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S&T good news

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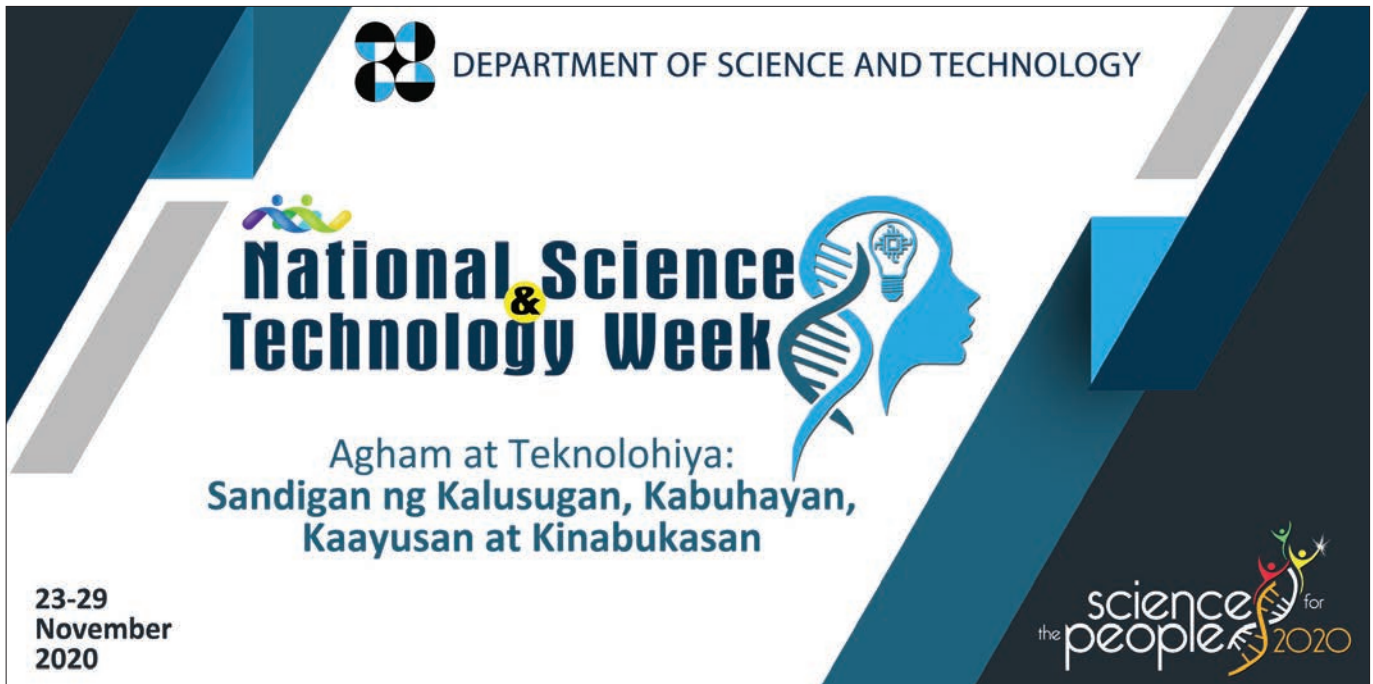
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# National S&T week celebration goes online this November 2020

By Allan Mauro V. Marfal, DOST-STII



The 2020 National Science and Technology Week (NSTW) banner signifies the thrust of the DOST and the entire science community to adapt to the new normal by harnessing the power of innovation in the four thematic areas, namely: Kalusugan, Kabuhayan, Kaayusan and Kinabukasan. (Photo from DOST-TAPI)

**The challenges brought about by the COVID-19 pandemic will not prevent the entire scientific community from showcasing its latest innovative products and services that would be significantly useful and relevant to every Filipino.**

From 23-29 November, the Department of Science and Technology (DOST) will be at the forefront again by staging the 2020 National Science and Technology Week (NSTW) celebration in virtual mode for the first time in history.

Carrying the theme, “Agham at Teknolohiya: Sandigan ng Kalusugan, Kabuhayan, Kaayusan, at Kinabukasan”, it aims to highlight the efforts and initiatives of DOST and the entire scientific community in the area of research and development; practical technologies; innovation in agriculture, industry, and health; technical

services and trainings; and financial assistance to entrepreneurs to help every Filipino adapt to COVID-19 under the new normal.

All technologies and services to be featured by DOST agencies and regional offices, academe, and private sectors in the virtual exhibit will be anchored on the 4Ks referring to the thrust of the Duterte Administration in addressing the pandemic mentioned in this year’s theme. Likewise, several webinars and other virtual activities will take the spotlight during the seven-day festivity.

In the previous NSTW celebrations, all techno-exhibits and activities were usually held for five days either at the SMX Convention Center or at the World Trade Center in Pasay City.

Moving the annual NSTW celebration from July to November

From 1993 until 2019, the NSTW has been celebrated during every third week of July pursuant to Proclamation 169. However, in August 2019, by virtue of Proclamation 780 signed by President Rodrigo “Roa” Duterte, the NSTW celebration will now be conducted every fourth week of November. The change of date was meant to ensure “maximum participation” of schools, students, stakeholders, and the public during the week-long celebration due to the change in the academic calendar of most universities, schools, and educational institutions.

For more information and updates regarding the 2020 NSTW celebration, please visit the [www.nstw.dost.gov.ph](http://www.nstw.dost.gov.ph) and its Facebook page or send your message at [nstw.secretariat@gmail.com](mailto:nstw.secretariat@gmail.com) and [nstw2020.promotions@gmail.com](mailto:nstw2020.promotions@gmail.com).

# DOST unveils virtual activities for the 2020 S&T fair celebration

By Allan Mauro V. Marfal, DOST-STII

**W**ith less than a month to go, the Department of Science and Technology (DOST) has formally released the complete list of activities that will be featured during the first ever virtual celebration of the 2020 National Science and Technology Week (NSTW) from 23 to 29 November.

Carrying the theme, Agham at Teknolohiya: Sandigan ng Kalusugan, Kaayusan, Kabuhayan, at Kinabukasan, the DOST and the different agencies and regional offices will banner several activities that include a total of 27 virtual fora, workshops, career talks, technology and project launchings, and film showings that will highlight different innovative solutions and new S&T knowledge related to livelihood and business, safety, health, education, disaster preparedness, and community development.

The 2020 NSTW will kick-off at 10:00 AM on 23 November with a virtual opening ceremony to be followed by a 30-minute press briefing to be attended by top DOST officials led by Secretary Fortunato T. de la Peña.

From 1:00 PM to 2:00 PM, there will be the Remote Learning Experience of PSHS System with Pisay sharing their STEM education strategic plan for their scholars during the COVID-19 pandemic. This will be followed, at 2:00 PM to 3:00 PM, by a series of TED-Talks-inspired sessions to be conducted by the DOST-Philippine Council for Health Research and Development (PCHRD). It will tackle the contributions, developments, and impacts of the various technologies such as the

RxBox telemedicine, GINAHWA, and Project SIBOL to communities during the COVID-19 pandemic.

Before the first day ends, the OneStore Hub: SETUP on the Go will be launched at 3:00 PM, followed by the Cybersecurity: Are We Serious About It? at 4:00 PM, wherein a DOST-National Research Council of the Philippines (NRCP) expert [in the field of Engineering and Industrial Research, Mathematical Sciences and ICT] will talk on the different kinds of cyberattack and how one can be protected against it.

On 24 November, from 9:00 AM to 11:00 AM, the DOST-Science Education Institute (SEI) will conduct the 3rd IndieSiyensya Film Exhibition to showcase the winning entries in their recent competition. It will be followed by DOST-Food Nutrition and Research and Institute's (FNRI's) Nutriflix from 11:00 AM -1:00 PM. Meanwhile, the DOST-Philippine Institute for Volcanology and Seismology (PHIVOLCS) will hold the Disaster

Resilience Summit on Earthquake and Volcano Preparedness from 1:00 PM to 3:00 PM and will be followed by the SETUP Forum: Gearing Up for Industry 4.0 to be held from 3:00 PM to 5:00 PM.

On 25 November, there will be the CEST Forum organized by the DOST Regional Offices from 9:00 AM to 11:00 AM. CEST or Community Empowerment through Science and Technology is one of the flagship programs of the DOST that provides assistance to rural communities with interventions in education, health, sanitation, livelihood enterprise, and disaster risk reduction and preparedness.

Thereafter, the DOST-Science and Technology Information Institute (STII) will conduct the Online Kwentuhan with S&T Idols from 11:00 AM - 1:00 PM. This will be followed by the DOST-Philippine Textile Research Institute (PTRI) that will hold a virtual forum on TELA Sustainability

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For the first time in history, the Department of Science and Technology (DOST) will be staging the 2020 National Science and Technology Week (NSTW) celebration in virtual mode from 23-29 November. The theme for this year's celebration, "Agham at Teknolohiya: Sandigan ng Kalusugan, Kabuhayan, Kaayusan, at Kinabukasan", aims to highlight the numerous initiatives of the DOST, agencies, regional offices, and the entire scientific community in the area of research and development; practical technologies; innovation in agriculture, industry, and health; technical services and trainings; and technology upgrading assistance to entrepreneurs to help every Filipino adapt to the new normal brought about by COVID-19. (Photo from National Science and Technology Week Facebook page)



# DOST nutribun technology is free for Pinoy entreps

By Geraldine B. Ducusin, DOST-STII

**T**he technology on enhanced nutribun can be given for free to qualified entrepreneurs who have technical capabilities to commercially produce the product. This refers to those with a GMP-compliant facility or working towards it, willing to invest in equipment and raw materials, and has a legal identity, or is a registered and taxpaying company, among others.

"The technology on the production of enhanced nutribun is a 'public good technology,'" Rosemarie G. Garcia, Chief Science Research Specialist of the Food and Nutrition Research Institute of the Department of Science and Technology (DOST-FNRI), said.

Based on the 2018 Expanded National Nutrition Survey, the 6-9 years old have 63.1% vitamin A inadequacy, while those 10-12 years old have 76.1% vitamin inadequacy. The enhanced nutribun version, which was also initially developed for the undernourished children like the nutribun from the '70s, can actually also be consumed by healthy Pinoyos. The enhanced nutribun is made from squash that is rich in vitamin A, a nutrient that's lacking in the regular meal of Filipino children.

The enhanced nutribun is not only good for young children, but also for the other population groups, particularly, pregnant and lactating women, and senior citizens. Even the well and healthy population need products like the enhanced nutribun.

The Enhanced Nutribun has more micronutrients like iron and vitamin A. The texture is softer and weighs 160- 165 grams per piece, which makes it easier for children to hold and bite. Each serving has 504 calories, 17.8 grams protein, 6.08 milligrams iron and 244 micrograms vitamin A. A piece of enhanced nutribun already provides 60% of the requirements for vitamin A.

Racky Doktor, owner of Nutridense Food Manufacturing Corporation (NFMC) was among the first to sign up for the Enhanced-Nutribun technology of DOST-FNRI. Their company, which has a mission of helping reduce malnutrition through production and distribution of research-based food technologies, signed up immediately because the product is very nutritious, timely, and needed by both children and adults. Nutridense is one of the many successful enterprises that were assisted by the DOST under the Small Enterprise Technology Upgrading Program or SETUP.

There are already four licensees in Region II: the AJ's Bread and Pastries; J.A. Fruits and Vegetable Processing; Quirino Livelihood for Everyone (Q-life); and J's Bakeshop & Delicacies.

On the other hand, there are 14 in Region IV-A: the Gem See's Cakeshop; Swisspharma



*A table of individually-packed nutribun from DOST-FNRI. (Photo from DOST-FNRI)*

Research Laboratories Inc.; San Jose Workers MPC; MRG Food Products/Malou's Bakery; Magifrance Bakeshop and Café; Doughpro Manufacturing & Trading Corp.; LGU-Mauban, Quezon Province; Panaderia Pantoja, Inc.; Golden Wheat Bakery; El Richard Bakery; Anica's Home Bread Store; Momilo Mio; Congw. Angelina "Helen" D.L. Tan, MD; and Amira's Buco Tart Haus.

Since there is no more charge being asked for technology licensing, the primary cost will be the setting up of the facility and the purchase of equipment that will largely depend on the scale of production. DOST-FNRI's pilot plant engineers will assist the entrepreneurs in terms of the plant lay out and the listing of equipment to be purchased.

Based on the assumptions and computation of DOST-FNRI's engineers, the return of investment on the enhanced nutribun is more than 30%, and payback period is 2-2.5 years.

In the '70s, 30 million nutribuns were given to 200,000 children. While DOST-FNRI cannot give the exact number of children who can benefit from its enhanced nutribun, since the distribution will depend on DSWD, DepEd and the LGUs, Garcia said the institute's rough and conservative estimate is that one million children would benefit from the product.

"We have more malnourished children now, than in the '70s," Garcia said.

DOST-FNRI is a research and development institute that developed the product and is ready to transfer it to capable partners who will then commercialize the product to its intended

customers. For the enhanced nutribun, DepEd, DSWD and DTI expressed full support for the product. Incidentally, DepEd and DSWD have already the funds to give the products to the children for free through their school and supplementary feeding programs, respectively.

The nutrition institute invites Filipino entrepreneurs to partner with them in commercializing and producing the enhanced nutribun, and bring it not only to school children, but to all those who want nutrition in a bun!

Moreover, other DOST technologies developed for adoption by MSMEs will be featured in the virtual 2020 National Science and Technology Week (NSTW) slated from 23-29 November 2020. Among those that will be featured are the GALING-PCAARRD Program agricultural technologies, food production, and livelihood opportunities.

Furthermore, this year's science fair will have activities for students who want to venture into the food business, the "Food Safety Career: What is it in Food Safety R&D, TekPinoy.biz, a virtual activity that will showcase technology on alternative livelihood for OFWs, and many others.

The public is invited to join the 2020 NSTW celebration and its many forums and webinars. For more information and updates regarding the 2020 NSTW, please visit the [www.nstw.dost.gov.ph](http://www.nstw.dost.gov.ph) and its Facebook page or send your messages to [nstw.secretariat@gmail.com](mailto:nstw.secretariat@gmail.com) and [nstw2020.promotions@gmail.com](mailto:nstw2020.promotions@gmail.com).



NATIONAL SCIENCE & TECHNOLOGY WEEK 2020  
 AGHAM AT TEKNOLOHIYA: SANDIGAN NG KALUSUGAN, KABUHAYAN, KAAYUSAN, AT KINABUKASAN

## TELA Sustainability in Textile and Fashion WEBINAR

November 25, 2020 (Wednesday) | 1:00 – 3:00 PM

[f](#) DOST-PTRI [f](#) TELA Pilipinas by DOST-PTRI [g](#) ptri.dost.gov.ph [t](#) @telapilipinas



# DOST-PTRI hosts webinar on sustainable textile during the science week

By Lanquin Seyer R. Gacusa, DOST-STII

**Three webinars on textile and fashion innovations will be hosted by the Philippine Textile Research Institute (PTRI) of the Department of Science and Technology (DOST) on 25 November 2020, at 1PM, as part of the first-ever virtual celebration of the 2020 National Science and Technology Week.**

Textile production continues to speed up and rise with the increasing demand and fast fashion trend, so no wonder why textile manufacturing is seen to rank between second and third as source of pollution globally. Because of this notion, the webinar aims

to promote awareness on sustainability initiatives of international organizations, industries and other players in the textile and fashion industries, and encourage collaborative action towards the attainment of sustainable development goals.

Dr. Rene van Berkel, representing the United Nations Industrial Development Organization (UNIDO) India, will talk on the international perspectives on sustainable solutions for textiles and fashion, which highlights the accomplishments and forward plans of the textile industry worldwide to achieve the United Nations (UN) sustainable

development goals (SDGs).

The Garment-to-Garment Recycling System developed by the Hong Kong Research Institute of Textiles and Apparel (KHRITA) will also be discussed by its Director for Project Development Dr. Gloria Yao with her talk titled, "Textile Recycling: Applied R&D in the Circular Textile Economy".

Lastly, Director Celia B. Elumba of the DOST-PTRI will present the institute's programs on research and development of sustainable textile materials with her topic titled, "TELA Model for Sustainable Textile Development".

### DOST unveils...

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in Textile and Fashion from 1:00 PM to 3:00 PM.

On 26 November, from 9:00 AM to 11:00 AM, a webinar will tackle S&T initiatives to include DOST's collaboration with international partners to combat the current pandemic. It will be followed by the Lecture Series and Symposium for the Youth organized by the DOST-National Academy of Science and Technology (NAST) from 11:00 AM - 1:00 PM.

Then, the DOST-Advanced Science and Technology Institute (ASTI) will conduct a webinar showcasing their state-of-the-art facility, the Electronics Product and Development Center as a platform for inclusive innovation and collaboration from 1:00 PM to 3:00 PM. On the other hand, from 3:00 PM to 5:00 PM, the DOST-Industrial Technology and Development Institute (ITDI) will introduce different technical services for various industries that are proven to help improve productivity, efficiency of operation, and market competitiveness.

On 27 November, the DOST-Forest Products Research and Development Institute (FPRDI)

will conduct a Bamboo Musical Instruments (BMI) Virtual Concert from 09:00 AM to 11:00 AM. It will be followed by Food Safety Careers: What is it in Food Safety R&D? of the DOST-Philippine Council for Industry, Energy and Emerging Technology Research and Development (PCIEERD) from 11:00 AM to 1:00 PM.

The next event will be another from DOST-NRCP where an expert will share insights on the science behind dreams from 1:00 PM- 3:00 PM. To cap the day will be the webinar of DOST-PAGASA on Bagyo at Baha, Bata at Matanda ay Ligtas from 3:00 PM to 5:00 PM.

On 28 November, the line-up of the webinars include the following: Galing-PCAARRD Kontra COVID19: Pagkain at Kabuhayan Sa Pamayanan from 9:00 AM to 11:00 AM; Advanced Manufacturing Center (AMCEN): Manufacturing Beyond the Conventional by the DOST-Metals Industry Research and Development Center (MIRDC) from 11:00 AM to 1:00 PM; Regulating Nuclear Facilities and Activities in

the Philippines by the DOST-Philippine Nuclear Research Institute (PNRI) from 1:00 PM to 3:00 PM; and iSTART: Bridging Gaps, Reducing Inequalities by the DOST-Caraga from 3:00 PM to 5:00 PM.

For the last day, 29 November, DOST-SEI will now have their 4th IndieSiyensya Film Exhibition from 9:00 AM to 10:00 AM and webinar on the DOST Courseware and Mathematics for e-Learning from 10:00 AM to 11:00 AM. The last event for the celebration will be an orientation on Manufacturing Productivity Extension for Export Promotion (MPEX) organized by the DOST Region VI office.

The different virtual activities will either be open to the public and some by invitation only. This will be indicated in the program of activities that will soon be released and published in the website so stay tuned to [www.nstw.dost.gov.ph](http://www.nstw.dost.gov.ph) and the official Facebook page of National Science and Technology Week in the coming weeks.