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S&T good news

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# S&T virtual exhibit opens to the public until November 29

By Allan Mauro V. Marfal, DOST-STII



The latest innovative technologies and services developed by the DOST agencies and regional offices as well as their partners from academe and private sectors will be featured in the virtual exhibit of the 2020 National Science and Technology Week (NSTW) celebration from November 23 to November 29.

In recent years, the exhibition of the latest innovative technologies and services plus having the chance to meet our science heroes is the main reason why the staging of the National Science and Technology Week (NSTW) has been a regular box-office hit.

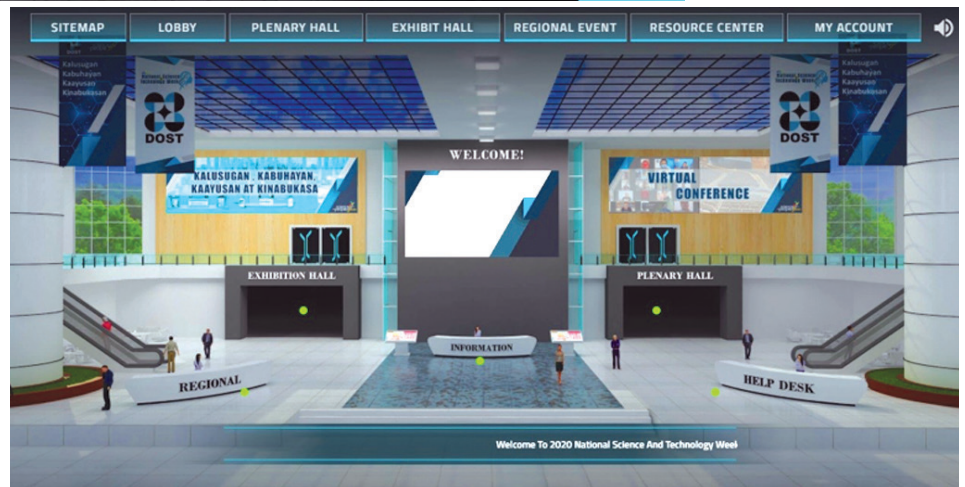
However, as we are in a middle of pandemic with various health and quarantine protocols, including the restriction on mass gathering, a traditional way of celebrating NSTW will not happen this year.

Despite these limitations, the Department of Science and Technology (DOST) has found alternative way and due to the advancement in technology, we will continue to enjoy the NSTW.

Starting November 23 to November 29, all DOST agencies and regional offices as well as partners from the academe and private sectors will give the public the opportunity to explore and navigate through the virtual exhibit with their respective innovative technologies and services.

Hosted in the NSTW website, the virtual exhibit will be divided into four (4) thematic clusters: Kalusugan, Kabuhayan, Kaayusan, at Kinabukasan, that are aligned with the framework of the Bayanihan to Heal as One Act.

To access the virtual exhibit, you can visit the link <https://nstw2020.dost.gov.ph/> and once you arrive at the landing page, click the Register button. After that, you will be requested



to fill out the form and click Submit. You will be redirected to a convention-type lobby, wherein you will see different buttons such as Plenary Hall and, most important of all, the Exhibit Hall.

Once you enter the Exhibit Hall, you may now visit, navigate, and access all relevant information and knowledge about the different DOST technologies and services featured in four exhibit clusters.

For the Kalusugan cluster, technologies and services related to the Bamboo Use Redefined, New Normal Necessities, and Modern Textile will be highlighted. For Kabuhayan cluster, there are services and products focused on providing rural

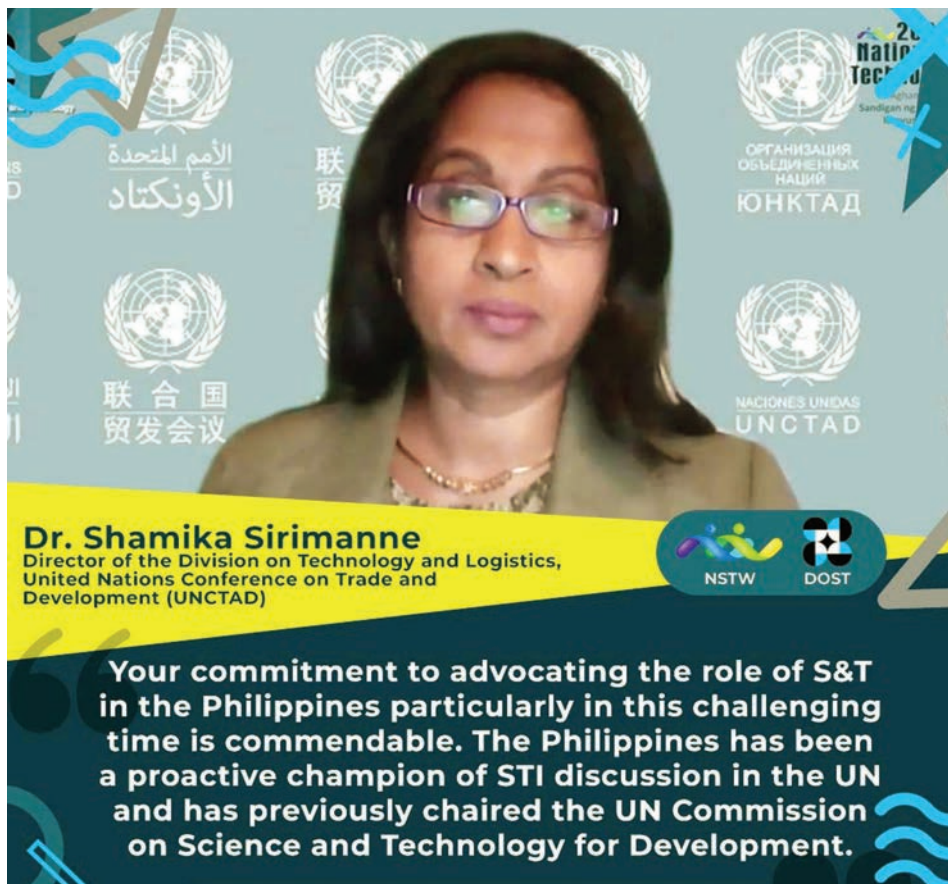
livelihood and industrial innovation in metals and engineering and more. Technologies related to emergency foods, hazard and risk assessment, smart agricultural technology, and transport system technology will banner the Kaayusan cluster. Lastly, Innovative Learning Tools will be the main attraction of the Kinabukasan cluster.

There will be available chat operators for each technology and product to be featured in the virtual exhibit from 9:00 AM to 6:00 PM.

For more information about the 2020 NSTW celebration please visit the [www.nstw.dost.gov.ph](http://www.nstw.dost.gov.ph) or its official Facebook, the National Science and Technology Week.

# DOST gets nod from UNCTAD for S&T advocacy in spite of pandemic

By Joy M. Lazcano, DOST-STII



**A** United Nations high-ranking official expressed her admiration for the country's efficient use of frontier technologies and support for science and technology.

Frontier technologies are the next generation technologies that hope to bring an inclusive and sustainable development across all economies. These technologies, which include 5G internet, artificial intelligence, 3D printing, big data analytics, robotics, and internet of things herald the dawn of the Fourth Industrial Revolution as new products and services will eclipse the traditional global market.

During the opening of the 2020 National Science and Technology Week (NSTW), Dr. Shamika Sirimanne, director of the Division on Technology and Logistics of the United Nations Conference on Trade and Development delivered her message commending the Department of Science and Technology (DOST) for successfully holding the annual science and technology fair featuring locally-developed technologies despite the challenges brought about by COVID-19 pandemic.

Shesaid that "the commitment to advocating the role of S&T in the Philippines particularly in this challenging time is commendable."

Sirimanne pointed out that second only to India, the Philippines is considered as one of the overperformers in the adoption of so-called frontier technologies relative to its per capita Gross Domestic Products (GDP).

According to Pew Research Center, "countries with a higher GDP per capita generally have higher rates of smartphone ownership and internet and social networking use."

She also mentioned that the Philippines has a "high-ranking industry" that reflects the high level Foreign Direct Investments on high-tech manufacturing particularly electronic products. Incidentally, the DOST aligns its programs to this strategy with the creation of world class facilities like the national testing laboratory called Advanced Device and Materials Testing Laboratory (ADMATEL) and the Electronic Products Development Center (EPDC).

On the other hand, DOST Secretary Fortunato T. de la Peña welcomes this development. In fact, the science chief underscored the importance of innovation with the many contributions of the different research and development institutes (RDIs) under its wings during the time of pandemic; technologies developed and feature in the 2020 NSTW exhibits that range from

remote health devices, nutrition, alternative energy to mobile apps and other initiatives that address not only COVID-19 but also other socioeconomic problems in the country.

In fact, just last September, the DOST reported the results of the Global Innovation Index 2020 which saw the country rose to 50th rank, up by four notches from the previous year and climbed 23 steps from the 73rd position in 2018.

De la Peña, in his message, shared that "we are also looking ahead for the years to come. We are now at the so-called Fourth Industrial Revolution. And with the things happening around us, masasabi ko na narito na tayo, handa, at buong lakas na hinaharap ang kinabukasan. Dahil ang kaunlaran natin bilang tao, bilang isang bansa, ay nakasalalay sa agham, teknolohiya at inobasyon."

The DOST is the premier government body that provides the central direction, leadership and coordination on both scientific and technological initiatives of the country through its research and development thrusts. The DOST ensures that these initiatives bear fruit to ultimately benefit the Filipino people.

The 2020 NSTW will run from 23-29. This year, the celebration is in virtual mode as restrictions to mobility and public gatherings are still implemented in the National Capital Region.

To see the virtual S&T exhibits and live webinars, visit the NSTW website at [www.nstw2020.dost.gov.ph](http://www.nstw2020.dost.gov.ph) or log on to the NSTW Facebook page at [www.facebook.com/2020nstw](https://www.facebook.com/2020nstw).

## ABOUT US

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# DOST awards SETUP beneficiaries that continued to excel during the pandemic

By Lanquin Seyer R. Gacusa, DOST-STII

For 18 years, the Department of Science and Technology (DOST) has been assisting thousands of micro, small, and medium enterprises (MSMEs) increase their production and technical capacities and capabilities through the Small Enterprise Technology Upgrading Program (SETUP), one of the flagship programs of the department.

SETUP encourages and assists MSMEs implement technological innovations in their respective industries by upgrading their product quality and market competitiveness through various trainings and seminars on technology adoption to energy utilization to good manufacturing practices.

This year, with the National Science and Technology Week (NSTW) celebration in full swing, the DOST through its Regional Office in Leyte held its annual SETUP forum virtually. For the past years, DOST recognizes the best technology adapters or beneficiaries of the SETUP program through this activity. Moreover, despite the pandemic and grave economic shutdown of many businesses, a lot of SETUP beneficiaries continued to thrive during the crisis. Hence, DOST altered the award from best adapter to PRAISE, the meaning of which is spelled out in the image on the right.

Thus, the SETUP PRAISE awards acknowledge MSMEs that show productivity, resilience, agility, innovation, sustainability, and excellence that led to expanding their market reach in the midst of the challenges brought about by COVID-19.

In addition, the SETUP program adapters also played their “big brother or sister” part in helping other businesses in adjusting to the new normal. DOST Secretary Fortunato T. de la Peña boasts, “Our own SETUP beneficiaries have also been assisting other smaller firms, and I am very proud of that. They are people who are willing to help other companies [to increase and innovate].”

Sixteen beneficiaries representing their regions have been recognized for their success in their respective industries and received P20,000.00 in recognition of their performance. The SETUP PRAISE Regional Awardees are:

- NCR - DJM Grandeur Corporation
- CAR - Health 100 Restaurant
- Region 1 - Bakers PH
- Region 2 - Agri-Component Machineries and Construction Corporation (AMCC)
- Region 3 - I-Provide Health Food Manufacturing
- Region 4A - Amstature Foods
- Region 4B - Red Gate Farm Supplies



- Region 5 - Pan de Masbate
- Region 6 - RU Foundry and Machine Shop Corporation
- Region 7 - Southern Negros Agri-Fisheries Multipurpose Cooperative (SONAMCO)
- Region 8 - GTC Poultry Farm
- Region 9 - VMD Rice Mill
- Region 10 - NJ Duct Works
- Region 11 - CPRP Manufacturing
- Region 12 - Kablon Farm Foods Corporation
- CARAGA - Millenium Ricemill

Out of the sixteen beneficiaries, five (5) companies received special awards, each receiving a plaque of recognition and additional P30,000.00:

- Most Resilient - Millenium Ricemill (CARAGA)
- Most Agile - GTC Poultry Farm (Region 8)
- Most Productive - Agri-Component Machineries and Construction Corporation (Region 2)
- Most Innovative - Kablon Farm Foods Corporation (Region 12)

Lastly, NCR representative DJM Grandeur Corporation bagged the National SETUP PRAISE Award, that exhibited outstanding operational performance resulting from their adoption and utilization of DOST’s technological innovations and technical assistance. DJM Grandeur Corporation received PhP 100,000.00.

“From Region 1 to Caraga, we can see that the winners are stories of how we can succeed and be resilient even during these abnormal times,” Sec. de la Peña stressed. He added that, “the more success stories we see among our MSMEs, the more confident we are—that we are indeed progressing, and that the technology assistance [through SETUP] helped a lot.”

SETUP also launched its program upgrade during the forum and awarding ceremonies. The original SETUP (2002-2017) offered firm-level assistance to upgrade existing technologies and products of SMEs. The current SETUP 2.0 (2018-2020), on the other hand, provided S&T assistance to further boost enterprise and productivity on a more focused industry

approach. SETUP 2.0 also initiated the development of industry-S&T roadmaps. •



In Photo: criteria for judging in selecting the best SETUP beneficiaries for 2020

# Independent regulatory body would increase public trust on nuclear use, DOST exec says

By Allan Mauro V. Marfal DOST-STII

**T**he Department of Science and Technology-Philippine Nuclear Research Institute (DOST-PNRI) is pushing to create an independent regulating body in the country, believing it would help change the public's perception about nuclear technologies, which usually destructive and harmful.

In an online forum titled: "Regulating Nuclear Facilities and Activities in the Philippines" DOST-PNRI Director Carlo A. Arcilla pointed out that synchronizing all regulatory activities on ionization radiation under one roof is very vital.

"There is a prevailing myth in many people's minds about nuclear. They think nuclear is the bomb and destructive and the only way public trust can be earned if there is an effective and independent nuclear regulating body", said Dir. Arcilla.

In the current organizational structure, regulatory division and other divisions that promote nuclear researches and applications are all under the jurisdictions of DOST-PNRI.

DOST-PNRI is one of the research and development institutes of DOST that is mandated to promote and regulate the safe and peaceful use of nuclear science and technology.

As the center of all nuclear science and technology activities in the country, DOST-PNRI has performed several functions such as R&D on nuclear and radiation applications, materials, and processes, nuclear and radiation-based services for various clients and the general public, licensing and regulations involving the possession and application of all nuclear and radioactive substances, and transfer of technologies and results to end-users.

"If we have a separate regulatory body, it makes checks and balances more effective. Currently, the director of DOST-PNRI is promoting and regulating at the same time, which is very complicated and not an ideal situation," Dr. Arcilla said.

The separation of the promotional to the regulatory is just following international practice, as Dr. Arcilla added.

Dr. Arcilla also stressed that decisions could be made without pressure from interests if there is an independent regulatory body.

"For example, if there is a nuclear power plant operating, for the sake of economy, if there is a defect in some place; okay, let's continue to operate despite its unsafe because

the huge amount of money will be lost. In this situation, safety is compromised. But if there is an independent regulator, the regulator can say, even we lost a lot of money, our top priority is safety. That's an important consideration," Dr. Arcilla explained.

## Creation of Philippine Atomic Regulatory Commission

There are currently pending bills filed, both in Senate in the Philippines and the House of Representatives, about the creation of an independent nuclear regulatory body.

Basically, these pending bills aim to merge the Nuclear Regulatory Division of DOST-PNRI and Centre for Device Regulation Radiation Health and Research (CDRRHR)-Radiation Regulation Division to form the Philippine Atomic Regulatory Commission. It would serve as an independent regulatory body consistent with international standards for regulating all practices and facilities involving ionizing radiation sources, including nuclear and other radioactive materials, facilities, and radiation generating equipment.

In a separate interview with the online show TechTalk later that night, Dir. Arcilla further explained that many sectors and industries in the country had reaped various nuclear-related research benefits.

It includes in the area of medicine, wherein he cited it could help in early cancer diagnosis. He also shared that nuclear application had helped the country produce a plant growth promoter developed from seaweeds, increasing rice yields by as much as 30 percent. It was subjected to irradiation with gamma rays at the DOST-PNRI facility.

"There is more to nuclear science than just a bombs, explosions, and destructive images we have in our minds or what we usually see. We would like to highlight that even in food, medicine, and agriculture, nuclear science can be applied and be game-changers," said Dir. Arcilla.

Regulating Nuclear Facilities and Activities in the Philippines webinar was part of the 2020 National Science and Technology Week (NSTW) virtual celebration which ran from 23-29. It carried the theme "Agham at Teknolohiya: Sandigan ng Kalusugan, Kabuhayan, Kaayusan, at Kinabukasan.



*The Department of Science and Technology-Philippine Nuclear Research Institute (DOST-PNRI) Director Carlo A. Arcilla shares in a webinar that an independent regulatory body helps maintain public confidence in the safe use of nuclear science and applications as it makes checks and balances more effective. (Photo by Henry A. de Leon, DOST-STII)*