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# **DOST rallies support for space science collab**

By David Matthew C. Gopilan, DOST-STII



DOST Secretary Fortunato T. de la Peña acknowledges researchers and business executives for their support and openness to the government's efforts and business opportunities in space science. (*Photo from DOST-STII*)

The Department of Science and Technology (DOST) recently called for support and collaboration of business groups from the aerospace, semiconductor, and electronics industries as the Department showcased its homegrown technologies and initiatives in space applications development.

In a recent business forum on space science and technology that showcased the initiatives, DOST Secretary Fortunato T. de la Peña said, "We at the DOST are hopeful that this event will give rise to the birth of a local space industry in the Philippines."

The science chief cited DIWATA 1 and 2, as well as MAYA-1, as examples of locally made

satellites that became possible through the expertise of local researchers and partnership with the local industry.

Sec. de la Peña emphasized that images generated from the satellites could in itself be a business too. These images can be useful for land use plannng, resource assessment and management, national security, hazard mitigation, agriculture, among others.

The business sector can be largely involved in the space industry through the following sectors: aerospace or airplane and spacecraft creation, communications and navigation, equipment and supplies, consultancy, research, and additional services. "That is why we want to create an environment for collaboration," he said. "We cannot do this alone, nor our experts in the academe by themselves, nor our combined efforts (with the academe)," the Secretary added.

"We need you, our partners from the industry, to make the country emerge as one of the space-faring countries reaping the benefits of space technologies," Sec. de la Peña stressed.

### Produce what industries need

Meanwhile, business leaders John T. Lee, chair of the Aerospace Industries Association of the Philippines and Dan C. Lachica, president of Semiconductors and Electronics Industries in the Philippines Inc., discussed the current industry scenario and how their sectors would take part in the emerging industry.

"We do not have space electronics as a sector in itself-this is a recognition and admission that we haven't considered seriously until now," Lachica said.

He explained that the country needs more engineers, in addition to data scientists and computer programmers inclined to space science. He also added that universities should produce graduates skilled with what the industry needs to advance the industry.

Lachica also expressed his willingness to sit down with the academe and the government in drafting a roadmap for government-academe-industry direction for a vibrant, local space industry.

"Instead of doing everything, we partner; we cannot do everything," Lee said while proposing a "from buying to making" paradigm shift. He also mentioned that the local aerospace industry now faces a growing aircraft demand and production backlog.

"We are trying to figure out how to grow

## **Innovators recognized at DOST-TAPI Awards**

By Jund Rian A. Domingo, DOST-TAPI

Fight outstanding program beneficiaries the Department of Science and Technology-Technology Application and Promotion Institute (DOST-TAPI) received awards in six categories during the recently concluded first-ever DOST-TAPI Awards. The awarding was held during the Institute's 32nd anniversary on 25 January 2019 at the Philippine International Convention Center, Pasay City.

Supported by the DOST-TAPI's various programs, these beneficiaries have successfully contributed positive impacts not just in the country's socioeconomic development but also in various priority areas specified by the DOST.

"The strategic designs of our programs support our stakeholders through the provision of both technical and financial assistance in whichever phase they are in the commercialization path," said DOST-TAPI Director Edgar I. Garcia.

He added that such programs support the stakeholders from the conception of ideas to eventually, technology commercialization, and marketing.

The awards were categorized based on the various programs and services of DOST-TAPI and were further divided into two major categories: the major awards and special awards. The major awards were called Gawad Masaligan and Gawad Katha-Likha, while the special awards were dubbed as Gawad Dagta, Gawad Dagitab, Gawad Dagisik, and Gawad Salin.



**Tooling and Fabrication Services, Inc** Gawad Masaligan Award



**Dr. Edna M. Nava, Capiz State University** Gawad Katha-Likha Award Researcher Category



DOST-Industrial Technology Development Institute Gawad Katha-Likha Award Research and Development Institute Category



**Asst Prof Fortunato B. de la Peña Jr.** Gawad Katha-Likha Award Individual Category

### DOST rallies..

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for the Philippines but we could also deliver the same products and services to our neighboring countries," said Dir. Paringit.

Meanwhile DOST Undersecretary for Research and Development (R&D) Dr. Rowena Cristina L. Guevara said that the DOST has already released PhP7.5 billion worth of R&D investment from 2010 to 2018. The investment produced about 1,000 projects and 5,400 local specialists capable of working for a space agency.

She added that there have been 25 space science facilities, all funded by DOST. "All of these could be soon under the PhilSA," Usec. Guevara said.

She also pointed out that capacity building—including identifiying and training people as well as putting up facilities—is the government's role. Meanwhile, retaining these people is primarily the industry's role, she added.

Usec. Guevara also mentioned that local researchers heavily rely on imported materials to develop, for example, microsatellites. She underscored that nurturing the local industry would primarily target importation and would allow the locals to develop competitive yet cost-effective and commercially off-the-shelf satellites, motherboards, and other parts. Locally available technologies, she added, would reduce the time lag between importing and getting the equipment and materials.

"The DOST encourages local firms to venture into R&D. We believe that an ecosystem of

locally developed technologies by Filipino experts in space science would propel the space industry of the Philippines to catch up with other Asian nations," Usec. Guevara said.

Now on its second reading, the Philippine Space Act or Senate Bill 1983 will cover six key development areas: space R&D, hazard management and climate studies, space industry capacity building, national security and development, education and awareness, and international cooperation.

Once created, the PhilSA would centralize the country's resources, partnerships, and capabilities in terms of space science. Eventually, it would usher a local space industry and the country's participation in the international space arena. ■



Dr. Ronilo P. Violanta, BioGroe® Technology Gawad Dagta



Dr. Danilo N. Pilar, DOST-Metals Industry Research and Development Center Gawad Salin

### **ABOUT US**

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DOST Secretary Fortunato T. de la Peña (seated, middle) and other officials from DOST, DLSU, UPLB, and UP Manila pose for a photo with the first batch of graduate scholars under the DOST Scholarship Offerings for ASEAN Researchers at CLM. (*Photo from DOST-SEI*)

# DOST ASEAN scholars earn advanced degrees in local top universities

### By Marco V. Melgar, DOST-SEI

pop universities in the country are currently hosting scholars from Myanmar and Cambodia under the "DOST Scholarship Offerings for ASEAN Researchers at Cambodia, Lao PDR, and Myanmar (CLM)."

Said scholars, currently taking their master's and doctorate programs, are sponsored by the Department of Science and Technology (DOST) as part of the Department's commitment to the ASEAN's goals in building up human resource in science and technology.

Sec. de la Peña described the program as "pioneering" for the Philippines, which normally is the one benefitting from scholarships offered by more developed countries.

"I think this is the first time that the Philippines is offering graduate scholarships to ASEAN partners and we are happy to extend this assistance to Cambodia, Lao PDR, and Myanmar," he said. "Through this effort, we will be able to bridge the gap between ASEAN member states in terms of science, technology, and innovation."

In a recent meet and greet event, the scholars thanked DOST and the Philippine government for letting them pursue their programs in top universities here, which they said will be very much helpful for their respective countries.

The scholarship program is exclusively offered to citizens of the three countries. The DOST-Science Education Institute (SEI) led the coordination with the embassies of the three countries and universities where the scholars will pursue their programs

About 14 scholars, currently hosted at De La Salle University (DLSU), University of the Philippines (UP) Diliman, UP Los Baños, and UP Manila, are taking up degrees in the fields of genetics, entomology, environmental science, environmental engineering, agronomy, public health, clinical medicine, electronics and communications engineering, energy engineering, and chemical engineering, among others. Lao PDR, although included in the program, has yet to send scholars.

DOST has earlier committed PhP50M to the ASEAN Committee on Science and Technology for Human Resource Development to implement the program.

DOST Assistant Secretary for International Cooperation Dr. Leah J. Buendia said that the initiative is a big help in raising a critical mass of MS and PhD graduates in CLM, which will ultimately help them address challenges in their countries.

Meanwhile, UP Los Baños Graduate School Dean Dr. Jose V. Camacho Jr. said that the program is an important move for the Philippines especially in the internationalization of its degree programs. He then urged DOST to level up its scholarships to maintain the positive trend and recommended sending Filipinos to joint dual degree programs in strategic countries.

Sec. de la Peña encouraged the scholars to really give back to their countries and spread the word among their colleagues to invite them to pursue graduate degrees in the Philippines.

"We plan to extend this program and we invite you to serve as our promoters in your respective countries so that we can welcome more CLM scholars in the future," said the DOST secretary.

Other DOST officials present during the event were Undersecretary for Scientific and Technological Services Dr. Carol M. Yorobe, DOST-Philippine Council for Agriculture, Aquatic, and Natural Resources Research and Development Executive Director Dr. Reynaldo V. Ebora, and DOST-SEI Director Dr. Josette T. Biyo. Representatives of the delivering universities were also present. ■

### Trike hailing app to benefit riders, trike drivers in Butuan

By Dionard N. Mendoza, DOST-Caraga

### ride hailing app that will make getting a tricycle ride easier for commuters will soon be available in the City of Butuan in Agusan del Norte.

Transeek—short for "transportation seek"—a mobile application that commuters can use to book a tricycle ride will be available for Android smartphone users in Butuan by April or March this year according to its developers.

Transeek's developers, Angelito U. Cagulada Jr., Ernest Jay T. Cubillas, and Lemar M. Arnego all from Caraga State University (CarSU), developed Transeek in 2018 as a start-up idea while enrolled in Navigatú, a Technology Business Incubation (TBI) hub funded by the Department of Science and Technology-Philippine Council for Industry, Energy and Emerging Technology Research and Development.

"We are now in the second round of deliberation with investors and partners, and hopefully we can operate by March or April," said Cagulada during an interview.

### Uplifting riders' and drivers' lives

The Transeek app hopes to provide a safer and more convenient commute around Butuan City, and at the same time help increase the income of tricycle drivers.

Based on a feasibility study among 100 tricycle drivers in Butuan City, the Transeek team found out that the average income of tricycle drivers ranges from PhP 400 to PhP 500 per day. With the help of Transeek, tricycle drivers can increase their income to more than 300 percent.

Drivers' registration to the system will be free. However, they will be required to comply with the insurance requirement, which most of the tricycle drivers in the city fail to adhere to.



Caraga State University student Angelito U. Cagulada, Jr. (left) with teammate and information technology instructor Ernest Jay T. Cubillas (right) showing the Transeek mobile app in an Android smartphone. (*Photo from DOST-Caraga*)

### Backed up by Navigatú

Navigatú is taken from the word 'navigation' and is inspired by Butuan's balangay boats. It offers idea incubation program and business skills courses for start-ups in the Caraga region.

The hub guided the Transeek team in developing the app and its business strategy. Just recently, the project allocated PhP2M from investors to fund its full operation.

"Because of Navigatú, we were exposed to ideation, pitching, and marketing activities we never had in classrooms. It helped improve our potential for business," said Cagulada.

The Transeek team is among the first batch of "incubatees" together with six more teams that are developing local IT solutions for agriculture and micro, small, and medium enterprises. Facilities such as computer units and administrative functions are provided for free at Navigatú enabling teams to develop their start-up ideas.

"Before, we just make IT systems because we like it. Now, it's more on solving problems or helping improve lives," Cubillas said.

Elpsalms David J. Franco, Navigatú TBI manager, added that they want the incubatees to realize the value of their skills, sustain their businesses up to more than five years, and create more job opportunities.

Navigatú also conducts workshops on business and information, communication, and technology for schools in the region.

To learn more about the Transeek application and the team's activities, send them a message or follow them at https://www. facebook.com/transeek/. For more information about Navigatú, visit https://www.facebook. com/navigatu/.



DOST-FPRDI researchers join ASEAN experts consolidate timber info. Forester Glenn B. Estudillo (rightmost) and Fernando C. Pitargue Jr. (second to the right) from the Department of Science and Technology-Forest Products Research and Development Institute (DOST-FPRDI) join other forest experts in a study tour at the Forest Research Institute Malaysia (FRIM) on 23 January 2019. Said delegates are working in the FRIM-led project "Equivalent Timber Names in the ASEAN" that will gather information such as trade names, common names, and location of various timber species in Southeast Asia. Estudillo and Pitargue earlier participated in workshops in Malaysia to collate and finalize data. The output will be presented during the 2019 ASEAN Senior Officials on Forestry meeting, and will be published as a book. Funded by the Japan-ASEAN Integration Fund, the project involves experts from Brunei Darussalam, Cambodia, Indonesia, Laos, Myanmar, Philippines, Thailand, and Vietnam. (Text by Apple Jean C. Martin-de Leon, DOST-FPRDI; photo by DOST-FPRDI)