News from Universities in ASEAN (FNA Magazine April 2014)

Can top engineering institutions in ASEAN respond to the needs of expanding or emerging Japanese industries in the region in terms of technological competency and future potential? We will introduce various efforts with a four-part series. Faculty of Engineering of Chulalongkorn University: The prestigious university of Thailand that commemorated its 100th anniversary last year is looking at university-industry linkage as one of the long-term strategies for growth.



Dr. Boonrat

Dr. Boonrat Lohwongwatana, Department of Metallurgy, is the up-and-coming researcher who received the Young Technicians Award 2013 by Foundation for the Promotion of Science and Technology under the Patronage of H.M. the King. His research focus is development of non-ferrous alloy and improvement of its forming process. He has persistently expanded collaboration with industry to the area of automotive, energy and material after his return from the U.S. which has successfully resulted in maintaining major companies in both Thailand and Japan in his partners list. He says, "Research for shortening casting process with silicon mold has been highly valued. I am dealing with both short-term problem-solving type collaboration and long-term collaborative research. I also try to involve peer researchers and students to improve the capacity of the entire research team." His students are subsequently spreading their wings around the world.

Dr. Sarawut Rimdusit, Department of Chemical Engineering, is a researcher who researches shape-memory polymer. He studied under a Japanese professor at Case Western Reserve University, a notable school in this field. When Chulalongkorn University commenced a PR initiative called "Researches to create Innovation" in March 2014 to disseminate outstanding research outcomes to the public each month, his research was selected as the 1st case. He comments, "This research topic can be widely applied to the various industrial sectors including but not limited to manufacturing, electrical and electricity, and medical. We have achieved 100% shape recovery under particular conditions and are looking for industrial partners for further research. It would be wonderful if we could collaborate with Japanese industries."

Dr. Sarawut]

The collaboration is not limited to the private sector and several young researchers have demonstrated remarkable achievements jointly with public sector. Dr. Anurak Sriariyawat, Water Resources Engineering Department, is conducting natural disaster simulation by satellite data with a Japanese public research institution in light of Thailand's flood crisis in 2011. Dr. Kasem Choocharukul,

Department of Civil Engineering, is a member of Infrastructure Management Research Unit that received "Prime Minister Road Safety Award" in 2013 with researches for Road Safety Management in collaboration with the Ministry of Transport. The two researchers who were in the same batch at Chulalongkorn University unanimously say, "Collaboration with public sector is indispensable for some engineering fields to contribute to the policy making process."

Chulalongkorn University is not the only school who is keen on university-industry linkage. We will introduce other member institutions in the next issue with the keyword of "commercialization".

AUN/SEED-Net is a platform of universities in engineering in ASEAN, which was established in 2001 under the main support of Japanese Government through Japan International Cooperation Agency (JICA). Twenty six leading universities in respective countries, including Chulalongkorn University, are participating in good collaboration with 14 Japanese universities, and conducting academic activities including collaborative researches. We aim at making contributions to the advancement and internationalization of industry in this region through research. We then identify university-industry linkage as one of the main pillars of the project and are trying to promote collaborative research between industry and member institutions in the region.



Dr. Anurak /// Dr. Kasem

Details of the researchers can be also found through following URLs:

[Dr. Boonrat] https://plus.google.com/+Boonrat/photos

[Dr. Sarawut] http://www.qa.chem.eng.chula.ac.th/index.php/people/faculty/19-sarawut-rimdusit

[Dr. Anurak] http://project-wre.eng.chula.ac.th/watercu_eng/

[Dr. Kasem] http://www.infra.chula.ac.th/

(Translated in English by SEED-Net Secretariat)

