



*Better quality of life  
through better packaging  
for more people.*



## INSIDE WPO

The Packaging Community Around the World

### President's word

#### A first semester full of activities!



Summertime in the Northern Hemisphere is sometimes looked upon as a time to rest and relax; and that's true in some quarters, but not for **WPO**. Ten days after our meetings in Sydney, I boarded a plane for Bangkok to speak at and chair a conference on packaging in conjunction with Pack Inno Tech 2013 and Thaifex/World of Food Asia, sponsored by Köln Messe. The fair, focused primarily on food and food service was extremely well attended and is quite a large show. The conference speakers were diverse with topics including *Cost Reduction as a Catalyst, Safety and Compliance, Developing Compelling Sustainable Packaging Propositions, Effective Implementation of Active and Intelligent Packaging*. Presenters were from Denmark, Belgium, France, UK, India, and of course, Thailand; a truly international conference.



About 3 weeks later, on June 16, I flew to Moscow where I represented **WPO** at Rosupack and spoke at a conference connected to the fair. I can report to you that the packaging community in Russia is alive and well, and growing rapidly. Last year, attendance at this show was around 18,000; this year they were expecting attendance to be in excess of 22,000.

As packaging shows go, it was typical with the usual materials, equipment and machinery on exhibit. Most of the exhibitors were Russian but there were about 33 other countries showing their products as well. Germany and Russia have had close business connections for a long time so there were a lot of German companies there along with representation from a number of US manufacturers. All-in-all, a good show; well organized and modern in its style. The exhibition facility, Crocus City, is very modern and quite large, over 450,000 square meters. Rosupack used only 4 of the 19 halls available.

At the conference, I spoke for about 20 minutes (x 2 because of translation into Russian) about packaging business opportunities around the world and what is driving the growth of packaging. There were only about 70 attendees, which is a good indication of the size of the packaging community in Moscow and other parts of Russia. I was told later by several people that the presentation was of great interest to Russian packaging professionals as most of them do not have a lot of information about what is going on in the packaging community in other parts the planet.

But it is clear that packaging in Russia is still growing rapidly, especially consumer-oriented packaging. I was reminded by one colleague that only 20 years ago, meat was still wrapped in plain kraft paper at grocery stores, with very limited choices for other foods. Now, the availability of choices is quite the opposite. The Russian middle class is growing quickly as evidenced not only by packaging but by the 4 million cars on the roads of Moscow.

According to UN statistics, Russian population has peaked at about 140 million people and will decline to about 100 million by 2050, but I believe that the packaging sector will continue to grow because of the growth of the middle class. This is good news for packaging.

It is also clear that Russian packaging professionals are concerned about and interested in sustainability as it relates to packaging. I met Petr Bobrovskiy, Vice President of Public Relations for the National Tare Union. You can see from their website that they are keen on environmental issues as well as creating more strategic business relationships with Russian, Latvian and Estonian partners ([http://www.estlatrus.eu/eng/future\\_enpi/partners\\_for\\_eni/search\\_for\\_partner/\\_gv/id\\_57](http://www.estlatrus.eu/eng/future_enpi/partners_for_eni/search_for_partner/_gv/id_57)).

I also met a number of influential people on the Russian packaging scene including the editor-in-chief of Package & Packaging magazine, Igor Smirenniy. He is also a vice president of the European Packaging Institute; he sent to me a number interview questions whose answers were published in their magazine. I also met Mikhail Basheleishvili, Deputy General Director of ITE Moscow and General Director of MVK, organizer of Rosupack, along with Nadezhda Talanova, Exhibition Director for Rosupack.

I was hosted by NC Pack, the National Packaging Confederation, headquartered in Moscow. Our colleague, Andrey Zagorskiy, has worked with NC Pack for many years. As you may know he has stepped away for this organisation and **WPO** for health reasons. I was able to spend considerable time with Alexander Boyko, Managing Director of NC Pack and Chairman of the Packaging Committee of Russian Chamber of Commerce and Industry, a Russian NGO. I also became well-acquainted with Vladimir Chuykov, recently elected president of NC Pack and a successful Russian entrepreneur.



Clearly, Russia is a growing packaging market, with modernization well underway. We should look forward to more participation in **WPO** from our Russian colleagues.

In addition to time spent on travel, Keith Pearson and I have spent a significant amount of time sorting through financial issues as reported at the Sydney meeting. We are particularly grateful for the assistance of Mike Mizerak, a CPA and financial Controller with Kellen Company, for taking the lead and really digging into the many discrepancies in that financial report. Mike reports that he and his staff invested about 75-80 hours on this project. I can now advise our board that these issues are resolved in both a satisfactory and positive way. We will be providing the Board with a full report on this matter in Barcelona.

So, here we go again: lots to do! As Keith is reporting, there is a lot of great **WPO** activity in Africa. Our new website is launched and ready for more updates. WorldStar Judging and the Board meeting is in Barcelona. Preparations are already underway for Düsseldorf. I will be attending a one day conference put on by European in Brussels in October and perhaps speaking at a conference at Brunel University in UK in early December.

**WPO's** momentum continues to grow. Our Working Groups are working... hard, and with good effect! So, I look forward to seeing all of you in Barcelona in November. Don't forget to make your hotel reservation soon!

*Thomas L. Schneider, CPP*  
*President of WPO (World Packaging Organisation)*

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## Events

### New printing and packaging show in Budapest



The Hungarian Association of Packaging and Materials Handling (HAPMH), a **WPO** member, in cooperation with the Technical Association of Hungarian Paper and Printing Industry and the Federation of Hungarian Printers and Paper Makers is organizing a new program named PPDexpo – Print and Packaging Days in Budapest, Hungary, between 19-21 November.

The program includes morning conferences and workshops on different topics; in the afternoon the exhibition is open for visitors. During the time of PPDexpo it will be organised the prize giving ceremony of the Hungarian Packaging Contest, called Hungaropack which is the eligible qualifying awards programme to enter the WorldStar Awards. More information contact Miklós Nagy, Secretary General of HAPMH at [nagym@csaosz.hu](mailto:nagym@csaosz.hu).

### PackTech India 2014



The trade show will join two events, Drink Technology India and International PackTech India. For the first time they will happen together in Mumbai between 25-27 September, 2014. One show under one roof at the Bombay Convention & Exhibition Center will be products and solutions from and for the International packaging, packaging print, processing, beverages and food industries. For the first time, therefore, these two events will be covering the food-processing segment. More information visit [www.messe-duesseldorf.de](http://www.messe-duesseldorf.de).

## PPP 2013



October 04-06 it will happen Plastics, Printing, Packaging 2013 in Nairobi (Kenya). The organizers expect exhibitors from 20 countries and visitors from all over Africa. For more information send an email to [info@expomesse.com](mailto:info@expomesse.com).

## FPPE 2013

Starling Expo and Messe Düsseldorf confirmed FPPE – Food Processing & Packaging Exposium in Nairobi, Kenya, from 26-28 November 2013.

## Hot topics in flexible packaging

As demand grows worldwide for food and pharmaceuticals safety and sustainability are the hot topics, particularly in Europe where the legislative impact on the industry is growing. Packaging is critical for protection and preservation and is becoming more sophisticated and tailored to the market requirements. At the same time there is a raised awareness of other issues like sustainability in the supply chain and the critical factor of safety in food contact, which is studied in terms of levels of extractables and leachables in European standards. Barilla, the Italian food supplier, has taken particular care with food contact issues and assists in leading the Italian Packaging Institute on this matter. Economics of production must also be considered, with budgets tight across the globe. AMI has reviewed the markets in flexible packaging and will be presenting some of the data at the next specialty conference on Multilayer Packaging Film, which takes place in Vienna from 18-20 November 2013.

## Flexible packaging in Middle East

AMI announced that the 5th edition of the Flexible Packaging Middle East conference will take place from 9-11 December 2013 at the Sofitel Hotel in Abu Dhabi, United Arab Emirates. AMI's Flexible Packaging Middle East conference is an established forum where all stages of the packaging supply chain meet to discuss key trends and developments influencing market growth and profitability.



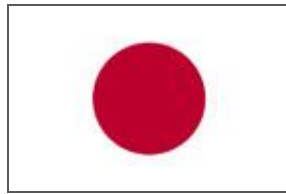
The Middle East region is growing at rates of over 15% per year with all major application areas advancing. In particular the growth of sophisticated packaging converter markets are giving companies the opportunity to participate in added value areas where profits are greatest. Flexible Packaging Middle East 2013 will build delegates' knowledge to provide an opportunity for the industry to meet and discuss the issues of concern today.

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## Around the world

### Japan reduces packaging waste



According to recent statistics, the percentage of containers and packaging waste accounted for by household garbage was the smallest ever recorded in Japan: 50.1% by volume (-3.6 percentage points year-on-year) and 17.8% by weight (-5.5 percentage points year-on-year). According to the Institute of Packaging Professionals Japan (JPI), a **WPO** member, the dramatic downward trend for the last couple of years was the result of the reduce, reuse and recycle (3R) approach. Accordingly, the number of years remaining for final disposal sites for non-industrial waste increased to 19.3 years (compared to 18.7 in 2011).

### Berlin packaging licenses IoPP's course



The Institute of Packaging Professionals (IoPP), a **WPO** member, and Berlin Packaging announced that Berlin Packaging has licensed IoPP's Fundamentals of Packaging Technology online course. IoPP is providing Berlin Packaging with a secure, co-branded online portal that contains the company's customized course catalog.

The individual courses Berlin has selected are available through its portal to preapproved employees at both Berlin Packaging and Berlin's customer companies. Upon gaining access, these employees complete the packaging training on their computer screen. The courses are accessible whenever and from wherever they wish.

Berlin Packaging becomes the latest organization to license IoPP's Fundamentals online course, joining companies including Kraft Foods, General Mills, Clorox, Ecolab and most recently, packaging students in Kenya, through a special training arrangement sponsored by the Staples Foundation and IPACK-IMA.

IoPP's Fundamentals online course catalog, at [www.iopp.org/elearning](http://www.iopp.org/elearning), comprises 42 prerecorded, self-directed lessons and 27 hours of learning covering all the major areas of packaging. Courses may be purchased individually or in topic bundles, and also in bulk through a corporate license. For details on corporate or group licensing options, contact Jim George, Director of Education, [jimg@iopp.org](mailto:jimg@iopp.org).

### New approach for food preservation

Recognizing that containers and packaging are disposed of after use, long-life and barrier packaging was reviewed. More companies focused on their development to enable using containers and packaging to provide food with a long shelf life and to decrease food wasted. Light-weight and high-barrier containers are under development and being used. The true role of packages in the supply chain, including reviewing expiration dates, was emphasized along with the development of the active barrier such as oxygen absorbents, as reported a study conducted by Institute of Packaging Professionals Japan (JPI), a **WPO** member.

### Best student packages in Turkey

Results of the Turkish Packaging Design Student Competition 2013, the ninth of which was held in cooperation with Reed TUYAP, organizer of Eurasia Packaging Istanbul Fair and ASD (Turkish Packaging Manufacturers Association), a **WPO** member, have been announced. 163 projects



applied to the competition. Selection committee members who have graded the 57 winning packaging designs have decided in unanimity and determined the first place, second place and third place projects as well as nine honorable mention projects. Twelve projects had been qualified to attend WorldStar Student, the international student competition organized by **WPO**. The award ceremony was held at September 12 during the 19th International Packaging Industry Fair – Eurasia Packaging 2013 Istanbul. More information about winners contact ASD (Turkish Packaging Manufacturers Association) at [asd@ambalaj.org.tr](mailto:asd@ambalaj.org.tr) or visit [www.ambalaj.org.tr](http://www.ambalaj.org.tr).

## Reduction in green house gas emission

The government of Japan decided to aim at an appropriate 20% reduction in 2030 compared to 1990 concerning the medium-term greenhouse gas emission target in the Innovative Strategy for Energy and the Environment. This attracted attention because the aim differed from the conventional 25% reduction in 2020 compared to 1990, which is the medium-term target committed to internationally.

## NVC congratulates graduates in packaging

NVC (Netherlands Packaging Centre), a **WPO** member, published the names of 19 graduates from the NVC Course Programmes in Packaging 2012-2013. They had received their diploma from the independent examination authority already at the festive annual Graduation Ceremony. The graduates are: Valentijn van der Hammen (Cats-Haensel Flexible Packaging); Jan Visser (Ceva Container Logistics); Barry Geerligs (Den Hollander Food B.V.); Erwin Ballijns (DS Smith Packaging Barneveld B.V.); Murat Izci (Elopak b.v.); Charlotte Devries (H.J. Heinz BV Heinz Innovation Centre); Lisette Albrecht-Schoonderbeek (Instore Kids Corners); Marit Lintsen (Koninklijke Douwe Egberts BV Vestiging Utrecht); Theo Martens (Merck Sharp & Dohme BV MSD Haarlem); Anja van de Wetering - van der Steen (Nutricia Cuijk BV); Elle Glaser-Roosen (Packz B.V.); Stefanie Iemhoff (Perfetti Van Melle Benelux B.V.); Jelmer van Deijne (Ramakers Industriële Verpakkingen bv); Frits Savelkoul (SABIC Europe B.V.); Henk Roets (Schering-Plough Labo n.v.); Erik Bruggeling (Smurfit Kappa Zedek Display & Packaging); Richard Roodbeen (van Soest B.V.); Nico Schenk (Vandemoortele Nederland); Angelique van de Nobelen.

The names of the graduates and their companies were also added to the official Register, bringing the total number of graduates since the introduction of the course programs to 537. The NVC course is intended for packaging and product technologists, R&D personnel and quality control officers, as well as product managers, purchasers and account managers working in middle management. Upon passing the NVC Packaging Exam I, they receive the internationally recognized diploma NVC Packaging Technologist (middle management).

The NVC Course Programme in Packaging II is intended for people who fulfill/aspire to a position of responsibility at upper management level with regard to the production of packaging and/or the packaging of products and/or the distribution and marketing of packaged products. Upon passing the NVC Packaging Exam II, they receive the internationally recognized diploma NVC Packaging Manager (upper management).

For more information and to register for the free online information sessions contact Irma Walstra [i.walstra@ncv.nl](mailto:i.walstra@ncv.nl).

## Packaging awards in Croatia

This year's packaging festival Fest.A Cropak, traditionally central professional event for packaging industry in Croatia and the region, was held mid June. The event was organized by the Institute of Packaging and Graphic Arts Tectus – IatT, a **WPO** member, Tectus Company and trade journal Ambalaža/REGprint from Zagreb, gathering 140 packaging users and producers from over 50 companies and institutions.

Besides the traditional general patronage by the **WPO**, Croatian Ministry of Environmental and Nature Protection, Croatian Ministry of Regional Development and EU Funds, as well as Croatian Chamber of Economy gave their patronage to the event. The partner of the festival was a Croatian company Tehnix Ltd., a leader in techniques and technology of environmental protection on the market of the region and further.

One of the events was the international conference "On the Threshold of the EU: Packaging, Legislation,

Sustainability..." that provided a series of expert lectures by eminent Croatian and foreign professionals presenting novelties and legislative requirements awaiting Croatian packaging industry upon accession to the EU and information on the trends regarding particular types of packaging materials.

This year's Cropak 2013 award ceremony marked a 10-year anniversary of continuously rewarding achievements in rethinking and developing packaging on the Croatian market. In this period over 629 products and 232 series were nominated, which constitutes to over 1230 products. A total of 140 prizes were awarded to the best packaging and 13 projects were acknowledged with the Eko Cropak award for the general contribution to the environmental protection.

There were 19 products and 22 series, constituting to over 120 products, nominated in 9 categories this year, while Packaging of Frankovka Rose Selected 2012 by Iločki podrum from Ilok has been proclaimed best of the best, winner of the Cropak 2013 award. You may find more information about the winners at [www.festacropak.hr](http://www.festacropak.hr).

Using Cropak as an example, a Regpak award for the best packaging on the regional market was founded in 2010. 25 products from Bosnia and Herzegovina, Croatia, Macedonia, Slovenia and Serbia were presented in 10 nominations for this year's award. All nominees were awarded with Recognitions as national representatives, while returnable crate for bottles by Pivovarna Laško, a brewery from Slovenia, was evaluated as the best packaging from all the participating countries and won the Regpak 2013 award. Winners are also eligible for WorldStar, where they have so far achieved great success.

And finally Student Creative Workshop Cropak celebrated its fifth anniversary this year. According to author concept of Drena Milijević, managing director of the IatT, students redesigned famous products packaging of four renowned Croatian companies in so far five successfully held Workshops, while this year a company and an educational institution from the neighboring Bosnia and Herzegovina joined the Workshop. A total of 448 students, their mentors and professional designers as supervisors have been involved in the Workshop so far.

This year's creative task was to re/design the label and glass bottle of Vitinka mineral water product line, a producer from neighboring Bosnia and Herzegovina. 80 students from Croatia and Bosnia and Herzegovina took part, while the evaluation committee evaluated 40 first selection works.

Creative solution by Adi Franković from the Academy of Applied Arts, University of Rijeka, mentored by Aljoša Brajdić, was the best work of the Student Creative Workshop CROPAK 2013 and thus became a template for the new packaging of Vitinka mineral water product line.



## Hungary at Interpack 2014

After maybe three decades Hungary will be presented again in the Interpack packaging exhibition in Düsseldorf, Germany, next year.

The Hungarian Association of Packaging and Materials Handling (HAPMH), a **WPO** member, in cooperation with the Hungarian Investment and Trade Agency is organizing a community stand for the Hungarian packaging material producers.

The achievement of the Hungarian packaging industry is growing and developing continuously. This can be proved by the 31 WorldStar awards received by the country from 2007 to 2012. The six companies that will participate in the common booth are: Adu Alba Packaging Ltd., Krajcár Packaging material Ltd., Mátramétál Ltd., Pikopack Co. Ltd., Reményi Packaging Ltd. and Rollbox Trade Ltd.

## Turkey selects packaging award winners

Turkish Packaging Manufacturers Association (ASD), a **WPO** member, registered in the fourth edition of Crescent and Stars of Packaging Competition 203 submissions, evaluated in 12 different categories; 96 of them were awarded. In accordance with the competition's rules, the packages which receive the "Competency 2013" award are entitled to join international competitions, including **WPO's** WorldStar.

The Selection Committee (a professional jury) met on 23 - 24 May 2013, at the ASD, examined all packages and graded every application based on the following features and criteria given below: protection and preservation of contents; new, original and different, and appealing package form; ease of handling, filling, closing, opening and reclosing; appropriate and sufficient marking and information on the package; sales appeal; graphic design; quality of production; economy in material usage and cost effectiveness; reusability, recyclability and recovery success in the case of environmental sensitivity, sustainability Ingenuity of construction; and suitability for successful exhibition at final points of sale.

The winners were published at [www.ambalajarismasi.com](http://www.ambalajarismasi.com) , the official website for the Crescent and Stars of Packaging. For more information, contact [asd@ambalaj.org.tr](mailto:asd@ambalaj.org.tr).





## Traditional packaging meeting in Ukraine

From May 21 to 24 it was held, in Alushta (Ukraine), VII International Scientific and Practical Conference "Packaging Industry (innovative technologies)." The conference, organized by the Club Packagers of Ukraine, a **WPO** member, and the Ukrainian magazine "Upakovka", was attended by over 30 experts in the packaging industry of Ukraine, Russia and Austria. At the conference there were 17 reports. The main theme of the plenary session was "The packaging business in a changing society." Very interested in this topic were also workshop sessions: "Ways of saving material, energy and financial resources in the packaging industry," and "Information and communication technologies in the packaging - the basis of the success of product sales." In the plenary speakers were Dr. Valery Krivoshey, Dr. Valentin Sherstuk, Dr. Alexander Gavva and head of Ukrainian packing and environmental coalition, Vladimir Slabyi.

This year, participants had the opportunity to hear about innovative design as part of the ideology of the packaging industry from the head of creative graphic design studio, People's Artist of Ukraine Vitaliy Shostya. There were also reports of Anna Tarantsova (Tetra Pak Ukraine) on environmental problems and Elena Tereshchenko (Heuft Eurasia) on

the prevention of the production of goods. They examined innovative approaches for solving the problems of successful sales in the package. At the end of workshop there were reports from Raymond Made and Christian Stieglitz from the European Institute of Environmental Economics (Vienna – Austria). Known European experts reviewed the system of financing the disposal of packaging waste (payments to business or government taxes) and identified the major social and economic benefits of extended producer responsibility for packaging waste from the experience of Austria.

At the end of the conference, participants took an active part in the round table "Package - a key component of a successful sale of the product."

The VIII International scientific-practical conference is scheduled to May 2014. More information visit [www.upakjour.com.ua](http://www.upakjour.com.ua).

## TricorBraun licenses IoPP's online course

TricorBraun is the latest organization to license IoPP's online Fundamentals of Packaging Technology course, joining companies like Kraft Foods, General Mills, Clorox, Ecolab, SGS International, Berlin Packaging and most recently, packaging students in Kenya, through a special training arrangement sponsored by IPACK-IMA and the Staples Foundation.

IoPP is providing TricorBraun with a secure, co-branded online portal that contains the company's customized course catalog. The individual courses TricorBraun has placed in its catalog are available through its portal to preapproved employees of the company. Upon gaining access, these employees complete the packaging training on their computer screen. The courses are accessible whenever and from wherever they wish. IoPP is **WPO** member in USA.

## Good performance in Brazil



According to an exclusive research made for ABRE (Brazilian Packaging Association), a **WPO** member, the production of packaging increased 2.66% in the first six months of 2013, compared to the same period in 2012, and should end the year with a result of +2%. The expansion of 4.8% in the first three months resulted in a positive performance. The forecast is that revenue achieves almost US\$ 22 billion by the end of the year against US\$ 20 billion in 2012.

## Call for entries for Iapris' conference

The Engineered Packaging and Distribution Research Group at Victoria University is proud to host the 19th World Packaging Conference on behalf of the International Association of Packaging Research Institutes (**IAPRI**), a WPO member.

General stream papers (abstracts due by 31st January 2014) will be published in the Conference Proceedings (with ISBN). Peer-reviewed papers (full papers due by 8th December 2013) will be published in a special issue of *Packaging Technology and Science*.

Key conference topics include: Active & intelligent packaging; Distribution packaging; Packaging design, Ergonomics & human factors; Medical, cosmetic & pharmaceutical packaging; Packaging printing & graphics; Packaging for food & agriculture; Packaging for hazardous & dangerous goods; Packaging machinery & systems; Novel packaging; Packaging materials; Packaging sustainability; Packaging standards & legislation.

More information on submission templates and the conference in general contact Vincent Rouillard, Michael Sek and Stephen Bigger at [Admin.IAPRI2014@vu.edu.au](mailto:Admin.IAPRI2014@vu.edu.au).

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## Education

### Training courses in Africa

From 18-23 September the Institute of Packaging Nigeria (**WPO** member) hosted a Residential Packaging Training course, sponsored by **WPO** and conducted by the Australian Institute of Packaging (AIP), also a **WPO** member. It used the IOM3 training material. Some **WPO** board members participated like Pierre Pienaar (Australia), Kishan Singh (South Africa) and Keith Pearson (General Secretary).



Another Residential Training course is scheduled to happen in Nairobi, Kenya, in October 28. It will be sponsored by KEBS and **WPO** and run by IoPP Kenya, a **WPO** member. Keith Pearson, General Secretary, will do a keynote address.

### Online learning courses in Netherlands



High-quality advanced education for packaging professionals worldwide is now available via live online sessions in the new NVC's online learning environment "LearningatNVC". The Netherlands Packaging Centre is a **WPO** member.

Currently five NVC E-Workshops are facilitated this way, each consisting of two three-hour sessions divided over two separate workshop days. The workshop language is business English and all supporting documentation is provided in English as well. Students can participate collaboratively or individually in online assignments, being either offered in real-time during the E-Workshop itself or offline as preparation or reference after the E-Workshop has taken place.

The five NVC E-Workshops currently on offer are: Paper and Board Packaging, Flexible Plastic Packaging, Food Contact Materials Legislation, Labelling of Food Products, and Sustainable Innovation in Packaging. More information contact Antje Augustinus [a.augustinus@nvc.nl](mailto:a.augustinus@nvc.nl).

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## From the Board

### Government recognition for Tanzania



**WPO** General Secretary, Keith Pearson, is involved in the issue of getting government recognition for the Tanzanian Packaging Association, a **WPO** member. Some meetings are being settled to discuss and explain the project.

### Board meeting in Spain

From November 04 to 08, **WPO** will have its second Board Meeting of 2013 in Barcelona, Spain. The whole program is being hosted by Graphispack Association, the local **WPO** member. During the week, WorldStar competition entries will be judged. More information contact **WPO**'s General Secretary, Keith Pearson at [glacier@tiscali.co.za](mailto:glacier@tiscali.co.za).

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## Fresh News

### World's thinnest shrink label

The world's thinnest shrink label (18 µm) was adopted by Suntory Beverage & Food Limited, in Japan, for plastic bottles. Its introduction for part of the Suntory green tea Iyemon 500 ml plastic bottles enables reducing CO2 emissions by 50%.

### More hygiene, less maintenance

Hygiene is being a key focus for Bosch Packaging Technology. In addition to launching innovative secondary packaging technology, the company recently showcased a technology designed to maximize product safety for manufacturers. These include a state-of-the-art vertical bagger platform and the Pack 301 IN inverted horizontal flow wrapper, as well as a fully-integrated coffee packaging solution. The flow wrapper is presented with the new product distribution system, a modular direct-depositing pull nose station, able to gently handle a wide variety of products and designed for easy cleaning and maintenance. All machines have been developed to facilitate integration with existing Bosch technology, enabling manufacturers to source all of their packaging line equipment from a single supplier. Optimizing line performance and efficiency will also be a core topic for Bosch at the show, with exhibiting its service concept Preventive Maintenance.

### Convenience is the key in packaging



Recloseable packaging and microwaveable plastic trays were named top packaging breakthroughs that most impacted peoples' lives over the last 25 years in an on-line survey hosted by DuPont. Together the two categories of invention captured 48% of the votes. The online survey was available to industry professionals from April 9 through May 10, 2013.

Recloseable packaging, which includes food-storage zipper locks and stand-up pouches, earned 27% of the votes. Microwaveable meals, enabled by "oven-able" packaging materials, captured 21% of the votes. Recycled content in consumer, industrial and community programs that support social goals earned 18% of the votes. More visit [www.dupont.com](http://www.dupont.com).

### Smart lid

Australian packaging firm Smart Lid Systems has introduced its award winning takeout coffee lids through the café outlets serving Foxtel Australia, News Limited, The Royal National Park, and the Museum of Sydney. Spread over the Sydney metropolitan area, the first outlets to stock the Smart Lid are operated by the Toast Food Group, with more independent outlets signing up daily.

The new device changes in color when it is placed onto a cup of hot coffee or tea, 'screaming' look at me to those around. As the drink cools, the packaging returns to its dark color.



## **New solution for industrial film**

Following the launch of Supertough 32ST05 in flexible packaging, which enables 25% thinner but stronger films, Total now brings a second grade aimed at the industrial film sector, Supertough 22ST05.

Lumicene® Supertough family of metallocene polyethylene is a breakthrough for multilayer film structures that embraces the industry need for easy to process, high-performance, down gauging solutions for the industrial, hygiene and food film sectors.

## **Crowdfunding for packaging**

In 2012, three engineers created a super-spicy honey-and-habanero barbecue sauce that took their friends by storm. They dubbed their invention Honey Badger BBQ Sauce – inspired by a popular YouTube parody of a National Geographic program on the badger species from Africa – and decided to raise money from crowdfunding website Kickstarter to commercialize the product. Their vision was to market the sauce in a 3D package shaped like its animal namesake.

The finished blown PET bottle features a snarling honey badger locked in combat with a cobra, complete with claws, fangs and ferocity that practically jump out of the resin. Along the way, the designer, mold maker, blow molder and filler had to make multiple adjustments to the preliminary 3D sketches to ensure manufacturability and fillability.





## Country Report

### Changes in Japan affect packaging industry

Japan's economy stagnated due to the prolonged appreciation of the yen, increased manufacturer's costs by soaring oil and natural resource prices, worsening European economy in 2012, and economic slowdown in China and emerging countries, which were followed by the anti-Japanese movement in China. Although manufacturers proceeded with structural reforms, such reforms were insufficient for the environmental changes, and some major consumer electronics companies plunged into the red. Such industrial sectors as iron and steel, automobile, heavy electric machinery, construction machinery and chemicals were in a tough situation across the board with an annual 3.5% decline in GDP based on the third quarter of 2012 (July-September), resulting in a recessionary phase. The Japanese packaging industry was required to address structural reforms by manufacturers.

Besides the macro economy issue, there are some new things happening in the domestic market in Japan too. According to the population estimates of the Ministry of Internal Affairs and Communications, the population of senior citizens aged 65 or older was a record 30.74 million. The percentage of the total population of Japan (127.53 million) surpassed the figures from the previous year at 24.1% (0.8 percentage point increase compared to the previous year). The population 75 years and older amounted to 15.17 million, exceeding 15 million for the first time. In addition, the national population census showed that the single-occupant households aged 65 or older accounted for 16.4% of senior citizens, which increases the need for accessible design such as user-friendliness of containers and packaging suitable for our aging society.

Bellow, some statistics about packaging industry in Japan in 2012:

#### Value

##### A) Shipment value of packaging materials and containers \ 5,645 bil. (yen)

Previous year: \5,769 bil. (yen)  
Ratio to the previous year: 97.8%

##### B) Production value of packaging machinery \ 433 bil. (yen)

Previous year: \ 427 bil. (yen)  
Ratio to the previous year: 101.2%

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**Total (A+B) \ 6, 078 bil. (yen)**

Previous year: \6,197 bil. (yen)  
Ratio to the previous year: 98.1%

#### Volume

##### 1. Shipment volume of packaging materials and containers 18.37 mil. ton

Previous year: 18.83 mil. Ton  
Ratio to the previous year: 97.6%

##### 1. Production number of packaging machinery 365,000

Previous year: 359,000  
Ratio to the previous year: 101,6%

***For more information contact Nahoko Ishizaki from International Business Dept. of Japan Packaging Institute (JPI), a WPO member [pack@jpi.or.jp](mailto:pack@jpi.or.jp).***

**Table 1 The scale of Japanese packaging industry, 2008 - 2012**

\* unit: billion yen

|                                 | 2008    | 2009    | 2010    | 2011    | 2012    |
|---------------------------------|---------|---------|---------|---------|---------|
| Value of materials & containers | 6,282.3 | 5,778.0 | 5,742.2 | 5,769.4 | 5645.3  |
| Ratio to the previous year      | 101.1%  | 92.0%   | 99.4%   | 100.5%  | 97.8%   |
| Value of packaging machinery    | 447.7   | 409.4   | 416.2   | 427.9   | 433.0   |
| Ratio to the previous year      | 94.0%   | 91.4%   | 101.7%  | 102.8%  | 101.2   |
| Total Value                     |         |         |         |         |         |
|                                 | 6,730.0 | 6,187.3 | 6,158.4 | 6,197.6 | 6,078.4 |
| Ratio to the previous year      | 100.6%  | 91.9%   | 99.5%   | 100.6%  | 98.1%   |

\* including estimation value in 2012

**Table 2 A rate in scale of the Japanese packaging industry to the nominal GDP**

\* unit: billion yen

|      | G D P (a) | Packaging Indust. (b) | (b) / (a) |
|------|-----------|-----------------------|-----------|
| 2010 | 481,773   | 6,158                 | 1.278%    |
| 2011 | 468,425   | 6,197                 | 1.323%    |
| 2012 | 475,867   | 6,078                 | 1.277%    |

**Table 3 Share of packaging materials in shipment value & volume in 2012**

| Share in shipment value |         | Share in shipment volume |         |
|-------------------------|---------|--------------------------|---------|
| Paper & paper products  | 43.3 %  | Paper & paper products   | 62.2 %  |
| Plastic products        | 28.8    | Plastic products         | 18.9    |
| Metal products          | 16.6    | Metal products           | 8.7     |
| Glass products          | 2.2     | Glass products           | 7.0     |
| Wooden products         | 2.3     | Wooden products          | 3.2     |
| Other materials         | 6.8     |                          |         |
| Total                   | 100.0 % | Total                    | 100.0 % |

**Table 4 Overview of shipment value of packaging materials and containers**

Upper column: Shipment value in 100 million yen(\)

Figures in ( ) shows composed ratio - %

Lower column: Comparison with previous year - %

|   | 2010<br>-final- | 2011<br>-final- | 2012<br>(incl. estimate) |
|---|-----------------|-----------------|--------------------------|
| Grand Total   | 57,422 (100.0)  | 57,696 (100.0)  | 56,453 (100.0)           |
|   | 99.4 %          | 100.5 %         | 97.8%                    |
| Paper & Paperboard<br>Products  | 24,255 (42.2)   | 24,530 (42.5)   | 24,469 (43.3)            |
|   | 98.5            | 101.1           | 99.8                     |
| Plastic Products  | 17,118 (29.8)   | 16,607 (28.8)   | 16,259 (28.8)            |
|   | 97.5            | 97.09           | 97.9                     |
| Metal Products  | 9,666 (16.8)    | 9,579 (16.6)    | 9,354 (16.6)             |
|   | 102.5           | 99.1            | 97.7                     |
| Glass Products  | 1,316 (2.3)     | 1,290 (2.2)     | 1,261 (2.2)              |
|   | 98.5            | 98.0            | 97.8                     |
| Wooden Products   | 1,298 (2.3)     | 1,289 (2.2)     | 1,287 (2.3)              |
|   | 99.6            | 99.4            | 99.8                     |
| Miscellaneous<br>Incl. seals, labels, tapes,<br>textile products, cellophanes | 3,670 (6.6)     | 4,398 (7.6)     | 3,820 (6.8)              |
|   | 106.8           | 116.7           | 86.9                     |

**Table 5 Overview of shipment volume of packaging materials and containers**

Upper column: Shipment volume in 1000 tons

Figures in ( ) shows composed ratio - %

Lower column: Comparison with previous year - %

|                                | 2010<br>- final - | 2011<br>- final - | 2012<br>(incl. estimate) |
|--------------------------------|-------------------|-------------------|--------------------------|
| Grand Total                    | 18,889 (100.0)    | 18,833 (100.0)    | 18,377 (100.0)           |
|                                | 103.3 %           | 99.7 %            | 97.6 %                   |
| Paper & Paperboard<br>Products | 11,635 (61.6)     | 11,742 (62.4)     | 11,429 (62.2)            |
|                                | 105.5             | 100.9             | 97.3                     |
| Plastic Products               | 3,636 (19.2)      | 3,530 (18.7)      | 3,467 (18.9)             |
|                                | 99.5              | 97.1              | 98.2                     |
| Metal Products                 | 1,662 (8.8)       | 1,627 (8.6)       | 1,599 (8.7)              |
|                                | 99.1              | 97.9              | 98.3                     |
| Glass Products                 | 1,359 (7.2)       | 1,335 (7.1)       | 1,285 (7.0)              |
|                                | 100.9             | 98.2              | 96.3                     |
| Wooden Products                | 597 (3.2)         | 597 (3.2)         | 596 (3.2)                |
|                                | 102.3             | 100.1             | 99.8                     |

**Table 6 Overview of production number and value of packaging machinery**

Production value in 100 million yen(\)  
( ) ; Comparison with previous year %

|   | 2010 -final-       |                  | 2011 -final-      |                  | 2012 (incl. estim.) |                  |
|---|--------------------|------------------|-------------------|------------------|---------------------|------------------|
|   | Number             | Value            | Number            | Value            | Number              | Value            |
| Grand Total                                     | 364,967<br>(101.6) | 4,162<br>(101.7) | 359,825<br>(98.6) | 4,279<br>(102.8) | 365,662<br>(101.6)  | 4,330<br>(101.2) |
| 1. Packaging & packing machinesTotal            | 363,637<br>(101.6) | 3,802<br>(101.5) | 358,411<br>(98.6) | 3,831<br>(100.8) | 364,251<br>(101.6)  | 3,857<br>(100.7) |
| Unit & inner packaging machine Sub-Total        | 274,022<br>(101.9) | 3,092<br>(102.5) | 273,823<br>(99.9) | 3,143<br>(101.7) | 274,024<br>(100.1)  | 3,162<br>(100.6) |
| -Scaling machines                               | 3,360              | 193              | 3,601             | 190              | 3,707               | 191              |
| -Filling machines                               | 3,715              | 378              | 3,677             | 371              | 3,659               | 363              |
| -Bottling machines                              | 3,355              | 460              | 3,873             | 525              | 4,087               | 588              |
| -Canning machines                               | 131                | 18               | 133               | 17               | 141                 | 19               |
| -Pouch form/filling machines                    | 5,626              | 574              | 5,839             | 586              | 5,684               | 592              |
| -Container form/filling machines                | 337                | 174              | 296               | 185              | 283                 | 158              |
| -Labeling machines                              | 161,550            | 124              | 161,794           | 124              | 165,212             | 127              |
| -Cartoning machines                             | 362                | 88               | 369               | 83               | 375                 | 92               |
| -Over wrapping machines                         | 16,530             | 163              | 17,874            | 160              | 17,683              | 165              |
| -Sealing machines                               | 46,628             | 172              | 43,978            | 148              | 42,150              | 148              |
| -Shrink packaging machines                      | 2,699              | 100              | 2,631             | 96               | 2,860               | 98               |
| -Vacuum packaging machines                      | 6,220              | 93               | 5,801             | 86               | 5,851               | 88               |
| -Others   | 23,509             | 556              | 23,957            | 565              | 22,332              | 527              |
| Outer packaging & packing machines Sub- total   | 89,615<br>(100.4)  | 710<br>(97.8)    | 84,588<br>(94.4)  | 688<br>(97.0)    | 90,227<br>(106.7)   | 695<br>(101.0)   |
| -Case landing machines                          | 519                | 117              | 513               | 120              | 519                 | 140              |
| -Case gluing machines                           | 159                | 9                | 139               | 8                | 140                 | 8                |
| -Taping machines                                | 2,763              | 18               | 2,410             | 18               | 2,598               | 19               |
| -Strapping machines                             | 64,488             | 101              | 60,556            | 101              | 62,377              | 108              |
| -Typing machines                                | 2,922              | 66               | 2,968             | 62               | 2,894               | 60               |
| -Boxers   | 5,704              | 5                | 5,744             | 5                | 5,934               | 6                |
| -Uncasers                                       | 14                 | 3                | 11                | 2                | 20                  | 4                |
| -Others   | 13,046             | 391              | 12,247            | 370              | 15,745              | 347              |
| 2. Bag-making machines Total                    | 1,043<br>(100.7)   | 219<br>(95.7)    | 1,097<br>(105.2)  | 256<br>(116.8)   | 1,108<br>(101.0)    | 274<br>(107.2)   |
| 3. Paper & paperboard converting machines Total | 287<br>(107.5)     | 141<br>(115.1)   | 317<br>(110.5)    | 191<br>(136.0)   | 303<br>(95.6)       | 198<br>(103.4)   |

## WorldStar Awards



The entries for WPO's WorldStar Competition closes on September 27. The judging process for this award will take place on 7 November, in Barcelona (Spain), during WPO's second Board Meeting of the year. WorldStar Awards ceremony is scheduled for 13 May 2014, during Interpack in Düsseldorf, Germany.

It's worth remembering that in its 45th year, WorldStar is considered one of the major events of WPO and the most important global packaging award. For further details contact [Rachel.brooks@iom3.org](mailto:Rachel.brooks@iom3.org) or go to [www.worldstar.org](http://www.worldstar.org).

The entries for **WorldStar Student Awards 2013-14 also end on September 30**. This is an international packaging design competition for students from countries around the world to develop projects in the field of packaging design. For the second year, this WPO's competition is being hosted by IoPP, WPO member from USA. More information by e-mail [dgriffin@iopp.org](mailto:dgriffin@iopp.org).

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## Comments from the General Secretary

### A year full of activities!

*Keith Pearson\**



This time of the year is normally very busy for **WPO** and for many of its members. There are packaging exhibitions, packaging training programs and packaging competitions all coming together over this period.

Entries have been called for by IOM3 for the WorldStar Competition which the closing date was 27 September 2013. Judging will take place during the **WPO** meetings in Barcelona and the resultant WorldStar Awards Presentation will take place on 13 May 2014 in Dusseldorf. The WorldStar Competition is the main revenue source for **WPO** and its success is an important component in financing our global packaging training programmes. **WPO** members are encouraged to support the WorldStar Awards by submitting winning entries from their national and regional competitions.

The Institute of Packaging Professionals (IoPP), from USA, has also called for entries for the Worldstar Student Awards; the closing date for this competition was 30 September 2013. The winners will be invited to attend a packaging jamboree in the USA during the first quarter of 2014.

The **WPO** Working Groups are moving forward on the decisions taken at the Sydney board meeting. The Marketing Group, for example, led by Luciana Pellegrino, is working on producing a video highlighting the WorldStar Competition and its importance in developing the art and science of packaging. Further, the video will show the tremendous strides that have been taken in the evolution of packages that are becoming more and more sustainable. In addition, the Marketing Group is putting together a review of the scope and costs to producing Global Statistics report.

A great deal of activity is taking place through the Education Working Group led by Gordon Stewart, from IOM3 (UK). Also IoPP USA is partnering with the Institute of Packaging Professionals Kenya in undertaking an online packaging training course. The APO (African Packaging Organization) and the AIP (Australian Institute of Packaging) are organizing and managing, respectively, a WPO sponsored residential packaging training programme in Lagos, Nigeria. The course run from 19-22 September and was arranged by the Institute of Packaging Nigeria. In our point of view that is a truly cooperation!



**WPO** is also supporting a one day packaging conference arranged by Montgomery West Africa in partnership with the Institute of Packaging Nigeria. The conference provided opportunities for senior packaging professionals to network and share best practises in relationship to challenges facing their industry. In addition, **WPO**, the Institute of Packaging Professionals Kenya and the Kenya Bureau of Standards are sponsoring and working together to run a packaging training course in Nairobi, on the 28 October.

**WPO** is initiating and sponsoring the Residential Packaging Training Course run by the IIP (Indian Institute of Packaging). The course is a product of IIP and IoPP USA and runs from 21 October to 1 November 2013 on the IIP campus in Mumbai. The call has gone out for **WPO** members to register participants. The facilities at the IIP campus have recently gone through a major upgrade and are world class. **WPO** and IIP have been involved in Residential Training in Mumbai for a number of years and have received positive feedback from the students. **WPO** members are requested to submit the names of their participants as soon as possible.

Plans are well on the way for the **WPO** meetings to be held in Barcelona during 4-8 November 2013. Graphispack Asociasion, the **WPO** Spanish member, has made arrangements for our members to reserve their accommodation at the Hotel Alexandra. Registration forms have been distributed to the **WPO** members. All our meetings will take place at this hotel. The cultural and landscape richness of Barcelona will certainly ensure the enjoyment of the event for all the board, members and executives. Due to the central location of Barcelona it is anticipated that the **WPO** meetings will be well attended.

It is with a sense of delight that we all remember the good organisation and fine hospitality offered by the Australian Institute of Packaging during the **WPO** meetings in Sydney earlier this year. We are delighted to congratulate AIP on celebrating their 50th anniversary. They have proved their value to the Australian packaging industry and we wish them every success as their celebrations culminate in functions hold on the 12 September in Melbourne.

The Marketing Working Group and the Kellen Company are to be congratulated on achieving excellence in launching the new **WPO** website during May 2013. The website is very informative and goes a good way towards making **WPO** a global reference on packaging. As is always the case with these things, the website is viewed as a work in progress. **WPO** members are requested to assist in making the site dynamic and up to date and are requested to liaise with Pierre Pienaar on all website updates. Pierre has been very much involved in the website update together with the staff at Kellen Company and for this we are most grateful.

*\* Keith Pearson is General Secretary of WPO ([glacier@tiscali.co.za](mailto:glacier@tiscali.co.za)).*

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## Techical Article

### The discussion of xenohormones in packaging

*Dr. Christian Kirchnawy\**

Food packaging made of plastics, paper or coated metal may contain hormonally active substances or xenohormones, e.g. plasticisers, antioxidants and stabilisers, which may migrate from the packaging into the food. These xenohormones are suspected to affect the human hormonal system. Because of their similar structures, they imitate the effects of natural hormones and may thus induce hormone-controlled effects in the organism.

In the context of a project, OFI, WPO member from Austria, developed biological and chemical methods to characterise the xenohormonal activity of food-contact materials. This included tests on various packaging materials that are currently being used. The results obtained by validated yeast testing systems and bio-assays with human cells permitted reliable conclusions regarding the hormonal activity of packaging materials.

In order to exclude any contamination by hormonally active food ingredients, e.g. from milk, only empty packaging was tested. In approximately 10% of the test specimens, hormonally active substances were found, even though their activity was very small in the majority of cases (less than 5 ng of 17 $\beta$ -oestradiol equivalent per litre; oestradiol = female sex hormone). However, individual specimens had considerably higher xenohormone contents.

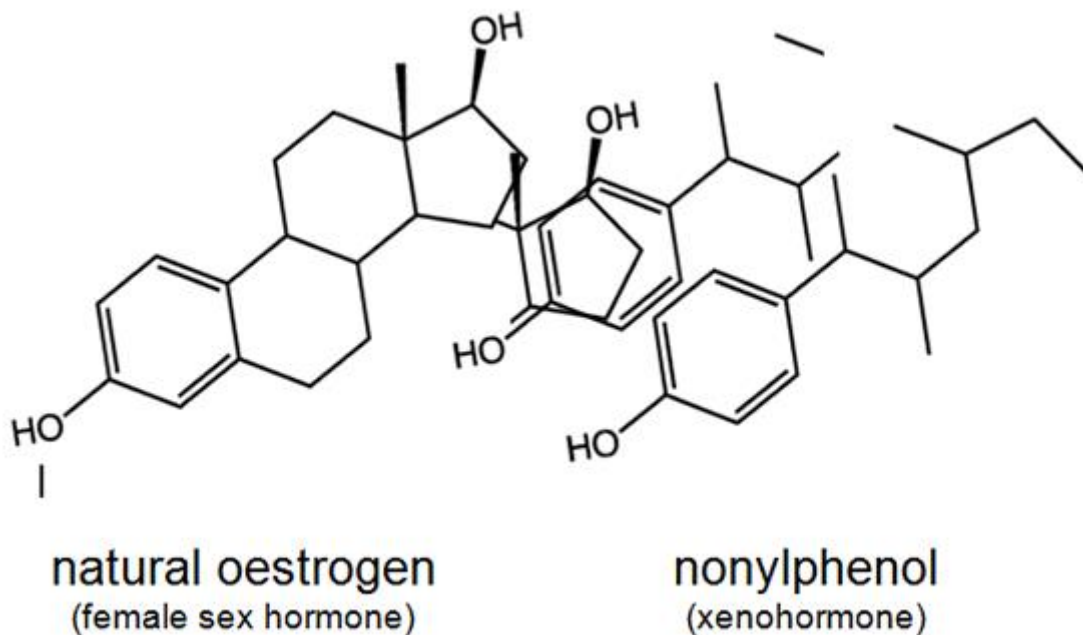
In addition to the detection of biological activity, chromatographic methods were used to identify the hormonally active substances involved. This enables packaging manufacturers to test their products for xenohormones and, by applying

appropriate measures, to produce food packaging that is free of xenohormones.

Apart from much-discussed bisphenol A, in a number of specimens that contained xenohormones, other hormonally active substances were found as well, which so far have hardly been in the focus: for instance, metabolites of antioxidants and styrene dimers, which may form in the context of polystyrene production.

In its current Xenofree project, OFI is carrying out tests at every production stage of specimens with high xenohormone contents in order to define the migration processes of xenohormones into the packaging, and to be able to find effective prevention measures.

At present, the European legislation on food-contact materials is being reviewed, and consequently, xenohormone testing may play an increasingly important role in the future. While the focus has so far been on pesticides and biocides, a recent report by the European Parliament advocates stricter regulations for materials and products that come into contact with foodstuff, aimed at reducing human exposure to hormonally active substances. Independent of legislative obligations that might be forthcoming, commercial manufacturers have shown interest in methods that ensure xenohormone-free packaging, and access to safe food for consumers.



**\* Dr. Christian Kirchnawy studied biotechnology at the university of Vienna and works at the OFI (Austrian Research Institute of Chemistry and Technology), a WPO member. He leads the xenohormones project, run as an cooperation between the pharmacy and packaging department at OFI. More information visit [www.ofi.at](http://www.ofi.at).**

## Special Articles

### Greetings on the 50th Anniversary of JPI

*Motoki Ozaki\**



This year marks the 50th anniversary of the Japan Packaging Institute (JPI). Looking back on its long history of half a century, I am overwhelmed by a deep sense of appreciation for the large number of people who have worked so selflessly for the development of Japan's packaging industry and packaging technology. The present status of JPI owes solely to the devotion and support of these predecessors and the present members of JPI as well. I would like to express my heartfelt thanks to you all for your support and cooperation.

JPI was established in 1963, when it started its activities as an incorporated association approved by the then Ministry of International Trade and Industry (current Ministry of Economy, Trade and Industry). The basic

policy of JPI throughout the past 50 years has been: "Contributing to the development of Japan's economy by promoting the streamlining of production, distribution and consumption through the enhancement of packaging technology."

During this period, the Japanese economy initially underwent a high-growth and subsequent stable-growth phase and eventually attained the status of the world's second largest economy in GDP. Helped by the dizzying advances in technology, Japan's packaging industry achieved a top-level ranking in the world in the amount of production and technological competence. In 1991, the total amount of packaging shipments including the packaging materials, packaging containers, and packaging machinery surpassed 8 trillion yen (about US\$ 80 billion).

Yet, with the burst of the bubble economy, the packaging industry, too, had headed down for a low-growth period, and since then Japan's packaging industry has by and large remained a 6-trillion-yen (US\$ 60 billion) industry. The past 20 years or so, however, have been a period which saw the emergence of global environmental problems, the advent of IT and other revolutionary technologies, and pronounced changes in life style, and along with them people's awareness and attitude toward packaging has also changed drastically.

Today Japan is tackling the major challenge of reconstruction from the Great East Japan Earthquake. The packaging industry, on its part, is initiating its new challenges to realize packaging which is better harmonized with society. Toward the establishment of sustainable human society, it is now the responsibility and urgent task of social and corporate enterprises to develop advanced technologies conducive to securing food safety, realizing a low-carbon society, and reconstructing energy and environmental measures.

Thus, JPI is now in the year of the 50th anniversary amid the great waves of changes. Today the institute has 1,200 member corporations and exerts significant influence not only inside Japan but throughout the world. In 2011, the institute was approved as a public interest association by the Cabinet Office. Therefore, we are now starting operations as a newly designated Japan Packaging Institute for public interest.

At this juncture of the 50th anniversary, the institute is reaffirming its determination to carry out its basic policies of pursuing ideal packaging, developing human resources for the next generation of packaging, and promoting international cooperation in packaging. At the same time, we must open up new frontiers by mobilizing all the wisdom of people involved and structure a richer human society by energizing packaging industry and improving packaging. Finally, let me thank you again and request your continued support and cooperation for the further development of JPI.

*\*Motoki Ozaki is the President of Japan Packaging Institute. For more information visit [www.jpi.or.jp](http://www.jpi.or.jp).*

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