KMUTNB Students won RoboCup Rescue World Champions 2016 in Germany:
“7-time World RoboCup Rescue Champions”

In 2016, iRAP Robot team of students from King Mongkut’s University of Technology North Bangkok (KMUTNB) won the First Place and also the Best in Class Mobility Award in the competition “World RoboCup Rescue 2016”. The world contest was held from 30th June to 4th July 2016 in Leipzig, Germany. This year, iRAP won against other 24 rescue robot teams form 12 countries such as Germany, Britain, Austria, Iran, Mexico, Hungary, Japan, South Korea, Turkey, China and USA. The accomplishment makes Thailand 8-time world champion, and the University become the 7-time world champion of the competition.

A competition under outdoor conditions was also implemented in the Rescue Robot League. Robots had to localize and remove victims in danger zones, and transport material to these zones. It was also the first time that flying robots took part in another technical test as part of this league.

Students of Thai-German Pre-Engineering School, KMUTNB won 1st to 4th Place of Sumo Robot of World Robot Games Thailand Championship 2016

Continued on page 11
KMUTNB’s new President-Elect

Prof. Dr. -Ing. habil. Suchart Siengchin is a new President-elect of King Mongkut’s University of Technology North Bangkok (KMUTNB). He assumed the presidency in November 2016 following the second full term of former President Prof. Dr. Teravuti Boonyasopon. Being a former student from German institutions of higher education, Professor Siengchin received his Dipl.-Ing. in Mechanical Engineering from University of Applied Sciences Giessen/Friedberg; a Master of Science in Polymer Technology from University of Applied Sciences Aalen; and a Master of Science in Material Science from the Erlangen-Nürnberg University.

Furthermore, he earned his Doctor of Philosophy in Engineering (Dr.-Ing.) from Institute for Composite Materials, University of Kaiserslautern, Germany.

As a promising scholar, Professor Siengchin had the international experiences as a postdoctoral researcher at Kaiserslautern University in Germany and at School of Materials Engineering, Purdue University in USA. In 2016, he obtained his habilitation from the Chemnitz University of Technology, Germany.

In terms of academic boundaries, Professor Siengchin has been a full-time instructor and an acknowledged researcher at Production and Material Engineering Department, The Sirindhorn International Thai-German Graduate School of Engineering (TGGS), KMUTNB. He demonstrated remarkable administrative potential as KMUTNB’s former Vice President in charge of Research Promotion and Development, pursuing the University’s commitments for excellence in research and education.

Through his hard work and dedication, his capabilities were confirmed by several successful nominations. He was named the recipient of the University Outstanding Researcher Award for the year 2010, 2012 and 2013. His research interests primarily lie in the area of Polymer Processing and Composite Materials.

Being a recognized scholar, Professor Siengchin has served as Editor-in-Chief of KMUTNB International Journal of Applied Science and Technology; and a member of International Advisory Board of the journal eXPRESS Polymer Letters. Last but not least, he was a notable author whose scholarly works were extensively presented in 57 peer reviewed journal articles. During numerous domestic and international conferences, he has given 39 professional presentations, focusing primarily on the aspects of materials science and engineering topics.

“I am both excited and greatly honored to have been selected from KMUTNB community and KMUTNB Council as the 8th President of King Mongkut’s University of Technology North Bangkok (KMUTNB), which is recognized a notable national public research university. I’m determined to work hard so the institution will meet greater academic standards, both at national and international levels. I will put forth my greatest effort to serve KMUTNB community, striving to make the University a leading academic institution.

Most importantly, I realized that it would be hard to achieve success without assistance from faculty, staff members, alumni, students and community members. Then, we will work together as a team to make progress towards our goals and to render this institution a higher standard of excellence,” said new President-elect, Prof. Dr. -Ing. habil. Suchart Siengchin.

Chemnitz University of Technology, Germany

On 21st October 2016, Prof. Dr.-Ing. Suchart Siengchin, a new KMUTNB President-elect, defended successfully his habilitation at the Faculty of Machine Engineering, Chemnitz TU where he has worked with MERGE for many years. In his habilitation “Natural Fiber Reinforced Thermoplastics”. He gathered in various research activities the application potential of the processing of natural fibers and their combinations with bio-based plastics in regard to “green” composites and also he has published his results in international renowned journals.
A New KMUTNB President-Elect visit Partner Universities in Europe

During 10th–19th December 2016, Prof. Dr. -Ing. habil Suchart Siengchin, a new President-elect of KMUTNB led his new administrative team to visit Université de Lorraine and Grenoble Institute of Technology, France and Konstanz University of Applied Sciences, Germany. They all are old partners of KMUTNB which have collaborated since 2001. The KMUTNB delegation exchanged ideas and explored opportunity to growing joint degrees, research partnership and student and faculty exchanges to strengthen existing ones.

The delegation consisted of Assoc. Prof. Dr. Somrerk Chandra-ambhorn, Vice President for Research, Asst. Prof. Dr. Panarit Sethakul, Dean of Faculty of Technical Education and Asst. Prof. Dr. Wattana Kaewmanee, Director of Thai-French Innovation Institute (TFII) have embarked on a relationship-building mission as follow:

Visit Université de Lorraine (UdL), France

On 12th December 2016, KMUTNB delegation was welcomed by Prof. Dr. Pierre Mutzenhardt, President of Université de Lorraine and his team. They discussed and shared their successes on Renewable Energy Research Center-RERC where both universities set up at TFII/KMUTNB. Also at this occasion the presidents of 2 universities signed renew their MoU for cooperation on Ph.D. Dual Degree in Electrical and Energy Engineering between Université de Lorraine and KMUTNB.

Grenoble Institute of Technology, France

On 16th December 2016, Prof. Dr. -Ing. habil Suchart Siengchin, KMUTNB President and delegates met with Prof. Brigitte Plateau, President of Grenoble Institute of Technology and her administrative who involved in collaboration with KMUTNB.

They had talks about development of the double degree program in master of materials science and engineering (Master SGM) between Grenoble INP and KMUTNB and also focusing on how to increasing number of joint research collaboration in other fields between two institutions. After the meeting, KMUTNB delegates visited facilities and laboratories of Parcours Engineering of Functional Materials, Grenoble INP.

Konstanz University of Applied Sciences, Germany

On 14th December 2016, Prof. Dr.-Ing. Carsten Manz, President of Konstanz University of Applied Sciences gave a warm welcome to KMUTNB delegates. The representatives from both universities discussed their possibility of cooperation in joint degree, co-research and student exchange in the near future.

At this occasion, a Memorandum of Understanding between Konstanz University of Applied Sciences and KMUTNB was re-signed and will further expand the interactions between the two universities.
IEEE Teaching, Assessment and Learning for Engineering Conference 2016 (IEEE TALE2016)  
Faculty of Technical Education, KMUTNB organised IEEE TALE2016 at the Dusit Thani Bangkok Hotel, Bangkok, Thailand during 7th-9th December 2016. The conference was supported by KMUTNB, IEEE Thailand Section, IEEE Computer Society and IEEE Education Society to provide a forum for academicians and professionals from various educational fields and also with cross-disciplinary interests to network, share knowledge and engage in dialogue around the theme of fostering innovation and excellence in engineering education. 120 participants from 21 countries and 80 papers took part of this conference.

Yantai University (YTU), China  
On 15th December 2016, Assoc. Prof. Dr. Vilai Rungsardthong, Vice President for Academic Affair and KMUTNB Administration gave a warm welcome to Delegation of Yantai University, China: Prof. Dr. Song Zhongmin, Vice President for Academic and International Affairs and Mr. Wu Hongjun, a Project Manager, International Office.

For academic internationalization, representatives from both institutions discussed to find matching academic interests for their cooperation as student exchange and joint graduate program together. After the meeting, the YTU delegates visited the facilities and labs of Science and Technology Research Institute and TGGS.
Fern University in Hagen, Germany

During 23rd-28th October 2016, Assoc. Prof. Dr. Phayung Meesad (4th from l-r) Dean of Faculty of Information Technology, KMUTNB, led his researchers and Ph.D. students to participate “Conference Autonomous Systems 2016” at Cala Millor, Majorca, Spain. It was organised by Fern University in Hagen and German Informatics Society. At this occasion he and Prof. Dr. Jörg Desel (5th from l-r) Dean of Faculty of Mathematics and Computer Science continued to discuss on Binational Doctorate Degree Program which will be official announcement at KMUTNB in January 2017.

Dresden University of Technology, Germany

On 6th -11th December 2016, KMUTNB invited Prof. Dr. paed. habil. Hanno Hortsch, Dresden University of Technology to have a meeting with Advisory Committee on “Thai-German Highly Skilled Technical Trainer Development Project” to advise the roadmap for the program implementation and also be a keynote speaker on the International Conference on Teaching, Assessment and Learning for Engineering (TALE 2016) which organized by KMUTNB on 7th-9th December 2016.

Iowa State University, USA

During 22nd-25th November, 2016 Faculty of Applied Science, KMUTNB, Iowa State University, USA. Thai Society of Biotechnology (TSB), Food Science and Technology Association of Thailand (FoSTAT) National Science, Technology and Innovation Policy Office (STI) co-organised Workshop “Extrusion: Technology and Practices in Food, Agricultural, and Material Applications” at KMUTNB.

Assoc. Prof. Dr. Buddhi Lamal, professor of Food Science and Human Nutrition from Iowa State University, USA was a keynote speaker at this workshop. At this occasion he had a meeting with Vice President for Academic and Vice President for International Affair of KMUTNB to discuss future academic cooperation between 2 universities.
Academic Cooperation

Workshop on “Rapid Detection Technology for Food and Agricultural Application”

On 25th – 29th July 2016, Faculty of Applied Science, KMUTNB, Bremerhaven University of Applied Sciences, Germany, Thai Society of Biotechnology (TSB) National Science, Technology and Innovation Policy Office (STI) and Gibthai Co., Ltd. co-organized workshop at KMUTNB. Prof. Dr. rer. nat. Carsten Harms and Prof. Dr. Bela H. Buck from Bremerhaven University of Applied Sciences, Germany were keynote speakers. They shared knowledge, skills and experience about innovative methods for rapid detection, enumeration, isolation and characterization of foodborne, waterborne microorganisms, applied for food industries and agriculture. Additionally, first insights into the use of these applications for disease detection within marine aquaculture products were learnt and shared together.

Seminar “Innovation Product Design and Development”

On 7th-8th July 2016, KMUTNB and National Science Technology and Innovation Policy Office co-organized a seminar “Innovation Product Design and Development” at Buddy Oriental Riverside Hotel, Bangkok. 4 French experts: Prof. Dr. Daniel Brissaud, Prof. Dr. Serge Tichkiewitch, Prof. Dr. Frédéric Noël and Dr. Andreas Riel from Grenoble INP, France were keynote speakers.

The 12th International Conference on Computing and Information Technology (IC²IT 2016) and The 12th National Conference on Computing and Information Technology (NCCIT 2016)

On 7th-8th July 2016, the conferences were organized by Faculty of Information Technology, KMUTNB, Mahasarakham University, Council of IT Deans of Thailand (CITT) and partner institutions from Thailand and abroad at Avani Khon Kaen Hotel & Convention Centre, Khon Kaen. 4 Professors from abroad universities: Prof. Dr. –Ing. habil. Djamshid Tavangarian, University of Rostock, Prof. Dr. - Ing. habil Herwig Unger, Fern University in Hagen, Prof. Dr. Gerald Quirchmayr, the University of Vienna and Prof. R. Mikler, University of North Texas, USA. were keynote speakers, More than 350 participants joined the conference.
Academic Cooperation

Cooperation with Daegu Gyeongbuk Institute of Science and Technology (DGIST), South Korea

On 22nd July 2016, Prof. Dr. Gyeung Ho Choi, Dean, School of Basic Science, DGIST received the KMUTNB’s award “The Outstanding Teacher of the Year Award”. He has consecutively worked with KMUTNB in research cooperation and be co-advisors of KMUTNB Ph.D. since 2003.

On this occasion, he was a keynote speaker at the seminar “An Innovation Science-Engineering Curriculum for the 21st Century” at KMUTNB.

MoU with University of Tokyo, Japan

On 17th August 2016, Faculty of Engineering, KMUTNB signed MoU on Cooperation with Intelligent Space System Laboratory, University of Tokyo, Japan. To support the implementation of the project “KNACKSAT project design and delivery of small satellite (CubeSat) for education” as well as to promote teaching and research in the field of Aerospace.

Assoc. Prof. Dr. Udomkiat Nontakaew, Dean, Faculty of Engineering, KMUTNB and Prof. Dr. Shinichi Nakasuka, Director of Intelligent Space System Laboratory, presided over the MOU signing ceremony.

RWTH – TGGS Materials and Production Engineering Workshop 2016

On 21st November 2016, Materials and Production Engineering program, the Sirindhorn International Thai-German Graduate School of Engineering (TGGS) and a team of doctoral candidates and master students of RWTH Aachen University co-organised their workshop on the topic “RWTH – TGGS Materials and Production Engineering Workshop 2016” at the 6th floor of TGGS building.

Graduate students from both institutes shared their presentations and documents about Materials and Production Engineering, Improvement of Die Service Life in Hot Forging Process of Bevel Gear by using Stress Ring, Characterization, cold forming and material application of high manganese steels, etc. on this workshop.
Academic Cooperation

University of Siegen, Germany

On 30th September 2016, Assoc. Prof. Dr. Udomkiat Nontakaew (5th from l-r), Dean of Faculty of Engineering welcomed Prof. Dr.-Ing. Hubert Roth (4th from l-r) and a delegate from University of Siegen, Germany. They had a meeting and discussed with a management team and lecturers from Department of Production Engineering, Faculty of Engineering.

At this time Prof. Dr.-Ing. Hubert Roth also gave a presentation of Master and Ph.D. programs at University of Siegen to 4th year students in the field of Robotics Engineering and Automation Systems at the Department of Production Engineering, KMUTNB.

Vienna University of Technology, Austria

On 11th July 2016, Ms. Sikan Kulchonchan (3rd from l-r), Vice President for International Affairs, KMUTNB gave a warm welcome to Prof. Dr. Gerald Quirchmayr (middle), Institute of Software Technology and Interactive Systems, Vienna University of Technology, Austria.

He and Asst. Prof. Dr. Maleerat Sodanil (1st from l-r), Head of Department of Information Technology, Faculty of Information Technology, KMUTNB had worked on research cooperation and publications together.

She and her Ph.D student worked on his lab at Vienna University of Technology in October 2016 for one month which he supported by ASEA-UNINET scholarship.

University of Siegen, Germany

On 30th September 2016, Assoc. Prof. Dr. Udomkiat Nontakaew (5th from l-r), Dean of Faculty of Engineering welcomed Prof. Dr.-Ing. Hubert Roth (4th from l-r) and a delegate from University of Siegen, Germany. They had a meeting and discussed with a management team and lecturers from Department of Production Engineering, Faculty of Engineering.

At this time Prof. Dr.-Ing. Hubert Roth also gave a presentation of Master and Ph.D. programs at University of Siegen to 4th year students in the field of Robotics Engineering and Automation Systems at the Department of Production Engineering, KMUTNB.

During 27th August – 16th September 2016, Prof. Dr. Wolfgang Lukas, a Professor of business management, is a head of the Institute for Management and Economics, Bremerhaven University of Applied Sciences was invited to give a block lecture on “Human Resource Management” at International Trade and Business Logistics Program (International Program), the International College, KMUTNB.

The program is 4-year bachelor program designed to conduct the next generation of business professional who have knowledge and skills in international trade and supply chain management.
Kyushu Institute of Technology (Kyutech), Japan

From 12th-16th September 2016, 4 students of Concrete Lab, Department of Civil and Architectural Engineering, School of Engineering of Kyutech, had an international collaboration study with a group of the students of Department of Civil Engineering, KMUTNB. They learned, shared, and contested on the topic Design of High Strength Concrete Specimen” under 2 supervisors: Prof. Goda of Kyutech and Assoc. Prof. Dr. Manot Subpakittipakorn, KMUTNB.

Two teams have learned and integrated their knowledge and experience to make their Strength Concrete Specimens because their own countries have different weather and topography.

Nine KOSEN, Japan

From 21st August to 3rd September 2016, Assoc. Prof. Dr. Suriyon Tansuririyavong and Asst. Prof. Dr. Yasutomo Tamaki who are faculty members of Okinawa National College of Technology led twelve students from Kosen as National College of Technology of Kumamoto, Oita, Ariake and Okinawa, Japan for a short-term student exchange program at KMUTNB.

They visited several laboratories of Faculty of Engineering and College of Industrial Technology and did mini projects with KMUTNB students project team.

The KOSEN students have got lots of experience in Thai culture, the society and technology by broadening in this program.

Mapúa Institute of Technology, Philippines

On 3rd October 2016, 15 undergraduate students and 4 faculty members from Mapúa Institute of Technology, Philippines led by Dr. Manuel C. Belino, Dean of School of Mechanical and Manufacturing Engineering to visit Faculty of Engineering and the Sirindhorn International Thai-German Graduate School of Engineering (TGGS), KMUTNB.

At Faculty of Engineering, Asst. Prof. Dr. Petch Jearanaisilawong, Associate Dean for Planning & Development welcomed, presented curriculum and toured through laboratories of Department of Mechanical and Aerospace Engineering. And at TGGS where delegates were welcomed by Dr.-Ing. Alex Brezing, DAAD Lecturer/Researcher. The objectives of the visit were to be oriented about mechanical engineering program, to visit laboratories and establish a linkage between the universities.
Universiti Tunku Abdul Rahman, Malaysia

Three of 4th year students of Department of Electrical and Computer and one of Department of Civil Engineering, Faculty of Engineering joined the exchange internship program at Universiti Tunku Abdul Rahman, Malaysia.

2 of them took their internship during 20th June to 23rd August 2016 and another two took internship during 29th July to 2nd October 2016. They all work closely with their supervisors.

KOSEN, Institute of National Colleges of Technology, Kumamoto College

Mr. Krittin Chanphet (2nd from l-r of sitting row), Department of Mechanical and Aerospace Engineering and Mr. Thanat Assawanadda (4th from l-r of standing row), Department of Electrical and Computer Engineering who are third year students from Faculty of Engineering, participated KOSEN’s exchange student program. They took their internship at labs of Kumamoto College from 1st June-1st August 2016.

They got opportunities to interact and work with other interns from many countries at the labs.

National Kaohsiung First University of Science and Technology, Taiwan

From 1st June -31st July 2016, 3 of third year students of Civil Engineering student of Faculty of Engineering (picture from l-r) Ms. Thanawan Songsnonlek, Ms. Pornlapat Suksri and Ms. Worawan Duangmawong took their internship at laboratories of Department of Construction Engineering of College of Engineering, National Kaohsiung First University of Science and Technology, Taiwan.

They did not only work in the labs but they spent times outdoors at construction sites with their Taiwanese supervisor so that they could solve problems onsite.

Eindhoven University of Technology, Netherlands

On 5th July 2016, Assoc. Prof. Dr. Kraipat Cheenkachorn, Associate Dean for Student Affairs and Asst. Prof. Dr. Karn Panasuppamassadu, Head of the department of Chemical Engineering, Faculty Engineering gave a warm welcome to 28 Ph.D and Master students from Eindhoven University of Technology, Netherlands. They visited Research and Development Center for Chemical Engineering Unit Operation and Catalyst Design (RCC) and other labs of department of Chemical Engineering. Graduate students of both institutes discussed and shared their knowledges and researches together.
Campus News

TGGS Advisory Board Meeting 2016

On 28th September 2016, Asst. Prof. Dr. Monpilai Narasingha, Dean and administrative team of the Sirindhorn International Thai-German Graduate School of Engineering (TGGS) held annual TGGS Advisory Board Meeting at Ratchapruek Room, KMUTNB.

The purpose of the Advisory Board Meeting is gathered honorary Thai and German representatives from industries, government and organizations to discuss and advise on TGGS’s current and future on their action plan and management, especially their strategic policy of industry-oriented research and education, R&D for future industry, etc.

H.E. Peter Prügel, the German Ambassador to Thailand is the Honorary Chairman of the board gave a welcome speech and followed the opening remark from co-chairman by Prof. Dr. Edmund Haberstroh, RWTH Rector Delegate to TGGS and also the acting co-chairman for Prof. Dr. Ernst Schmachtenberg, RWTH Rector and Prof. Dr. Teravuti Boonyasopon, KMUTNB President.

Students of Thai-German Pre-Engineering School, KMUTNB won 1st to 4th Place of Sumo Robot of World Robot Games Thailand Championship 2016

Student teams of Thai-German Pre-Engineering School, King Mongkut’s University of Technology North Bangkok (KMUTNB) were winners of the first place to the fourth place of Sumo Robot of World Robot Games Thailand Championship 2016. The national contest was held from 29th-30th July 2016, at Zeer Rangsit Shopping Mall, Pathum Thani. Then they became representatives of Thailand in “World Robot Games 2016” held between August 24th-27th at Bandung, Indonesia where they successfully received the first runner up award and a performance award.

Kyushu Institute of Technology (Kyutech), Japan

During 27th August to 5th September 2016, 11 students from Kyushu Institute of Technology were led by Prof. Dr. Eiji Hayashi and Assoc. Prof. Dr. Panart Khajornrungruang, attended to the Robot workshop at robotic laboratory, Faculty of Engineering.

It was not only exchange of knowledge and experience in academic between students of both institutes but also they were still good practice in cultural exchange during their workshop together.
KMUTNB Graduation Ceremony for Academic Year 2015

On 17th November 2015, Her Royal Highness Princess Maha Chakri Sirindhorn presided over the graduation ceremony of King Mongkut’s University of Technology North Bangkok (KMUTNB) for the Academic Year 2015 which was held at the hall of Bangkok International Trade & Exhibition Centre (BITEC), Bangkok. A total of 4,909 graduates including 133 doctoral degrees, 794 master’s degrees and 3,982 bachelor’s degrees.

“KMUTNB University Council, Board Committees, Administrators, Deans and Faculty Members heartily congratulate all the graduates of 2015 and wish all of them great success in their future endeavours.”

MoU with 17 Companies joined “Thai-German Highly Skilled Technical Trainer Development Program”

On 12th October 2016, H.E. Mr. Peter Prügel, German Ambassador to Thailand and General Dapong Ratanasuwan, Minister of Education were co-chairman of honorable witnesses for MoU Signing Ceremony “Thai-German Highly Skilled Technical Trainer Development Program” at Benjarat Hall, Navamindra Rajini Building, KMUTNB.

KMUTNB in collaboration with the public-private sectors, namely Office of Vocational Education Commission; Thailand Professional Qualification Institute and 17 leading private enterprises as Siemens Limited, SCG, The Siam Cement Public Co., Ltd., B.Grimm Power Co., Ltd., Boon Rawd Brewery Co., Ltd., Danieli Co., Ltd., etc. They all have joined the program to develop their manpowers.