



Making science
work for you

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Small enterprises to be featured in Nat'l Science and Technology Week

By LOTUSLEI DIMAGIBA
S&T MEDIA SERVICE, DOST-STII

Micro, small, and medium-sized enterprises (MSMEs) in the Philippines will share the spotlight with other sectors and technological breakthroughs in the country during the 2014 National Science and Technology Week (NSTW) scheduled from July 24-28 at the SMX Convention Center, SM Mall of Asia, Pasay City.

To be showcased in particular are the innovative and cost-effective technologies which helped MSMEs develop competitive and world-class products.

Acquisition of these technologies was made possible through the Department of Science and Technology's (DOST) SETUP or Small Enterprise Technology and Upgrading Program. SETUP assists MSMEs in the acquisition of technology interventions in order to increase the volume of their production, improve product and service quality, expand their market, and allow their business to attain world-class standards.

Lined up during NSTW are various events anchored on enterprise development.



Some of the DOST-SETUP beneficiaries and products that are on display posed for photo with DOST Region IV-B Director Josefina Abilay (middle). (S&T Media Service)

Foremost of these is the Awarding Ceremony for Outstanding SETUP Adoptors of 2014. Adoptors refer to MSMEs around the country which achieved greater stability and business success after availing assistance from SETUP.

Other activities lined up are fora on Smart Innovations for MSMEs which will showcase successful entrepreneurs, Packaging Innovations, Food Safety, and Community

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The Philippine Aerospace Industry: Now Looking Up

By ALLAN TAULE
S&T Media Service, DOST-STII



The RP-S512, a locally-assembled light sport airplane with removable wings

The Department of Science and Technology (DOST) will unveil to the public its first locally-assembled RP-S512 airplane on its National Science and Technology Week, 24 July at the SMX Convention Center, SM Mall of Asia, Pasay City.

The plane is a two-seater light sport airplane that is easily transported and stored in much smaller hangar spaces since its wings are detachable.

According to Mr. Arturo "Art" Rivera IV of Omni Aviation, Inc., the company behind the RP-S512, the aircraft's wing locking system is based on a similar system proven safe and effective for use in sailplanes. He

demonstrated that by pulling a pair of pins located at the back of the seats, the wings can be removed quickly by a minimum of two persons.

The system is designed so the plane's control and wiring connections are fully automatic. Most important, its ignition interlock will prevent the engine from running if the wings are not properly installed, a key safety feature that also demonstrates the ease by which the RP-S512's wings lock and unlock from the main body.

In addition to its unique features, the light aircraft is powered by a 100-horsepower

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Front view of the RP-S512 with wings intact



Front view of the RP-S512 without wings

engine that runs on basic unleaded gasoline. This makes fuel costs more economical over similar aircraft in its class using higher-octane aircraft gasoline, considerably more expensive and less readily available. With a few modifications, the engine can be made to run on ethanol, bringing fuel costs even lower.

Meanwhile, Captain William "Bill" Wright, Omni consultant for the RP-S512 project, said they are now awaiting certification from the Civil Aviation Authority of the Philippines (CAAP) for the aircraft. He added that in test flights, the plane was able to easily reach Cavite and as far away as Lingayen, Pangasinan and back.

This project is spearheaded by DOST's Philippine Council for Industry, Energy, and Emerging Technologies Research and Development (PCIEERD) and Metals Industry

Research and Development Center (MIRDC) in cooperation with the Aerospace Industries Association of the Philippines (AIAP).

PCIEERD actively promotes this kind of high-value adding industrial activities that promote local capability to bring the country's aerospace and aviation industry to the next levels.

"Our overarching aim is to chart and bring about an environment that rewards risk-taking for Filipino entrepreneurs to invest in technology companies," said Dr. Rowena Cristina L. Guevara, PCIEERD Executive Director. She added the Council has targeted competitive industry and manufacturing as among its thrusts until 2016.

"Here's hoping that if our plans don't miscarry, we can look forward to a bright future for the aerospace sector. The sky's the limit."

Empowerment Through Science and Technology (CEST). A new assistance program by DOST, CEST aims to empower the poorest of the poor communities.

Also to be launched during NSTW is the "MSMEs Packaging Innovation Awards."

These enterprise development initiatives aim to provide a venue for sharing of knowledge and best practices among SETUP beneficiaries to identify direction, strategies and partnerships and further improve program implementation.

In particular, SETUP focuses on food processing, furniture, metals and engineering, horticulture and agriculture, health products and services, electronics, ICT, gifts, housewares, and décor. The program also provides assistance in the form of manpower training, consultancy services, technical assistance, functional package and label design, among others.

Know more about SETUP and S&T's role in enterprise development at NSTW. An annual project of DOST, the week-long event is a display window of the latest technologies invented by Filipinos whose benefits cut across sectors and trickle down to the Filipino everyman. Also to be featured are interactive exhibits, speed networking sessions, launchings, a career talk and bio-camp, among others. Admission is free.



Farmers in Benguet prepares to bring their products to the market.

Interconnection of gov't offices for better public service almost complete - DOST

By HERNAN S. MELENCIO
S&T Media Service, DOST-ICTO

A slow, weak and inefficient system of government services will soon be a thing of the past as Metro Manila's fiber optic technology that will interconnect 160 government offices and provide them with high-speed communication is almost done.

This was announced by DOST Undersecretary Louis Napoleon Casambre, executive director of the Information and Communications Technology Office (ICT Office), a service institute of DOST.

This initiative of connecting government offices is part of DOST's flagship e-government project called the Integrated Government Philippines project or iGovPhil.

Set for full deployment by early 2015, iGovPhil aims to integrate all functions of government agencies and simplify their processes via ICT in order to help build an e-government that is transparent and that will guide the country toward IT competitiveness and economic progress. High-speed connection will enable these agencies to collaborate on projects, share resources and save money in the process.

According to Casambre, fiber optic technology will not only help government agencies coordinate faster but also

facilitate other necessary services like cloud computing, data center co-location, web hosting, document and records management, email and online security. "Cloud computing, for instance, will be difficult to implement without broadband connectivity," he explained.

The cables in Metro Manila are set for last-mile connection to buildings and the main data center where information and data from government offices are stored in servers. Most of the services offered by iGovPhil, like government website hosting, email, cloud, online payment system, public key infrastructure, are launched from these data centers.

Also being developed are registries on land, vehicles, businesses and citizens. Citizens' registries are existing in the forms handled by SSS, GSIS, NBI, DFA and other data gathering agencies. The data will just have to be centralized and expanded.

Meanwhile, a similar fiber optic network project in Cebu is set to connect 12 government agencies. The networks are expected to be online before the end of 2014.

iGovPhil and other issues related to e-government will be discussed in various fora to be held during DOST's 2014 National



iGovPhil is poised to strengthen government services through a stronger ICT infrastructures.

Science and Technology Week (NSTW) from July 24-28 at SMX Convention Center, SM Mall of Asia, Pasay City. NSTW is an annual event featuring interactive exhibits, fora, networking sessions, inventions, and other local science and technology breakthroughs in various sectors. Admission is free.

How much should you eat? Let DOST's "Pinggang Pinoy" tell you.

By JOY M. LAZCANO AND DIVORAH V. AGUILA
S&T Media Service, DOST-FNRI

How much should you eat in one meal in order to be healthy?

This question will now be answered more easily with a new visual tool for healthy eating developed by the Department of Science and Technology's Food and Nutrition Research Institute (DOST-FNRI) after collaborating with the World Health Organization, Department of Health, and the National Nutrition Council.

This new visual tool, aptly called "Pinggang Pinoy," was unveiled by FNRI last July 4, 2014 during the "Seminar Series on Food and Nutrition Researches and Science and Technology Activities" at the DOST Compound in Bicutan, Taguig City.

"Pinggang Pinoy" serves as a quick and easy guide for determining how much to eat per mealtime. It is also a complementary tool to the Daily Nutritional Guide (DNG) Pyramid for Filipinos, many of whom are now



becoming hypertensive and overweight due to inactivity.

The DNG Pyramid, also developed by FNRI, shows at a glance the whole day healthy food intake recommendation for Filipinos in order to have a balanced diet. Basically, the

Pyramid builds from the base, indicating that people should eat more vegetables and whole grains which take up the bottom part of the pyramid, and less red meat, sugar, fats, and oils which take up the topmost portion.

Both "Pinggang Pinoy" and the DNG Pyramid are based on the latest scientific findings about how food, drink, and activity choices affect people's health.

"Pinggang Pinoy" is one of the tools and technologies to be showcased in DOST's upcoming 2014 National Science and Technology Week (NSTW) from July 24-28 at the SMX Convention Center, SM Mall of Asia, Pasay City. NSTW is an annual event featuring interactive exhibits, fora, networking sessions, inventions, and other local science and technology breakthroughs across various sectors including health and nutrition. Admission is free.

**ADMISSION
IS FREE**

2014 NATIONAL SCIENCE & TECHNOLOGY WEEK

July 24-28, 2014,
SMX Convention Center, Mall of Asia, Pasay City

SCIENCE NATION

Philippines: A Science Nation Meeting Global Challenges

exhibits • events • inventions • exhibits • events • inventions • exhibits • events • inventions

REMOTE SENSING SCIENCE, TECHNOLOGY &
INNOVATION
INVENTIONS

OPENING CEREMONIES

24 July 2014

Date	Activity	Place/Venue
9:00 - 12:00 nn	Opening Ceremonies/Opening of Exhibits	Main Stage, SMX, Pasay City
11:00 - 12:30 nn	GMA's IM Ready	Outcome 8 Pavillon, SMX, Pasay City
11:00 - 12:00 nn	Press Conference	Meeting Rms. 2 & 3, SMX, Pasay City
1:00 - 5:00 pm	9 th Knowledge Exchange Conference	Main Stage, SMX, Pasay City
1:00 - 5:00 pm	Scientific Forum on Emerging Technologies	Forum Hall 1, SMX, Pasay City
1:00 - 5:00 pm	Drugs and Diagnostics Forum	Forum Hall 2, SMX, Pasay City
2:00 - 5:00 pm	ASEAN Integration in 2015	Meeting Rms. 7 & 8, SMX, Pasay City
2:00 - 5:00 pm	Pinoy Rice on the Rise	Outcome 1 Pavillon, SMX, Pasay City
5:00 - 6:00 pm	Speed Networking Session	Forum Hall 1, SMX, Pasay City
5:00 - 7:00 pm	Stakeholders' Night	Main Stage, SMX, Pasay City



Department of Science and Technology