

chance to exchange knowledge, best practice on office's management of the Sirindhorn International Thai-German Graduate School of Engineering (TGGS), International College, President's Office. They learned and shared experinces from each side and discussed about the ideas on the improvement of their works.

International College's Field Trip in Hong Kong



During 28 May – 3 June 2023, the group of 45 undergraduate students of International College made a field trip to Hong Kong and Japan. They attended short courses at Hong Kong Polytechnic University and University of Tokyo. Then, they attended a study visits to the Port of Tokyo,

Kurobe Dam Power Plant, Shirakawago World Heritage and SC Maglev and Railway Park. This study visit enabled the students to broaden their views on sustainable tourism, the operation of the logistics process at the port, the process of the Hydro generating electricity and the Japanese rail transportation infrastructure.

Campus News

College of Industrial Technology's Outbound Internship Programme

During May – June 2023, 22 students of the college of Industrial Technology (CIT), KMUTNB, took an internship in Germany, France and Indonesia. CIT offered the Outbound Internship Programme for the students to do an internship with partner universities. The numbers of KMUTNB internship students in each partner university are as follows; Germany: 6 students in HS Esslingen and 4 students in HS Coburg, France: 4 students in CESI Engineering School and 2 students in ESILV Engineering School, Indonesia: 6 students in Universitas Negeri Surabaya. They all took a group picture with Assoc. Prof. Smith Songpiriyakij (mid) CIT Dean and Assoc. Prof. Dr. Rattanakorn Phadungthin (2nd mid), Associate Dean for International Affairs and Special Affairs.



Bourgogne University, France



On 6 June 2023, Asst. Prof. Dr. Wattana Kaewmanee, Director of Thai-French Innovation Institute (TFII), welcomed Prof. Dr. Sami Ferdjani, a lecturer and supervisor of 4 internship students from Faculty of Engineering, Bourgogne University, and showed them around laboratories and facilities of TFII. The students joined an internship pro-

gram at Department of Material and Production Technology Engineering and Department of Electrical and Computer Engineering, Faculty of Engineering. Their internship period was between 17 April - 17 July 2023.

SPIE Oil & Gas Services



From April – June 2023, 7 undergraduate students of Faculty of Engineering joined the internship program at SPIE Oil & Gas Services, a French company. This is the cooperative activity under the MoU between KMUTNB and SPIE Oil & Gas Services aiming to enable the students to work in the international environment. The students worked productively with the maintenance engineering team.

Victoria University College, Myanmar



During 20 – 24 June 2023, as a part of the cooperation under the MoU to develop academic exchange, the 16 students from Victoria University College, Myanmar, attended a special training course at KMUTNB. The program was offered by Department of Civil and Environmental Engineering Technology, College of Industrial Technology, including a study visit to Metropolitan Waterworks Authority and SCG Cement Co., Ltd.

TGGS

TGGS's Executives Team Visited RWTH Aachen University



Picture from l - r of front line: Assoc. Prof. Dr. Tawiwan Kangsadan (1St),

Associate Dean for Academic Affairs and Quality Management, Dr. Henriette Ulrich Rüdiger, Rector of RWTH Finsterbusch (2nd), RWTH Director of International office, Prof. Dr. -Ing. Aachen University to discuss about Nisai Fuengwarodsakul (3rd), TGGS Dean and Univ.-Prof. Dr. rer. nat. Dr. the potential to expand and strengthen h.c. mult. Ulrich Rüdiger (4th), Rector of RWTH Aachen University.



Picture: TGGS Executive team visit TGGS students who get DAAD scholarship are studying at RWTH Aachen University.

During 1-6 May 2023, Prof. Dr.-Ing. Nisai Fuengwarodsakul, the Dean of the Sirindhorn International Thai-German Graduate School of Engineering (TGGS) and 5 members of executive team visited RWTH Aachen University in Germany. RWTH Aachen has played an important role to foster the progress of TGGS since its establishment in 1996. It was the first visiting of them to RWTH Aachen University after the Covid 19 pandemic in 2020.

They had a meeting with Univ.-Prof. Dr. rer. nat. Dr. h.c. mult.

The delegates from TGGS also visited loboratories and exchange research and collaborartion ideas with the researchers of RWTH Aachen University, such as Univ.-Prof.Dr. rer. nat. Dirk Uwe Sauer, Chair for Electrochemical Energy Conversion and Storage Systems, Institute for Power Electronics and Electrical Drives (ISEA), and Prof. Dr.-Ing. Stefan Pischinger, Chair of Thermodynamics of Mobile Energy Conversion Systems (TME). The TGGS delegates also met the community of TGSS students who had recieved DAAD shoolarship and were studying there.

Special Lecture Series 2023 "Tribology Aspects in Advanced Metal Forming Process"

On 10 May 2023, at Room 605, 6th floor, TGGS Building, TGGS hosted the MPE Special Lecture Series 2023 by inviting Prof. Dr. Kuniaki Dohda, McCormick School of Engineering, Northwestern University, U.S.A., to give a lecture on "Tribology Aspects in Advanced Metal Forming Process." TGGS organize sthis lecture series to provide an oppotunity to the KMUTNB's students and researchers to learn and exchange up-to-date knowledge with the leading sholars in different fields.



International News is published quarterly by: **International Cooperation Centre**

King Mongkut's University of Technology North Bangkok 1518 Pracharat 1 Rd., Bangsue, Bangkok 10800, Thailand Tel: +66 (0)-2-555-2000 ext. 1024, Fax: +66 (0)-2 586-9007



EDITORIAL TEAM

Prof. Dr. Teravuti Boonyasopon, Advisor **KMUTNB International News Committee**

Send news, questions and comments to: icc@op.kmutnb.ac.th