

The official newsletter of the Industrial Technology Development Institute published semi-annually

DOST crafts milestones in IP transfer, sharing ITDI fleshes out protocol



TSD-ITDI Chief, Nelia Elisa C. Florendo

Five years ago, a progressively radical protocol on management, protection, transfer, and sharing of intellectual property (IP) on research and development in the country, otherwise known as the Philippine Technology Transfer Act of 2009 or Republic Act (RA) No. 10055, was signed into law.

In other countries, the idea of sharing intellectual property is fairly new as well with President George Bush Jr. of the US signed the America COMPETES (Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science) Act on 9 August 2007.

Signed on 8 May 2010, RA10055 officially recognizes that intellectual property derives its power to be nationally useful and functional through transfer. Furthermore, it acknowledges that transparency and openness are necessary requisites of the scientific method

of research and development.

This year, DOST issued three Administrative Orders (AO) as it relates to how its line agencies may spell out the law's implementing guidelines in detail, as follows:

1. AO No. 003 or Adoption of the DOST Technology Data Sharing Policy, signed on 8 April;
2. AO No. 004 or DOST Intellectual Property Policy, signed on 13 April; and
3. AO No. 009 or Technology Transfer Protocol of the Department's Research and Development Institutes (DOST-RDIs), signed on 14 September.

AO 003 or the Adoption of the



DOST-ITDI, in step with ASEAN food gateway 2015 SIAL ASEAN Manila held

Drawing 5,000 visitors, the SIAL ASEAN Manila 2015 Exhibit lived up to its promise to be the food event of the year.

Tagged as the most comprehensive food and beverage exposition in the ASEAN Region, SIAL or Salon International de l'Agroalimentaire (translated as International Agri-Food Fair) was established in 1964.

Serving as a food trade platform, industry experts, and professionals have since found a venue for discovering the latest products and services in the market. Themed as "The South Asian Food Marketplace," SIAL ASEAN Manila 2015 Exhibit is the second to be held in the country following last year's. Here, they explored new opportunities to forge business to business relationships



Adelia M. Guevarra of TSD-ITDI and inquirer of the DOST-developed food processing equipment

From the Executive's Desk...

It's almost a year now since I took the helm as the new director of ITDI. Many challenges faced us along the way but nonetheless, we hurdled most of them and made significant progresses. There is so much work to do and may be even more challenges ahead, and I am counting on your continued commitment for us to deliver on our mission.

We are steadily moving forward on our course and hopefully, through our innovations, we can always serve our stakeholders better and as timely as we can.

It's almost Christmas and a new year is about to unfold with its own promises and challenges. Let us focus intently on what we can do, providing our customers with the best service and most appropriate technologies or solutions to their needs. With this in mind, ITDI can surely contribute in developing the DOST brand.

It is my pleasure to share this holiday season and the coming year with you. Do enjoy a well-deserved break and quality time with family and friends and let's get right back to track, refreshed and ready for 2016.

I wish you all the very best for the Christmas holidays and, a peaceful, prosperous, and productive 2016.


Dr. MARIA PATRICIA V. AZANZA
Director

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DOST Technology Data Sharing Policy took effect on 1 July. It bases its principles on the mission of Open Data Philippines (OPD) to be transparent, accountable, and participatory.

Espoused by the Office of the Presidential Spokesperson, the Department of Budget and Management, and the Presidential Communications Development and Strategic Planning Office, OPD provides the tenets of AO 003 to which DOST affirms as follows:

- Data is a valuable resource to the government, its partners, and the public;
- The government of the Philippines should take full advantage of its data resources; and
- All government agencies, in managing data as an asset throughout its life cycle, must promote openness and reusability.

Furthermore, DOST's data sharing policy adheres to the following

views:

- Research data generated through public funds should benefit public interest and ought to be accessible to them;
- Publicly funded research data maximizes returns to R&D investments which leads to formulation of relevant policies that advance delivery of public services;
- Advocate for respect of IP rights and the need to restrict release of proprietary information that may compromise such rights.

To these ends AO 003 covers conduct of all R&D studies of DOST's line agencies, DOST-funded programs and projects, and all subsequently generated research data, records, samples, scientific papers, R&D roadmaps, analyzed data, and metadata.

Forking the other route, AO 004 or the DOST Intellectual Property Policy took effect on 1 July. Where the former order focuses on the research

and its results, AO 004 lays down DOST's institutional mechanisms for technology transfer activities.

It instructs DOST line agencies on how they may perform their roles as government funding agencies (GFAs) and research and development institutions (RDIs). Likewise, it defines their engagements with stakeholders including, but not limited to, other public RDIs, private RDIs, public and private higher education institutions, and technology adopters from the private sector.

Lastly, AO 009 or the DOST-RDIs Technology Transfer Protocol (TTP) completes the standard in implementing RA 10055.

It defines the policies, strategies, and procedures to be adopted by DOST and its RDIs in identifying/disclosing, managing/promoting, protecting, and transferring/commercializing IPs and/or IPRs generated from research and development funded by the government.

ITDI as the lead convenor on TTP

ITDI: Aiming High at 114



The ITDI 2015 retirees with ITDI Director, Dr. Maria Patricia V. Azanza, R&D Deputy Director, Dr. Benjamin S. Magbanua and Administrative Division Chief, Dr. Diana L. Ignacio



Re-launching of the Nanotech Lab with Director Maria Patricia V. Azanza and R&D Deputy Director Benjamin S. Magbanua

Progress. Innovation. Excellence. Service. Words that could describe ITDI as it welcomes its 114th year of providing Philippine industries and communities innovative technologies and quality service!

ITDI or the Industrial Technology Development Institute of DOST, formerly the National Institute of Science and Technology, has since become the foremost government institute helping MSMEs develop their potentials and improve their efficiency and productivity.

Commemorating its 114th year of founding, the Institute embraces the challenge of connecting more expansively with industries and communities as it aims higher with this year's theme - ITDI: Industry's One Stop Technology Shop. For this, the Institute invited everyone to celebrate the occasion from July 1-3, 2015. The celebrations took place at the ITDI grounds within the DOST compound in Bicutan, Taguig City.

The simple celebration started off with an Ecumenical Thanksgiving Prayer, instead of the traditional Thanksgiving Mass at the conference room of the Environmental and Biotechnology Division at 8:30 in the morning.

This was followed by the opening program at the building of the Material Science and Food Processing Divisions (MSD and FPD). Deputy Director for Research and Development Dr. Benjamin S. Magbanua welcomed guests and staffs while Director Maria Patricia V. Azanza addressed the group with a special message.

Guest speaker DOST Secretary Mario G.

Montejo honored the Institute's retirees and achievers.

ITDI designated the first day of celebration, July 1, as a "Nano Day," which focused on ITDI's efforts on research on nanotechnology. The Nanotech Lab was re-launched with viewing of the lab's exhibits and facilities opened to guests and visitors.

Sopranist Huber Tabi, a former FPD-ITDI staff provided the melodious respite in between presentations. Seminars on current advances on nanotechnology were also held on the first day. Aside from the Nanotech Lab, all facilities and service centers of ITDI were opened for public viewing from July 1 to 2.

On the second day, July 2, activities to celebrate Nano Day continued on in an effort to educate the public on nanotechnology. Seminars,

product talks, and workshop with equipment viewing completed the day. Among those shown was a high-power analytic equipment.

At ADMATEL, Director Azanza led industry guests during the "Kapihan with Industry" with invited speakers from industry talking on various topics. The meeting envisioned to enlighten both ITDI and industry participants on how ITDI expertise can be employed to answer industry needs.

Other activities included public viewing of AVPs, i.e., *Balik Tanaw* sa ITDI and HITS Rollout/ FIC, and conduct of technology demonstrations on vacuum-frying of potatoes. An anniversary sale of products of cooperators assisted by the Institute was also held at the MSD/FPD quadrangle.

The ITDI family ended its Foundation Day celebrations with its annual Institute-wide teambuilding activity held on July 3 at Camp Benjamin in Alfonso, Cavite.

The ITDI 114th Anniversary celebration was one of the Institute's pre-events listed in celebration of the 2015 National Science and Technology Week which was held at the SMX Convention Center at the SM Mall of Asia in Pasay City on July 24 to 28. *(Reginald Roy U. Dela Cruz)*



DOST-ITDI... *from p. 1*

that will shape the future of the food industry globally.

Seeing this, the Industrial Technology Development Institute (DOST-ITDI) as DOST'S representative agency, together with several other exhibitors from the Philippines, joined 15 countries in SIAL -- the food gateway to the rest of the region.

Several foreign dignitaries and their local counterparts marked the opening of the event with a ribbon-cutting ceremony.

SIAL Group Director Nicolas Trentesaux and SIAL ASEAN Manila Regional Director Joanne Cook were joined by DA (Dept. of Agriculture) Secretary Proceso C. Alcala (represented by Usec. Bernadette Romulo Puyat), BFAR (Bureau of Fisheries & Aquatic Resources) Undersecretary Asis Perez, and PCA (Phil. Coconut Authority) Administrator Romulo N. Arancon Jr.

Others which graced the ceremony included: Argentina Trade and Commerce Secretary Martin Soto; Iran Ambassador Ali Asghar Mohammadi; Director of Business France Phils. Stephane Perchenet; France Ambassador Giles Garachon; and France Vice President of Chamber of Commerce Bernard Flour.

Ingeniously divided into four product zones of Biscuit, Wine, Frozen Goods, and Meat, the exhibition covered 18 product and service categories. These offered opportunities for other exhibitors, like ITDI, to customer test and demonstrate the same.

ITDI participated for the first time, in the three-day activity as one of SIAL's key exhibitors. From June 17-19, 2015 it showcased its DOST-developed food processing

equipment which form part of the Food Innovation Center (FIC).

Currently being rolled out nationally, FIC s a package of five machines, namely, spray dryer, vacuum fryer, water retort, freeze dryer, and vacuum packaging machine.

However, only the spray dryer and vacuum fryer. were shown during the exhibition. Nevertheless, the ITDI booth was made more interesting with an array of food product display that included spray dried *malunggay*, carrot, pineapple, calamansi, and *lato*, a seaweed indigenous to Philippine seas, among others.

Vacuum fried food samples of jackfruit, green mussel, and okra were offered to walk-in visitors for tasting. These were watered down by a specially concocted juice mix of pineapple, turmeric, ginger, and calamansi.

More than 30 local and foreign firms expressed their interest to acquire the spray dryer and vacuum fryer. ITDI approximates the value of these machines "on order" to be more than Php31 million.

With the World Trade Center in Pasay City as multicultural backdrop, the 300 exhibitors, in a colorful and distinct food product and services display, showed domestic and foreign visitors the economic potential of buying and selling at SIAL.

Apart from the most extensive array of products and services, the



exhibition sustained its reputation as a full gastronomic destination. It offered visitors not only tasty but also visually stimulating experiences with its series of wine tasting, in-kitchen cooking demonstrations, and other pocket events such seminars and talks.

Nelia Elisa C. Florendo herself, chief science research specialist of ITDI, talked on "Sustaining the Growth of MSMEs through the Food Innovation Center" to a full crowd on June 18. Other seminar topics included "The Basics of Cacao Production," "The Benefits of Coconut Products," "Food Safety: A Social Responsibility," "How SMEs should prepare for ASEAN Integration," and "Organic Farming."

Lastly, MAFBEX Events Management, organizer of SIAL, flew in from Paris "World Tour by SIAL." Prepared by 28 top food journalists, it showcased various food cultures around the world the latest food trends and retail system. Visitors of this year's exhibition were thus privileged witnesses to this key SIAL event. *(Adelia M. Guevarra)*

DOST crafts... *from p. 2*

is thus tasked to flesh out the campaign to build awareness about it. TSD Chief Nelia Elisa C. Florendo served as resource person on several occasions with DOST also doing the rounds of campaigning for implementation and adoption of the three administrative orders.

On 7-8 September, Florendo spoke before representatives from various DOST research institutes, research councils, and Regional Offices at B

Hotel in Alabang. She highlighted the implementing rules and regulations on IP Valuation, Commercialization, and Information Sharing.

Meanwhile, Science Secretary Mario G. Montejo noted that the underpinning of the three administrative orders is inclusivity of its stipulations as opposed to the traditional exclusivity clause of most IP policies.

These orders downplay prohibition or severe limitation of data sharing by research agencies and institutions

while encouraging sharing of proprietary interests between and among a research agency/researcher and adopting company.

He added as well that at the heart of the law is "... prevention of the loss or corruption of immensely valuable research data" through data archiving.

Full documents of the Administrative Orders can be read or downloaded from the ITDI Website and TSD Facebook account. *(Adelia M. Guevarra)*

DOST develops alternatives for health and wellness

The debates have been fierce and challenging; they rouse one from the dark blankness brought about by this debilitating disease.

A mother softly whispered, “We don’t call it by its real name. We prefer to call it as the BIG C,” referring to that liver cancer that her son has. Na Nena (not her real name) is one of thousands of sad witnesses to its crippling effects.

“It saps your spirit and strength; it leaves you hopeless and crying like a child,” the 55 year-old fish vendor continued, slowly getting teary-eyed. *“You know, we have tried everything. With our money fast running out, it’s a relief to know that guyabano tea can help.”*

Mounting the evidences for alternative medicine

The use of decocted *guyabano* (*Annona muricata* L.) leaves as tea has long been considered by many as an alternative cure for various illnesses.

Denounced in an October 2013 interview with a national newspaper as “*scientifically unsupported alternative cancer treatment*,” a medical group has kept to its side of the fence.

But, did you know that alternative/ traditional medicine or folk medicine has since been and still is being practiced the world over?

There are other Asian and African countries where up to 80 percent

of the population relies on traditional medicine for their primary health care needs. In fact, core disciplines which study traditional medicine include herbalism, ethnomedicine, ethnobotany, and medical anthropology.

Tracing the roots

So what’s all the buzz? What is the contention about this green, heart-shaped fruit with a waxy, leathery peel and soft, pliable spines?

It is, actually, about its decocted leaves which is peddled by many enterprising “herbalists” as a cure-all, especially, for the BIG C.

Several groups have in fact exchanged words regarding their beliefs about *guyabano*’s medicinal uses.

With the anti-cancer properties of *guyabano* fully established since 1997, a group from Purdue University worked on the capability of the fruit to block, or inhibit cell growth of tumor cells.

There have been since more than 40 cancer-blocking properties isolated from the stems, leaves, and seeds of *guyabano*. In a 1994 study of Li et al., three more of these properties have been identified. This was followed in 2007 by the work of Yang-chang Wu of Chinese Taipei which included seven newly discovered pure compounds from *guyabano* for curing human tumor.

Documented efforts, however, to produce large amounts of these active ingredients and subject these to clinical trials involving humans are far between. Until then, one can turn to the *guyabano* natural supplement in capsule and teabag produced by the Industrial Technology Development Institute of the Department of Science and Technology (ITDI-DOST).

Nature in convenient bag and capsule

Remaining undaunted by the “talk” and doubts by some on the therapeutic effects of decocted *guyabano* leaves, Dr. Rosalinda C. Torres, supervising science research specialist at the Chemicals and

Energy Division of ITDI, stood firm.

For years she and her team of 10 researchers persisted in the daily research chore until finally proving to all that it can be done.

On 24 October 2014, Epifanio M. Evasco, Director of Patents of the Intellectual Property Philippines-Bureau of Patents (IPP-BP), awarded Dr. Torres and her team Utility Model Patent Registration Nos. 2-2014000346 and 2-2014000347 for their work on the process of preparing *guyabano* leaves in capsule and teabag, respectively.

Two weeks later, the Bureau again awarded the team Utility Model Patent Registration Nos. 2-2014000307, for the process of preparing *guyabano* fruit in capsule, and 2-2014000308 for *guyabano* fruit in teabag.

The patent will allow the team to make, use, or sell the four utility models for the next seven years.

Dr. Torres added, “We did not stop there. We also determined the potency of the extracts in preventing diseases caused by bacteria like boils and food poisoning, and fungal parasites infecting the hair and skin.”

The team also successfully established the anti-inflammatory and anti-diabetic properties of the *guyabano* extracts.

The *guyabano* health supplements were developed following WHO (World Health Organization) standard protocol.

Other wellness products

To date, Dr. Torres’s team has developed other wellness products including essential oils used mainly for their aroma-giving constituents. The oils are extracted from freshly-harvested dried parts of aromatic plants like flowers of *ylang-ylang* and *sampaguita*, leaves of *citronella*, *eucalyptus*, and *lemon grass* or *ginger* and *vetiver* roots, and *calamansi* rind.

Essential oils are important ingredients in many industries - e.g., food and beverages, perfumery and cosmetics, pharmaceuticals and health-care products/personal care products. These are also popularly



ITDI joins DOST family in celebrating NSTW 2015

The National Science and Technology Week or NSTW is celebrated annually spearheaded by the DOST (Department of Science and Technology). This year, 2015, it was held last July 24-28 at the SMX Convention Center, SM Mall of Asia, Pasay City, with the theme, *“Philippines: A Science Nation Innovating for Global Competitiveness.”*

It was a weeklong event that feted guests and viewers with the latest DOST technologies, services, and innovations that are intended to help improve the quality of life of every Juan and Juana.

For the second time in a row, the DOST showcase focused on its eight Outcomes that aim to enhance the following key areas: 1. agriculture; 2. micro, small and medium enterprises; 3. industry; 4. IT-business process management; 5. e-government service; 6. healthcare; 7. human resources; and, weather and geologic hazards (disaster preparedness). For its part, the ITDI plays a key/vital role to spur improvements in about four (agriculture; micro, small and medium enterprises; industry; health) of these eight outcomes.

This 2015, ITDI participated in four Outcomes (Outcome 3 (industry), Outcome 6 (healthcare), Outcome 8 (disaster preparedness, & Outcome 2 (MSMEs).

The Philippine Council for Industry, Energy and Emerging Technology Research and Development (PCIEERD) led Outcome 3 with member agencies, apart from ITDI, Forest Products Research and Development Institute (FPRDI), Metals Industry Research and Development Center (MIRDC), Philippine Nuclear Research Institute (PNRI), and Philippine Textile Research Institute (PTRI).

Essaying *“InduSTriyaman”* as its main theme in all its exhibit modules and events, and a parallel subtheme *“technology-backed local industries for global competitiveness”* Outcome 3 showcased DOST’s high impact technologies, innovation centers, and facilities/laboratories that are designed to assist local industries move up the value chain towards global competitiveness.

The ITDI Outcome 3 showcase included its various technical services and facilities which the industry can avail of to help them improve their processes and meet required local and international standards. Among these were ADMATEL, nanotechnology laboratory, FIC, rubber testing facility, metrology in chemistry-proficiency testing, cleaner production, and metrology.

Outcome 6, led by the PCHRD (Philippine Council for Health Research and Development) meanwhile, focused on the theme, *“People-centered innovations for better health”* and carried the tagline, *“Tekno kalusugan para kay Juan at Juana.”* Apart from ITDI, participating agencies



DILG Secretary Mar Roxas (3rd L) graced the 2015 NSTW celebration

included the FNRI and PTRI. ITDI features in Outcome 6 were: guyabano natural health supplement, slimming cream, salt iodization machine, nipa sap sugar, essential oils from local plants, and ceramic water filter.

On disaster preparedness or Outcome 8 led by PAGASA, ITDI featured the emergency food reserve or EFR; while Outcome 2, on MSMEs, featured packaging technologies and the OL Trap.

Reaching more people thru NSTW

For this year’s NSTW celebration, the DOST aimed to reach as much as 260,000 visitors/guests for the week-long event. To help realize this goal, Outcome leads initiated promotional campaigns to create awareness about the NSTW celebrations and encourage attendance of various stakeholders. For one, an agreement with DepEd (Department of Education) to encourage students to attend the event also added the extra mile in achieving this goal.

Among the promotional avenues explored included installing 26 NSTW posters in all MRT stations and 31 NSTW posters in all LRT stations, and airing of a 30-second advertisement from July 14 - 27 on select cinemas in SM MOA, SM Megamall and SM North. NSTW ads were also displayed at the SM MOA’s spherical globe from July 20 - 27.

In addition to these, both the tri media and cyber/social media were also tapped to further widen the reach of promotions. Press releases were farmed out to various media outlets while radio/TV interviews of DOST officials and agency heads were also facilitated.

Of these campaigns, the ITDI participated in two press conferences, one each for Outcomes 3 and 6 with Deputy Director Benjamin Magbanua, Jr. as resource person. Five radio interviews focusing on ADMATEL and health and wellness were granted to DZRH, DZRB, and Radyo Agila. Web postings and media releases also expanded ITDI’s reach.

DOST develops... *from p. 5*

used in aromatherapy, and for healing/stress reduction massage.

Meanwhile, two other research teams at ITDI have developed a candle-type ceramic water filter and a salt iodization machine.

Led by Dr. Blessie A. Basilia, head of the Materials Science Division, a candle-type ceramic water filter is now being fabricated by local pottery makers making use of clay, sand, and water. It is coated with nano anti-microbial agent to remove microbial/particulate contaminants in drinking water and

help prevent water-borne diseases.

Very easy to use, it doesn't require electricity or batteries to operate. All one needs to do is to pour water into the attached plastic container until full measure. The action of gravity naturally allow water to flow down into the catching pitcher below. The clay pot attached to the plastic container above the pitcher serves as filter.

The filtered water conforms to PNS (Phil. National Standard) for drinking water. Thus, its use can help make safe, potable drinking water readily available and accessible even in

remote areas.

Lastly at the Chemicals and Energy Division, Engr. Carlos de Vera developed a salt iodization machine. A continuous screw-type, it can be used by small salt processors and help them comply with the ASIN Law, which hopes to reduce if not eradicate iodine deficiency in the country especially among children.

The machine can be used to iodize fine or coarse salt and ensures consistent and even distribution of iodine content. The process is sustainable and employs low operating costs. (*Adelia M. Guevarra*)

ITDI joins... *from p. 6*

In addition, ushering in the big day was a series of pre-events in respective DOST agencies. At ITDI for example, nine engagements with various stakeholders were conducted that helped drum up attention to the NSTW celebration through participation in the international exhibition, SIAL ASEAN Manila 2015; fora, project launchings, scientific meetings, and meeting with the industry sector. These pre-events were well attended and guests/visitors were invited and given tickets to the NSTW exhibitions.

Regional cluster fairs

The NSTW is a celebration of science

and technology in the country. After the big event at the SMX-MOA in July, the DOST led by TAPI (Technology Application Institute) brings the fair and NSTW celebration to the regions, dubbed, 'regional cluster fairs'.

ITDI's participation to these events provides an opportunity to showcase its programs, services and technologies in the regions.

This year, four regional cluster fairs were held as follows:

1. South Luzon Cluster S&T Fair, August 16-20, 2015, Puerto Princesa Coliseum, Puerto Princesa, Palawan

2. Northern Luzon Cluster S&T Fair, September 1-3, 2015, Vigan Convention Center, Vigan City
3. Central Visayas Cluster S&T Fair, September 23-25, 2015, Ormoc Superdome, Ormoc City
4. Mindanao Cluster S&T Fair, December 3-5, 2015, Palacio del Sur, Marican Garden Hotel Complex, Zamboanga City

As always, the cluster fairs exemplify the successful collaboration among various groups working for the common good - the DOST regional offices -clusters, LGUs, academe, and business sector. □

Profile... *from p. 8*

food safety consultant for Virginia Foods, Incorporated; and key opinion leader (KOL), circle member for 3M Philippines.

Currently, she continues to provide services in various capacities to these organizations: Bureau of Product Standards/ Philippine National Standards, technical committee on packaging and packaging materials/ halal; DOST- PCIEERD, technical advisory committee member; and Bureau of Product Standards/ Philippine National Standards, technical committee: academics member.

From her line of work, it is evident that MPVAzanza is a champion of technologies for a social cause. This side of her was seen in action in the aftermath of Typhoon Yolanda that left Tacloban and nearby areas devastated and flat with no utilities like water and electricity, which made cooking food not an option.

She led UPD with help of volunteer faculty, staff, alumni, and students in producing her RTE rice and bihon that required neither water nor heating prior to consumption and which could last for a month without refrigeration.

From November to December in 2013, her group worked

long days to produce RTE rice and bihon at the UP Pilot Food Plant. Together with volunteers, they distributed these to typhoon victims within UPD, in shelters in Metro Manila, and to those in affected provinces of Leyte and Aklan.

To date, MPVAzanza (along with co-authors) has to her credit the following on going patent application with the Philippine Bureau of Patents-Intellectual Property Office illuminating her extensive contribution in her field: "Moderately fine shelf-stable dried rice bran." January 31, 2013; "Retrogradation resistant shelf-stable cooked rice." October 3, 2011; "Extruded meat extenders and analogs comprising stabilized cereal brans." April 14, 2010; "Sterilized meat-based emulsion comprising stabilized rice bran." September 23, 2009; "Pasteurized meat-based emulsion comprising stabilized rice bran." March 23, 2009; "Thermal processing of rice product." September 15, 2008; and "Improved canned rice technology for Philippine rice cultivars/varieties." October 3, 2003.

All the above-cited speak well for MPVAzanza and gives one a glimpse of what she can do for DOST-ITDI. Truly, with her at the helm, ITDI is indeed in good hands! □

Maria Patricia V. Azanza, Ph. D

Director, ITDI-DOST



Dr. Maria Patricia V. Azanza or MPVAzanza assumed office as ITDI director on January 12, 2015. She comes from a long and productive career in the academe and R&D spiced with immersion in the industrial/manufacturing sector. With that, she truly embodies the leader deserving to take the helm at ITDI.

MPVAzanza is a faculty with the rank of Professor 9 at the Department of Food Science and Nutrition, College of Home Economics, University of the Philippines Diliman (UPD).

She was born on March 13, 1958 in Manila, making her a true blue Manileña. She lists her permanent address as Mambogan, Antipolo City.

Dr. Azanza holds a Ph.D. in Food Science obtained in 1996 from the Department of Food Science and Technology, University of New South Wales, Sydney, Australia; her MS degree is in the same field while her BS is in Fish processing Technology from the University of the Philippines Diliman.

She started her career as an assistant biologist at Philippine Bullfrog Industries in San Mateo, Rizal in 1980, then as senior biologist at the National Bullfrog Development Program, Ministry of Natural Resources; and as Farm Manager at P.T. Indonesia Bullfrog Industries, Inc., Surabaya, Indonesia in 1983 to 1985.

In 1987 she moved on to UP Diliman as research assistant at the Office of Research Coordination. From Instructor 2 in 1988 at UPD's Department of Food Science and Nutrition, College of Home Economics; she rose from the ranks and is now holding the position of Professor 9 in the same college since January of this year.

Her stint in the manufacturing industry came when she joined the private sector in 2007 as Vice President for Research and Development of Foodflow, Inc., in Sucat, Paranaque, Metro Manila until March 2010.

MPVAzanza's career is heavily dotted with awards, honors, and other forms of recognition both of national and international caliber that there wouldn't be enough space to name them all.

Among the most recent are the following: 2013-2014 Centennial Professorial Chair Award for Hydrocolloid sour taste control in pasteurized rice; 2nd Runner - 2013 UP LIKHA Award Outstanding Creative Research for Moderately fine shelf-stable dried rice bran; 2012 AFMA Best R&D Paper, Silver Award, Basic Research

Category for Retrogradation control in acid-pasteurized Japonica rice cultivars and 2012 DOST-NCR/TAPI Outstanding Alumni, "Science and Technology" category; 2011 UP Diliman Centennial Professorial Chair Award for D720C Values of Salmonella typhimurium in citrus juices: Predictive efficacy of a model; and Scientist 2 rank in 2006, UP System.

Her various works in food safety and quality of foods and materials, HACCP, food toxins, RTE, and street foods, among others, also bagged UPD's International Publication Award - The President's Award for Academic Distinction in 2005-2006.

These include: Philippine Food-borne diseases outbreaks, Journal of Food Safety 26:92-102; HACCP certification of food services in Philippine inter-island passenger vessels, Food Control 17:93-101; Heat-shocking of Philippine green mussels, Perna viridis, International Journal of Food Science and Technology 40:689-694; Aerobic plate counts of Philippine ready-to-eat foods from take-away premises, Journal of Food Safety 25:80-87; Microbiology of Kwek-kwek: An emerging Philippine streetfood, Food Science and Technology Research 10(1):6-9; Development of quick-cooking meat congees using multi-level sensory evaluation, Journal of Food Quality and Preference, 15(4):331-340; Varied assays for PSP toxins in heat-shocked Philippine green mussels (Perna viridis), Journal of Food Safety, 23(4):249-261; and Barriers of HACCP Team Members to Guideline Adherence. Food Control, 16:15-22.

Aside from these awards, her exemplary work saw print in local and international refereed (ISI) journals that brought her also to different places here and abroad for various engagements like scientific conferences, presentations, exhibitions, and the like.

Even with her busy schedule, MPVA doesn't stop in her R&D. Having completed many studies, some are still in the pipeline including: Validation of pasteurization treatments against microbial spoilage and pathogenic indices of liquid egg products, Microwave blanching and food coatings for discoloration control in minimally-processed local allium bulbs, and Use of natural antioxidants to control rancidity in pasteurized cooked RTE noodles.

Alongside her R&D work, MPVA also held administrative positions having served as Chairman, Office of Research and Publication, College of Home Economics, UPD; and as Faculty-in Charge in its Pilot Food Plant.

Her career also sees her busy in extension work and other noteworthy endeavors in local and international scenes, both public and private. She was committee member of the Joint FAO/WHO expert committee on food additives; National CODEX committee for fish and fishery products;

Our Business Is Industry



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