

10 years of bringing
S&T good news

Inside

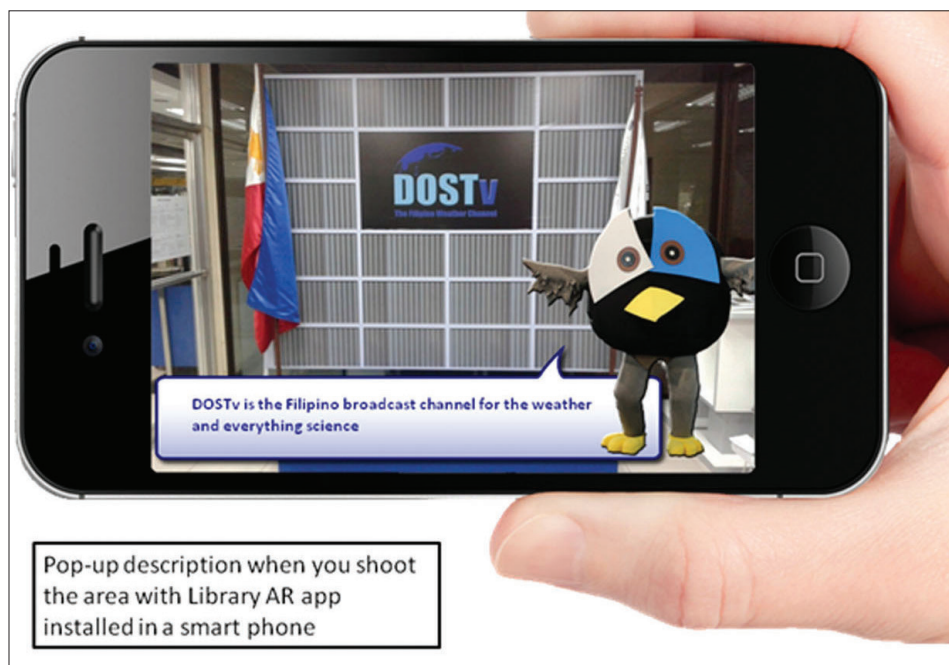
DOST's OneLab Project Bags
BCYF Innovation Award.....p3

DOST researcher bags awards on
nanotherapeutics in Japan.....p4

InFocus.....p4

Beyond index cards and online access Enhanced library experience soon at DOST

By **Framelia V. Anonas**, DOST-STII



This is a preview of what library researchers can expect using STARLibrary, an app that gives an enhanced experience to library researchers at the DOST-STII.

Generation Xers will have to stow their library cards and Millennials will soon go beyond online access as the Department of Science and Technology gears up to give an enhanced experience to library researchers within the year.

This levelling up of library experience will start at the DOST- Science and Technology Information Institute (STII) which holds the largest collection of S&T information materials in the country.

STII gave a preview of the augmented reality experience to Sec. Fortunato T. de la Peña during the 30th anniversary celebration of DOST-STII on February 27, 2017 at the Manila Hotel.

STII, established in 1987 through EO 128, is the information and marketing arm of the

DOST. Particularly, STII is tasked to provide S&T information services which include information reference services through its library.

The app, called the STARLibrary or the Science and Technology Augmented Reality Library, will “add new creative dimension to the experience of DOST visitors, library users, and even beneficiaries,” said STII Director Richard P. Burgos.

“We will redesign the library user experience by incorporating augmented reality,” Burgos revealed. “The DOST-STII library will be the first library to use augmented reality in the country.”

“We will also include virtual reality and gaming in the experience of a science and technology library without physical books,” he added.

continued on page 2

DOST partners with DTI & Laguna SPU to boost CALABARZON food industry

By **Rodolfo P. De Guzman**, DOST-STII

The Department of Science and Technology (DOST) Region 4A based in Los Banos, Laguna is on high gear as it pushes for full adoption of the services of the CALABARZON Food Solutions Hub or C-FoSH located at the Laguna State Polytechnic University in Sta. Cruz, Laguna.

C-FoSH is a beneficiary of the Share Services Facility (SSF) program that is being implemented nationwide aimed to empower the micro, small, and medium enterprises or MSMEs. The program is a partnership among DOST, the Department of Trade and Industry, and the Laguna State Polytechnic University in Sta. Cruz, Laguna where the facility is located.

One important cooperator of the C-FoSH is the Association of Laguna Food Processors or

continued on page 2



Food Solutions Hub. Department of Science and Technology Secretary Fortunato T. De la Peña (in barong) converses with a student of the Laguna State Polytechnic University (LSPU) during his project visit to the CALABARZON Food Solutions Hub or C-FoSH, a facility housed at the LSPU campus in Sta. Cruz, Laguna. This facility caters to food processing companies that require the use of special equipment like spray dryer to manufacture innovative food products.

Enhanced library...
from page 1

Augmented reality is a technology that adds computer-generated enhancements into a real environment in real time to make the experience more meaningful by interaction. It blends digital components into the real world to enhance each other.

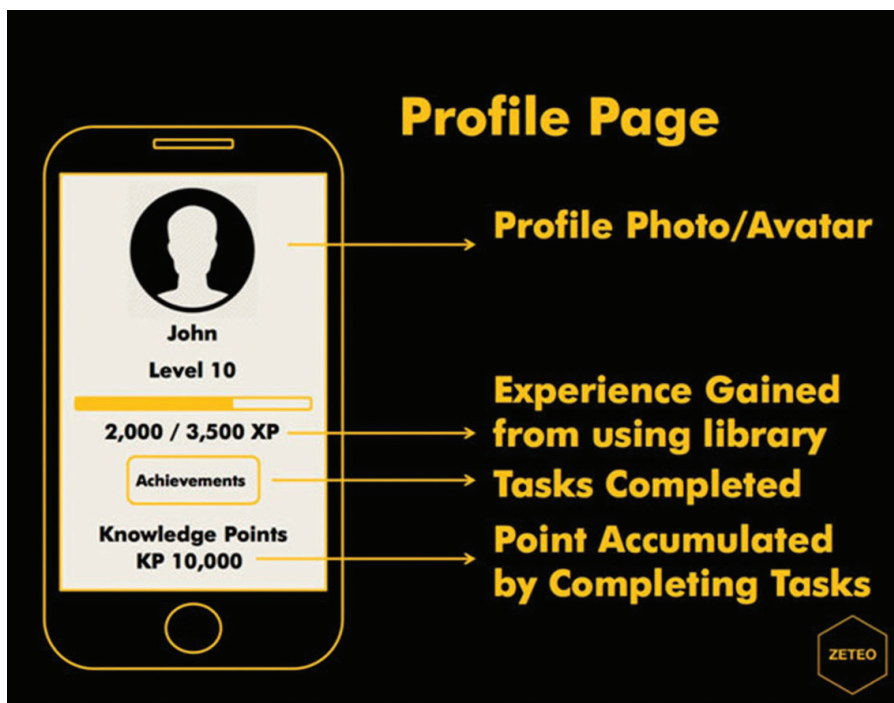
Virtual reality, meanwhile, is an artificial, computer-generated simulation or recreation of a real life environment or situation. The technology makes users feel like they are experiencing the simulated reality firsthand through vision and audio stimulation. This is usually experienced in video and computer games, 3D movies, and even in training for real life environments such as flight simulators for pilots.

Virtual reality presents a digital recreation of a real life setting, while augmented reality mixes virtual elements as an added layer to the real world.

One example of this virtual reality experience, according to Alan C. Taule, chief of STII's Information Resources and Acquisition Division which handles the STII Library, is the popping-out of a description when a smart phone installed with the STARLib app is used to shoot a certain part of the library.

"The app may also run a 2D or 3D animated object with an audio," he said.

Taule also said that the enhanced experience through virtual reality will start with STII materials and selected locations at STII and will be expanded to include the whole of DOST Compound in Bicutan, Taguig City.



STARLibrary also has a gaming component that encourages guests to visit the library and read books for more points.

DOST partners...
from page 1

ALAFOP that include among its members, Bugong Foods Corporation, Escaba Sweets, Forest Wood Garden, Sustalicious, Costales Farms, and Villa Socorro.

According to DOST Secretary Fortunato T. de la Peña the C-FoSH will be able to create added value products that could command better prices because of its high quality standard that can compete in the international market. C-FoSH serves as a capacity building venture that empowers micro enterprises to avail of the state-of-the-art and industry compliant manufacturing plant that conforms to high grade food safety. The facility will

enable the food processors from Laguna and nearby provinces to increase their production capacity and produce export quality products. The C-FoSH will also serve as a laboratory for food innovation and provide support to entrepreneurs to come up with new products that are needed in the market.

The LSPU facility has several equipment, such as the large scale spray dryer that can convert fresh food produce to powder form like pineapple that can be made into instant powder juice drink. There is also the packaging machine that allows the printing of product labels faster and with more consistent quality.



C-FoSH Spray Dryer. A spray dryer is a food processing equipment that uses hot gas to produce a dry powder after rapidly drying a liquid or slurry. The spray dryer works by separating the solute or suspension particles as a solid and the solvent as vapor. It has a spray nozzle that disperses the liquid into a controlled drop size spray. It is used to produce dry solids and form powdery substances or granules usually applied in pharmaceutical products, beverages, food, and plant extracts. This spray dryer is found in the CALABARZON Food Solutions Hub or C-FoSH at the Laguna State Polytechnic University in Sta. Cruz, Laguna provided by the Department of Science and Technology (Text & Photo by Rodolfo P. de Guzman/S&T Media Service)

Operational since 2013, the SSF program promotes inclusive growth particularly in the regions with the establishment of some 1,702 SSFs nationwide with accumulated funding of Php 776.53 million from 2013-2014. In the process the program has so far benefitted 17,095 MSMEs and 72, 619 potential businessmen all over the country.

ABOUT US

The DOST Digest is published by the Science and Technology Information Institute- Department of Science and Technology
For comments, suggestions or queries, contact:
(02) 837-2071 loc. 2148/839-2193 local 107 or
email: dost.digest@gmail.com

Framelia V. Anonas

Editor-In-Chief

Allan Mauro V. Marfal

Editorial Assistant

James B. Intia

Layout

Janina Myn Z. Villapando

Proofreader

Ferdinand D. Cartas

Circulation

Science and Technology Information Institute-
Department of Science and Technology
Bicutan, Taguig City
Metro Maa. 1631
Philippines

www.stii.dost.gov.ph

Like us on Facebook/Science and
Technology Information Institute (DOST)





DOST officials and personnel managing the DOST-OneLab project nationwide were on hand to receive the BCYF Innovation Award.

DOST's OneLab Project Bags BCYF Innovation Award

By Bon Padayhug, DOST-Reg IX

The OneLab Network, a platform developed by the Department of Science and Technology (DOST), was recently awarded the Benita & Catalino Yap Foundation (BCYF) Innovation Award under the government category.

The BCYF recognizes innovative products, services, technologies, or initiatives that transform organizations through improvements that are sustainable, demonstrable, and measurable.

The OneLab Network is an innovation in the service delivery of laboratories in the DOST system. The platform integrates DOST's regional and research institutes' laboratories, including selected non-DOST laboratories all over the country, into a network that provides easy access to testing and calibration services for the manufacturing and other industries, entrepreneurs, and the public in general.

The networking of laboratories through the DOST-OneLab project enables DOST regional offices to coordinate laboratory transactions with other DOST regional offices that are capable of doing tests required by clients. Such set-up facilitates the testing requirements of clients who no longer have to travel from one testing center or laboratory to another to complete their testing requirements.

Laboratory services are critical in the product development and quality assurance requirements of the micro, small, and medium enterprises. Public institutions and local government units likewise need laboratory services in addressing public welfare concerns and consumer protection. The academe too needs laboratory services for research and development activities.

The OneLab Network portal makes transactions easier and quicker, and allows customers to track



DOST Regional Directors Dr. Anthony Sales (left) and Dr. Julius Caesar Sicat (right) with representatives of DOST officials who pushed for the realization of the DOST OneLab project.

the status of their requests. The customer portal, available in three online platforms (Web, Android and iOS), can be accessed through the internet address onelab.ph.

Former DOST-IX Regional Director and now DOST Undersecretary for Regional Operations Brenda L. Nazareth-Manzano, DOST-Industrial Technology Development Institute Director Dr. Ma. Patricia V. Azanza, and cluster heads Dr. Julius Caesar V. Sicat (Northern Luzon), Dr. Alexander R. Madrigal (Southern Luzon), Engr. Rowen R. Gelonga (Visayas), and Dr. Anthony C. Sales (Mindanao), Regional Directors of DOST III, IVA, VI and XI respectively, pushed the OneLab project to become internationally

recognized and accredited to ISO 17025:2005 "General Requirements for the Competence of Testing and Calibration Laboratories."

OneLab project's ISO accreditation ensures customers of accurate and complete instructions regarding their testing requirements.

Since it went online on October 2015, DOST's OneLab Network has facilitated 153 referrals of 434 samples across the country requiring 575 tests and calibration.

For more information on OneLab, please call (062) 991-1024 or text 0917 722 4118 and look for Rosemarie S. Salazar or email us at dost9info@gmail.com or visit our Facebook page at www.fb.com/DOSTRegion9.

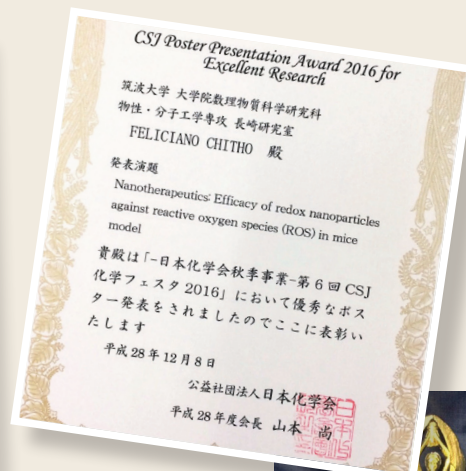
DOST researcher bags awards on nanotherapeutics in Japan

By Hans Joshua V. Dantes, DOST-PNRI

Chitho Feliciano, a senior science research specialist from the Department of Science and Technology-Philippine Nuclear Research Institute, recently bagged the De Silva Prize for Best Oral Presentation at the Interdisciplinary Workshop on Science



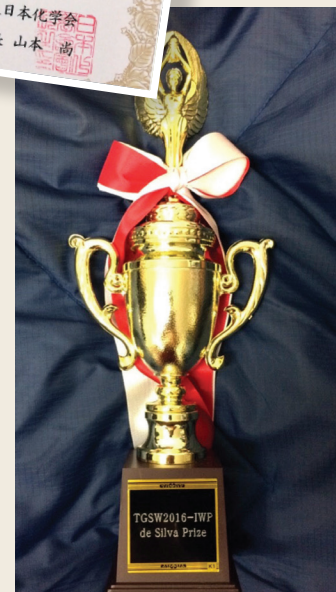
Mr. Chitho Feliciano of the PNRI Biomedical Research Section (extreme left) wins the De Silva Prize for Best Oral Presentation (middle left) in Tsukuba, Japan; the Best Poster Presentation Award during the AsiaNANO Conference (middle right) in Sapporo, Japan; and the Best Poster Presentation Award at the Chemistry Society of Japan Festa (extreme right) in Tokyo, Japan.



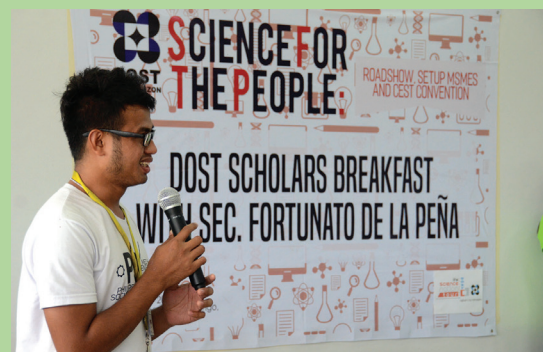
and Patents during the Tsukuba Global Science Week held in Tsukuba, Japan.

Feliciano's study, which was done in collaboration with his Japanese professor, aims to use nanoparticles to improve the therapeutic effect of nitroxide radicals. The study also aims to reduce the effects of skin aging, skin lesions, and other skin inflammatory disorders caused by ultraviolet rays and other forms of ionizing radiation, as well as radiation-induced reactive oxygen.

This doctoral student in Biomaterials Science at the University of Tsukuba in Japan further proved his study's winning streak by subsequently pocketing two Best Poster Presentation awards at the Asian Conference on Nano-science and Nanotechnology in Sapporo and then again at the 6th Chemistry Society of Japan Festa held in Tokyo last year.



inFocus



DOST Scholars from all over CALABARZON raised their questions and concerns in a breakfast dialogue with DOST Secretary Fortunato T. de la Peña. The Secretary also informed the students that the Department has loosened some of its policies and has expanded the courses accepted in the program. Nevertheless, DOST will continue to uphold the academic excellence of its scholars. The DOST Scholars Breakfast with the Secretary was part of the Science For The People: Roadshow, SETUP MSMEs and CEST Convention of DOST CALABARZON held at Bay, Laguna on February 20, 2017.