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# Science scribes get DOST awards

By Arjay C. Escondo  
S&T Media Service, *DOST-STII*

The Department of Science and Technology (DOST), through its information arm, the Science and Technology Information Institute (STII), gave recognition to the country's top science journalists and media advocates through the conferment of the Gawad Scriba: DOST Media Awards for Science Communicators during the closing ceremony of the National Science and Technology Week last July 27, 2013 at SMX Convention Center in Pasay City.

The Gawad Scriba, called the DOST Media Awards in previous years, is a fitting new name, with "scriba" being the Latin word for "writer." It honors individual science writers and broadcasters, as well as media organizations from both the public and private sectors, for their concern and involvement in the promotion of science and technology information in the Philippines.

Awardees for the Professional Category were Paul Icamina of Malaya for print, TJ Dimacali of GMA News Online for cyber press, Dr. Custer Deocarlis of RadyoAgila for radio broadcast, and Donna May Flavier of Panahon TV for television.

"The media have been our faithful partner in promoting S&T solutions to the country's pressing problems, said DOST Assistant Secretary and STII Director Raymund E.



DOST recognizes and honors this year's top science journalists through the Gawad Scriba: DOST Media Awards for Science Communicators during the closing ceremony of the National Science and Technology Week 2013. Among the winners for the Professional Category are TJ Dimacali of GMA News Online (not in photo), Paul Icamina of Malaya (4th from left), Dr. Custer Deocarlis of Radyo Agila (3rd from left), and Donna May Flavier of Panahon TV. Also in the photo are DOST officials Mr. Luis Napoleon C. Casambre (extreme left), DOST-ICTO Executive Director, Prof. Fortunato T. De la Peña (2nd from left) DOST Undersecretary, and Mr. Raymund E. Liboro (extreme right), DOST Assistant Secretary. **(Photo by Ceajay Valerio, S&T Media Service, DOST-STII)**

Liboro. "It is only befitting that we express our gratitude as well as give recognition to their role in heightening the public's awareness in S&T," he added.

DOST also gave special citation to Dr. Ronald M. Henson for his book "Popularizing Science thru Mass Media" which illustrates how simple but informative writing can appeal to a wide audience.

Another special citation was given to Business Mirror in appreciation of its unceasing support to and extensive coverage of science and technology related events and activities.

The 2013 GawadScriba panel of judges included Dr. Maria Theresa Velasco, dean of the College of Development Communication in UP Los Baños; Erwin Oliva, senior lecturer at UP Diliman; and Rene Pizarro of Hyundai Asia.



DOST Asst. Secretary Raymund E. Liboro receives Britannica Encyclopedia's replica/reproduction of its original three-volume 1771 edition from Rene D. Yanos, president of Thistle International Inc. **(Text by Angelica A. de Leon / Photo by Henry A. de Leon, S&T Media Service, DOST-STII)**

## STARBOOKS loads up content with Britannica Encyclopedia

By Angelica A. de Leon  
S&T Media Service, *DOST-STII*

**Britannica Ultimate Encyclopedia 2013 Edition is now available in STARBOOKS (Science and Technology Academic and Research-based Openly Operated Kiosk Station). This enhanced version of STARBOOKS was launched last July 25, 2013 during the Expo Science 2013 held in celebration of the National Science and Technology Week at SMX Convention Center, Mall of Asia Complex in Pasay City.**

A project of the Science and Technology Information Institute (STII), the information arm of the Department of Science and Technology's (DOST), STARBOOKS is basically a stand-alone digital library of science and technology (S&T) materials in text, video, and audio formats. Being a stand-alone research tool, it does not need internet connection in order to be accessed and is very user friendly.

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# Smartest kids clash in science skills competition

By Joy M. Lazcano  
S&T Media Service, *DOST-STII*

**It was serious, grueling competition alright but the fun never stopped as 10 elementary schools competed against each other during the "Smarter Kids, Smarter Scientists: The Ultimate Clash of Science Smarts" held last July 24 at the Manila Ocean Park.**

At the end of the final round, Baclaran Central Elementary School emerged as overall champion, receiving P10,000 in cash and a trophy. C.P. Sta. Teresa Elementary School and Centex Manila received P7,000 and P3,000 respectively and a trophy each for their second and third place finish. Meanwhile, Silahis ng Katarungan Elementary School and Pamplona Elementary School each received P2,000 as fifth and fourth place winners.

"Smarter Kids, Smarter Scientists: The Ultimate Clash of Science Smarts" was aimed at equipping kids with practical lessons in science that can be useful in their daily lives. "By sparking the interest of the students, we may lead them in choosing careers in the field of science in the future, (and they) will lead us toward building a Smarter Philippines," explained DOST-SEI Director Filma Brawner.

Participating schools vied to outwit and outplay each other in seven rounds of science-oriented games which tested the students' skill, attention to detail, alertness, rational thinking, tenacity, enthusiasm, and resourcefulness which are character traits of a scientist.

Among the games in the elimination round were "Steady Hand" which required the kids



**Slowly but surely.** The competition tested the students' mettle in seven grueling but fun rounds of science-oriented games meant to equip students with valuable and practical knowledge in science which can be used in everyday life. The competition was organized by the Department of Science and Technology's Science Education Institute, as part of the recent National Science and Technology Week also called Expo Science 2013 which ran from July 23-27, 2013. **(Photo by Gerardo Palad, S&T Media Service, DOST-STII)**

to steadily guide a metal loop through the curved wire without touching it, thus testing their patience and hand-eye coordination; "Dimaryp" in which the children built an inverted pyramid using soda cans; "Pencil Chase" where a player caught pencils on one hand in an incremental number at every try; "Popsi Puzzle" whose objective was to solve pattern problems by moving and re-arranging pieces of popsicle sticks to form the required pattern; "Egg on the Rise" where participants made eggs float in the water using salt; "Candy Taxonomy" which involved segregating candies according to colors and shapes; and "Matchstick Clay Table" which required players to make a sturdy miniature table out of matchsticks and a slab of clay.

"My classmates and I find the games exhilarating and fun especially the 'Dimaryp' game," said Jochelle Jacinto, a Grade 6 student of Pamplona Elementary School.

For Summer Constantino of C.P. Sta. Teresa Elementary School in Bagumbayan, Taguig City, the competition was "tougher and more challenging than I expected it to be."

Among the participants were the elementary schools of Jose Rizal, Daniel Fajardo, Bagong Tanyag, Andres Bonifacio, and Sun Valley.

Organized by the Department of Science and Technology's Science Education in cooperation with the Manila Ocean Park, the elementary level competition was part of Expo Science 2013 held in July at the SMX Convention Center, Mall of Asia Complex.

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## STARBOOKS loads up...

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"It's like bringing the STII library to the far regions of the country," DOST Assistant Secretary and STII Director Raymund E. Liboro stressed during the launch as he shared how STARBOOKS had been installed in several schools nationwide including in places where people have not seen a computer.

With the inclusion of the 32-volume Britannica Ultimate Encyclopedia, the STARBOOKS content is now more formidable, Asec. Liboro remarked.

Included in the encyclopedia are the Britannica Elementary Library, Britannica Student Library, and Encyclopedia Britannica Library. "Britannica is already an institution and its inclusion would mean that STARBOOKS contains general information as well," stated Rene D. Yanos, president of Thistle International Inc., exclusive distributor of Britannica Online in the Philippines.

Yanos shared to the audience how school children in the provinces are having a hard time carrying their books to school. The idea

behind digitizing Britannica Encyclopedia, he said, was to eliminate this difficulty on the part of the children and make learning easier for them.

"We call it the digital divide," he added, referring to the educational challenges faced by schools in the provinces compared with the big league academic institutions in Manila. This is a problem which Britannica Encyclopedia, in partnership with STARBOOKS, aims to address, Yanos emphasized.

A highlight of the event was the handover of a replica or reproduction of Britannica Encyclopedia's original 1771 edition in three volumes, as Thistle International Inc.'s gift to DOST-STII as its content partner for STARBOOKS.

Aside from an audio-visual presentation, the launch likewise featured a demo presentation of STARBOOKS, particularly the features of Britannica Ultimate Encyclopedia, by DOST-STII's Annie Lyn D. Bacani, science research specialist II and STARBOOKS administrative coordinator.

# DOST-DepEd's cloud based e-learning project offers new approach to learning

By Allan Mauro V. Marfal  
S&T Media Service, *DOST-STI*

**Tambubong Elementary School in San Rafael, Bulacan has scaled up its standard of education as the Department of Science and Technology, together with the Department of Education (DepEd) and the National Engineering Center of the University of the Philippines, recently led the distribution and installation of computer systems for digitized instructional and learning materials.**

The school received 16 cost-efficient thin clients and a server from said institutions. Thin clients are computers or computer programs relying heavily on another computer, usually a server, for usual functions. Said thin clients make the power-consuming and costly CPUs unnecessary, so with the hard disk storage and many peripherals of traditional desktop computers.

In the partnership, DepEd is tasked to provide the content, covering all subjects in the elementary level, particularly those for Grades 5 to 7. This will guide teachers on the conduct of their lectures and exercises.

This is only one of many activities under the Cloud Top Project which aims to reduce the acquisition costs of computer hardware and software by promoting the use of thin clients for educational purposes and government cloud applications such as GovCloud, as sustainable energy solutions.



GovCloud is a private cloud for government agencies and their employees with basic cloud applications such as GovMail (government email), web hosting, and payment gateway applications. Cloud applications or cloud computing is a system where users can store all their files in different applications of the cloud such as email. Google, Yahoo and Hotmail are examples of cloud computing.

"I believe that students would be encouraged and inspired more to study their lessons, as devices like computers could offer them new approach in learning... their curiosity on how to use it (will help), compared with traditional learning materials like textbooks and workbooks," said Gerardo Olchondra, principal of Tambubong Elementary School.

Alpha Testing was also conducted in Tambubong Elementary School to test the efficiency of the thin clients and the server live within the classroom settings. The

testing phase will also continue in several public schools in Luzon including San Roque Elementary School and Sampaloc Elementary School in Bulacan, which will be the next beneficiaries of the thin clients and server. Kamuning Elementary School in Quezon City will serve as test laboratory, given its proximity to the Cloud Top Project Center at University of the Philippines.

Aside from producing and installing the thin clients and servers, Cloud Top Project is also developing long-range Wi-Fi communication equipment for several schools in target areas.

To strengthen implementation of this project, the team is also coordinating with proponents of other government projects, such as TV White Spaces Technology (TVWST), for stronger internet connectivity. TVWST is an equipment that can deliver wide-range and cost-effective internet connectivity in all parts of the country, particularly in local barrios, through unused TV channels.

# DOST to collaborate with ARMM to turn agro-forest raw materials into income source

By Apple Jean C. Martin  
S&T Media Service, *DOST-FPRDI*

**The Department of Science and Technology- Forest Products Research and Development Institute (DOST-FPRDI) is set to assist the Autonomous Region of Muslim Mindanao (ARMM) in beefing up the region's livelihood options. Particularly, DOST will help the ARMM turn its agro-forest raw materials into viable sources of income for the locals,**

This plan was ironed out after a two-round talk among DOST-FPRDI representatives Mildred M. Fidel, chief of the Technical Services Division, Maria C. Reyes of the Business Development and Intellectual Property Section, and ARMM's Executive Secretary Atty. Laisa M. Alamyra and Manila Liaison Office Director Jolly S. Lais.

"Dir. Lais is envisioning livelihood projects that will turn some of ARMM's untapped agro-forest raw materials into viable sources of



DOST-FPRDI's non-wood agro-forest dryer can dehydrate raw materials that abound in ARMM such as water hyacinth stems.

income for the locals," explained Reyes. "He is particularly interested in the Institute's dryer for water hyacinth stalks, grasses and shrubs, as well as training courses on the preservative treatment of these materials," she added.

Some areas of the region are frequently flooded due to the vast carpets of water hyacinth clogging the tributary streams of Liguasan Marsh.

"The local government is about to identify some communities along Rio Grande de Mindanao that could be tapped as project cooperators. DOST-FPRDI, meanwhile, will help identify handicraft manufacturers willing to purchase the dried raw materials that will be produced," said Reyes.

The ARMM officials are slated to visit DOST-FPRDI and some successful adopters of the Institute's drying technology.

# DOST-led project to help local rubber industry stretch its prospects

By Apple Jean C. Martin  
S&T Media Service, DOST-FPRDI

**The country's natural rubber industry is flexing up as it leaps toward competitiveness in the areas of production, processing and manufacturing by 2020, as projected in the National R&D Program for Natural Rubber Processing and Rubber Manufacturing. Anchored on the country's National Rubber R&D Agenda, the program is a collaboration among the Departments of Science and Technology, Trade and Industry, Environment and Natural Resources, Agriculture, and the Philippine Rubber Industry Association.**

A sub-project headed by Engr. Belen B. Bisana of DOST's Forest Products Research and Development Institute is designed to improve the production of technically-specified rubber in Zamboanga Peninsula by training the farmers on latex tapping and handling, benchmarking and dissemination of best practices, and recommending facilities and equipment, among others.

According to Bisana, the world demand for natural rubber is expected to increase from 10.2M metric tons (MT) in 2010 to 15.4M MT in 2020. "Malaysia's decreased production of natural rubber can be an opportunity for the country to expand export," Bisana said. In 2010, the local natural rubber industry produced 395,237 MT and generated around 277,420 jobs, with plantation sites mostly found in Regions IX, X, XI, XII, and ARMM.

Bisana likewise informed that by 2017, an international global tire manufacturing company based in the country, is "projected to produce 50,000 tires a day. This presents an opportunity for the Philippines to increase natural rubber production by 12 percent for this company alone."

Sourced from rubber trees, natural rubber is harvested in the form of latex — a sticky, milky fluid collected by incising the bark. It is commonly manufactured into tires, footwear, gloves and latex



Photos courtesy of DOST-FPRDI

A sticky, white sap called latex is gathered by incising the bark of a rubber tree.

products. Top consumers include Malaysia, Singapore, China, Korea, Japan and Taiwan.

## InFocus

MOSES rides the tide. Dr. Mahar A. Lagmay (right), executive director of Project NOAH (Nationwide Operational Assessment of Hazards), formally introduces the Mobile Operational System for Emergency Services or MOSES tablet during the 2013 National Science and Technology Week. MOSES is a portable computing device that contains online and communication applications vital for disaster risk reduction and management operations. The launch was held during the Metro Manila Disaster Summit in July 23 that gathered local government officials nationwide for the five-day celebration of the National Science and Technology Week 2013. With Dr. Lagmay is Renato Brion, director of the National Capitol Region Office of the Department of the Interior and Local Government. According to Dr. Lagmay, 150 units of MOSES will be distributed to barangays in the National Capitol Region for pilot testing. **(Alan C. Taule, S&T Media Service, STII)**

