



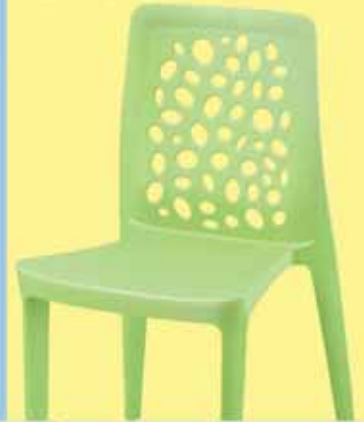
aura



MAX DINING TABLE WITH LUXURY CHAIRS



ENJOY



Exclusive range of moulded furniture made from virgin polymers by Uma Plastics Ltd

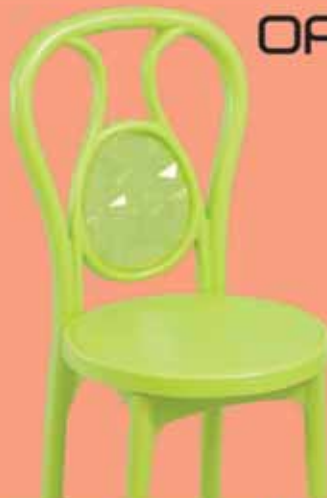
For Trade Enquiries, Please Contact : 1800 123 0080
Website : www.swagath.co

Swagath

PLUSH



OPAL



ADORE



 **PROPEL**
100% TRUST. 100% VALUE.
A range of world-class petrochemicals

For Polymer Products :
PP, HDPE, LLDPE manufactured by
Indian Oil Corporation Limited

Please Contact: Del Credere Associate cum Consignment Stockist

Uma Plastics Limited
An ISO 9001:2008 & ISO 14001:2004 Certified Company

Regd. Office: 14 B, Camac Street, Kol - 700 017, India
Phone: +91-33-22810775 / 6967 Fax: +91-33-22813961
Mobile: +91-9830142233 E-mail: polymers@umagroup.in

Start your Business with the Best!



"Best Free Zone in the Middle East"
Global Banking and Finance Review – 2014



"Best Free Trade Zone in the GCC"
International Finance Magazine – 2014

BUSINESS ADVANTAGES



EASE OF DOING
BUSINESS



STRATEGIC
LOCATION



LOW COST OF
BUSINESS SETUP
SOLUTIONS



BUSINESS
FACILITATION

BUSINESS OPTIONS



FREE ZONE



NON
FREE ZONE

BUSINESS SETUP SOLUTIONS



COMPANY
FORMATION



INDUSTRIAL
LAND



WAREHOUSES



EXECUTIVE
OFFICES



STANDARD
OFFICES



FLEXI
FACILITIES



Government of Ras Al Khaimah
RAK Investment Authority

...where business happens
www.rak-ia.com

PLASTICS INDIA

A journal for the growth and development of plastics trade & industry

President

Pradip Nayyar

Vice President

Ramesh Kr. Rateria

Hony. Secretary

Ashok Jajodia

Hony. Joint Secretary

Sisir Jalan

Hony. Treasurer

Banwari Lal Tak

EDITORIAL BOARD

Manish Kr. Bhaia – *Editor*

Ashok Jajodia – *Co-Editor*

Ashish Agarwal – *Member*

P. K. Ghosh – *Member*

Raj Somani – *Member*

Vineet Nemani – *Member*

Owner Indian Plastics Federation, Printer and Publisher Sri Ashok Jajodia, Published from 8B, Royd Street, 1st Floor, Kolkata 700 016 and Printed from **CDC Printers (P) Ltd.**, Plot No. 5,6,16 & 17, Tangra Industrial Estate - II, 45, Radha Nath Chowdhury Road, Kolkata - 700 015.

Phone : 2329 8856-57, Fax : 2329 8858

E-mail : cdc@cdcpinters.com

Editor : Manish Kr Bhaia

Published by :

INDIAN PLASTICS FEDERATION

8B, Royd Street, 1st Floor

Kolkata - 700 016 (INDIA),

Phone: 2217 5699 / 5700 / 6004

Telefax : 91-33-2217 6005

Email : office@ipfindia.org

- The opinions expressed by the authors do not necessarily reflect or are in agreement with the views of the Federation.
- The Federation does not accept responsibility for the correctness of news, commercial intelligence and statistics given, although every care has been taken to verify them from authentic sources. Users of same should, in their own interest, consult legal authorities and financial channels before dealing any transaction.
- All rights reserved. Reproduction without the permission of the Editor is prohibited.

Dear Friends,

Technology affects almost every aspect of our lives. Just look around you and you'll see how wired we are. Thanks to the Internet, virtually anything you desire can be delivered to your door in a matter of days. Personal information is more accessible over the Internet as well -- you can look up everything from a long-lost cousin to the registered crime offenders in your neighbourhood.

You can even trade stocks or file taxes online. Parents don't need to lose sleep waiting for their teenage daughter to come home — they can just call her cell phone, or send an unobtrusive text, to check up.



But as much as our personal lives have changed, the business world has revolutionized almost beyond recognition in the past few decades. Technology - and we mean the advances in communication and information technology - has changed the face and the pace of business.

As communication and information travels faster and faster, the world seems smaller and smaller, and this has large implications for the way we conduct business.

Storing important in files on a computer rather than in drawers, for instance, has made information easily accessible. The world of work has changed profoundly in the last 30 years and it will continue to change over the next 30.

Augmented reality will become much more significant as network bandwidth increases. We are already seeing experiments with hologram-like technology in the entertainment business and this will spread into office life, allowing us to send replicas of ourselves into virtual business meetings.

Equally, we will consume information on the move in this way through wearable displays which will push connectedness to a new level, hyper-tasking our way to a new reality.

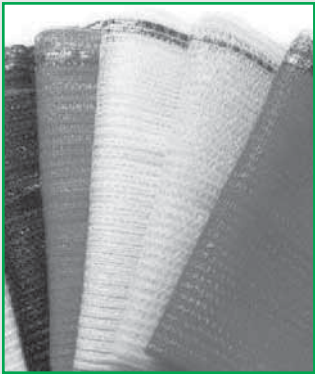
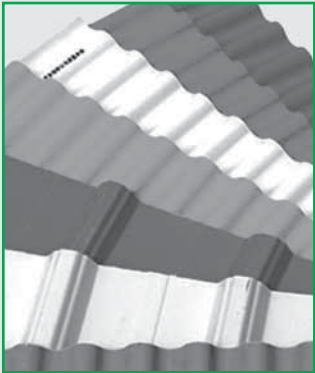
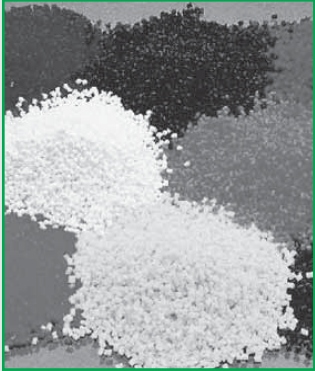
Technology will enable to you to work really effectively with people anywhere in the world, as if you are virtually in the room with them, presenting immense opportunity for collaboration and new market development. This will take mobile working to a different place altogether. Technologies that are in development now and over the next 30 years will become commercial products and part of accepted human behaviour. **With this, I hope in the time to come, we keep pace with time and launch an E-IPF monthly magazine.**

Happy reading!

Warm Regards,

Manish Kr. Bhaia
Editor

INDEX



3 Editorial

5 Presidential Address

6 From The Desk of Hony. Secretary

7 News & Articles

13 Glimpses

23 Management Mantra

24 IPF Circular

PRESIDENTIAL ADDRESS

PRESIDENTIAL ADDRESS



Dear Friends,

On 3rd July 2015 the undersigned had been to Bhubaneswar to participate in an Entrepreneur Meet for promotion of Petroleum, Chemicals & Petrochemicals Investment Region at Paradeep. The President presented a paper on the theme “Exploring the market dynamics of petroleum products and plastics” that was well received by the gathering. With the objective to promote investment both domestic and foreign, in Petroleum, Chemicals and Petrochemicals segment, Dept of Chemicals & Petrochemicals, Govt of India has formulated a policy to set up Petroleum, Chemicals and Petrochemicals Investment Regions (PCPIRs). The PCPIRs would reap the benefits of co-siting, networking and greater efficiency through the use of common infrastructure and support services. The Paradeep Petroleum, Chemicals and Petrochemical Investment Region (PCPIR) is one of the PCPIRs approved by Govt of India under the PCPIR Policy of the GoI. Each PCPIR is supported by an Anchor Unit which provides feedstock support to the downstream industries in the value chain. Indian Oil Corporation Limited (IOCL) is the Anchor Tenant for Paradeep PCPIR.

At the invitation of IPF Shri Hansraj Gangaram Ahir, Hon’ble Union Minister of State for Chemicals & Fertilisers, Government of India, interacted with IPF members on 6th July 2015 at the Golden Parkk, Kolkata. Dr. S. K. Nayak, Director General – Central Institute of Plastics Engineering & Technology and Shri Debasish Bhattacharjee, Senior Manager (Projects), CIPET Haldia were also present during the interactive session. During the interaction the undersigned pointed out some practical problems being faced by members as given below:

1. The domestic consumption of PVC is 24 lakh tons per annum. The domestic manufacture of PVC is only 12 lakh tons per annum. The balance 12 lakh tons has, therefore, to be imported to meet domestic needs. It is unfortunate to note that though this import is need based arising out of shortage in production capacity in India, anti-dumping duty is charged on the same. PVC is used to manufacture consumer durables for the common man. This anti-dumping duty is therefore passed on to the common man making products made out of PVC more expensive. He requested the Union government to abolish this anti-dumping duty on PVC.
2. He also pointed out the difference in duty of imported granules vis-à-vis finished products. Manufacturers complain that the duty on imported granules is less than the finished products made out of the same granules. This makes the manufacture of such products uncompetitive for local manufacturers. This also goes against the much publicized ‘Make in India’ policy of our government. He requested the Hon’ble Minister to maintain parity in duty on raw materials and finished products made of the same raw material.

The Minister requested the Federation to provide him with all the details so that he can look into the matter.

The Hon’ble Minister further stated that with the coming up of two major petrochemicals complexes in eastern India viz. Brahmaputra Cracker & Petroleum Ltd in Assam and Indian Oil Corp Ltd. plant at Paradeep, the Federation must work for the upliftment of the plastics industry in eastern India.

At the invitation of CIPET Haldia, the undersigned participated in the foundation stone laying ceremony of CIPET Haldia new hostel complex on 6th July 2015. The Hon’ble Minister Shri Hansraj Gangaram Ahir laid the foundation stone. Many senior officials of the government were present in the function.

The minister also showed great enthusiasm in Indplas’ 15 being organised by IPF from November 27-30, 2015. Shri Ashok Jajodia, Chairman – Exhibition Organising Committee is doing commendable work to put up a great show and I request all members not to miss this mega-show. I can assure members that this exhibition will be one of the best organised by IPF.

With best wishes,

Pradip Nayyar
President

From the Desk of Hony. Secretary



Dear Members,

The Eastern and North - Eastern region in India will see speedy growth in Plastic sector in coming years, due to commissioning of two New Petrochemical plants namely Brahamaputra Cracker in Assam and Indian Oil at Paradip in Odisha. Brahamaputra production is expected to start in near future. A road show was organized by Indian Oil Corporation Ltd at Bhubaneswar on 3rd July 2015 where IPF Office Bearers and other members participated. The IOC Paradip plant will produce 700000 MT of PP and plant is supposed to start commercial production by 2018. A poly park is also being developed by the Odisha Govt near the IOC site at Paradip. We expect large investments in Plastic sector in near future in these states including West Bengal.

The Executive Committee at its last meeting has nominated Shri K. K. Seksaria, Past President of IPF for the post of President, Plastindia Foundation for the term 2015-18. We are hopeful that our nominee will be elected to the PIF Chair with whole hearted support from other founder members.

Plastindia Foundation has re-constituted its Plastindia International University Managing Committee. On behalf of IPF Shri J. C. Agarwal, a Past President of IPF will be our nominee in the Managing Committee and our present President Shri Pradip Nayyar will be a Special Invitee.

An interactive session was organised by IPF with Shri Hansraj Gangaram Ahir, Hon'ble Union Minister of State (C & F), GoI at the Golden Parkk, Kolkata. The Federation members got an opportunity to interact with the Hon'ble Minister and share their views with him. The interactive session was a great success. The meeting was initiated and possible with the help of our active member Mr. Ashish Agarwal. Full report and photograph of the meet is given in inside pages.

Indplas' 15 is just four months away and preparation for the grand event is going on in war footing. The entire EOC team and convenors are working hard to make it a grand success. We have sold/have commitment of around 75% of our saleable area of 6000 sq mtr. We are confident that we shall be able to sell our entire area in the exhibition. This edition of Indplas'2015 will witness largest machine participants with live demo machines. This will definitely encourage people to invest in Plastic industry.

It has been decided to have a Theme Pavilion in Indplas' 15 exhibition covering an area of 150 sq. m. Views and guidance of primary producers and CIPET and ICPE will be taken in selecting an appropriate topic for the Theme Pavilion.

I had requested IPF members to come forward and participate in the exhibition and showcase their products to the world. We have not received much response from our finished product manufacturers. I once again request you all to extend your full support to Indplas' 15 and confirm your participation without any further delay.

With best wishes

A handwritten signature in black ink, reading "Ashok Jajodia".

Ashok Jajodia
Hony. Secretary

STATE OF THE ART RECYCLING SOLUTION FOR ROOFING AND TUBES

A €1.2 mln investment in an upgraded recycling facility to handle PVC production left-overs paid for itself in 18 months at Protan Group, the Norway-based manufacturer of roofing foils and ventilation tubes for tunnels and mines. The investment, in equipment from German size-reduction technology specialist Pallmann, came through cost savings and increased capacity. Protan is now running a state-of-the-art, tailor-made three-in-one recycling installation for grinding, agglomerating and pulverising.

The company, which has an annual turnover of one billion Norwegian Crowns (€110 million), is one of the world's largest manufacturers and suppliers of innovative roofs, membranes, technical textiles and ventilation systems. Every year, hundreds of kilometres of its ventilation pipes are installed in mines and tunnels around the globe - mainly in Europe, Africa and South America. Protan wins most of its work - some 65% - from above-ground applications, such as the fabrication of foils for roofs on office and industrial buildings located in some of the most

challenging climates in the world. Over the past 40 years, Protan's coverings have been installed on roofs in conditions as diverse as the African desert and the tundra on the Spitzbergen archipelago in the Arctic Ocean.

It is in its roofing products that Protan uses most of its recycled materials. On average, it incorporates 6% recyclate in its production process, most of which is sourced in-house. Owing to their complexity, it is difficult to dispose of or use these materials in other applications; however, the materials are of high value, making internal reuse worthwhile.

Protan started recycling two decades ago and Pallmann's engineers have been involved from the earliest pioneering stage. The size-reduction technology major installed a reconditioned PFV agglomerator in Protan's plant in 2000. Over the years, this solution has become outdated, according to Lillemoen. 'It became increasingly unsuitable for the products and recipes we were working with, and its capacity was no longer sufficient,' he explains. 'On top of that, new products required new particle sizes, which could not be produced with the old technology.'

Pallmann ran an extensive test programme in Germany: existing material mixtures and new recipes

and material compositions were all tried out before implementation. Grinding, agglomeration and pulverising tests were done at Pallmann's large test centre at Zweibrücken, while the end products were tested on Protan's production lines in Norway. In the new facility, grinding is undertaken by Pallmann's knife mill-type PS 4-7,5; agglomeration is carried out in a Plast agglomerator PFV 250; and a PolyGrinder PM 300 unit takes care of the pulverising. The machines are connected via conveying units, silos and collection units. Pallmann supplied and commissioned the entire package of components.

Source : Plastics News

NEW BIODEGRADABLE PLASTIC FROM AVOCADO PIT

A student from the Technological and Superior Studies Institute of Mexico (ITESM), Scott Mungía, developed a new way of producing plastic from the avocado pit, as per latintimes.com. The feedstock requirement will not impact demand-supply balance of potential food sources like corn and potatoes. The Mexican industry discards about 30,000 tons (MT) of seeds a month.

'In fact it's a bio-plastic which biodegrades much faster than regular ones which come from

hydrocarbons like petroleum or natural gas,” the National Council of Science and Technology (Conacyt) said in a statement. “This material has two main characteristics, it’s obtained from vegetable sources and it is biodegradable, but it acts like any other type of plastic,” Mungía pointed out about his now patented material, adding that this bio-plastic biodegrades in approximately 240 days, depending on the microbial content of the air where it is thrown out. Global Polyolefins and Plastics has projected a yearly raise of 15% in their profits until 2020 in Mexico. The number represents almost 11 tons in their production capacity, which is why a bio-plastic derived from the avocado seed is such an important development. Currently, Bio-face is in negotiations with Mexican supermarkets looking to use resin in their bags and fertilizer companies interested in using the product in their plastic packaging. “For the moment, we’re only looking for sales in Mexico. The company is really young and we are looking for stability to be able to grow.”

Source : Popular Plastics & Packaging

BANNING PLASTIC PACKAGING TO HAVE ADVERSE IMPACT ON SEVERAL INDUSTRIES: FICCI

Banning plastic packaging would adversely impact the growth of

several industries such as FMCG, food processing, etc, and is likely to raise the cost of products (especially low-cost) by manifold, according to a new study - titled ‘Why Banning Plastics Packaging is Not a Viable Option’ – released by The Federation of Indian Chambers of Commerce and Industry (FICCI) and Strategy& (the management consulting arm of PricewaterhouseCoopers) on May 6, 2015.

“While appreciating the concerns related to environment it needs to be noted that restrictions or ban on plastics packaging would impact the growth of several industries like FMCG, food processing, plastics packaging and allied industries. It could further adversely impact consumers in terms of cost, health and safety,” said Dr A Didar Singh, secretary general, FICCI.

The report comes out as the National Green Tribunal meets today for a hearing on plastic packaging ban.

FICCI has conducted this study to analyse the impact of a possible ban and the findings show that this could lead to unwarranted consequences particularly on low priced products (Rs 5) as the cost to manufacture and distribute these products could rise multi fold. Further this study revealed that plastics industry sales & employment, agriculture sector and farmers could also be impacted.

The study highlights that plastics are the material of choice in packaging products across categories globally. In India, an overwhelming majority of the FMCG products are packaged

in plastic – in fact, 90 percent of biscuits, dried processed food items, hair care products, dairy products, laundry products and baked goods sold in India in 2014 were packaged in plastic.

Plastic has been the preferred material for packaging (relative to alternatives such as glass, paper, metals etc) globally as well as in India due to three critical benefits - superior food safety, quality and shelf life; lower environmental impact across the product lifecycle; and better versatility to create more innovative and consumer friendly packaging options.

The study estimates that a ban on plastic packaging will directly impact plastic industry sales of Rs 53,000 crores. Additionally, about 13 lakh personnel across 10,000 firms (mostly SMEs) engaged in plastic packaging for FMCG will need to find alternative employment. “The indirect impact based on multiplier effect will be ever larger - 2 to 2.5x the direct impact on sales and 3-5x on employment levels,” said the FICCI press release.

Further, it is deduced the ban might forfeit the purpose of intention behind it. As alternatives, in general, have lower product to package ratio, resulting in the use of higher quantities of raw materials. They also require higher energy and water during manufacturing.

“It is recommended that the prudent way forward is not an outright ban on plastic packaging but rather finding solutions to the problem of plastic waste management,” added

the release.

The study estimates that reuse rates in India are about 70% for PET-plastic, and lower for non-PET plastic. The low rate of reuse is despite the existence of technologies that have been tested in India – such as polymer blending in bitumen roads and co-processing in cement kilns - that can help India solve its plastic conundrum in its entirety.

The report explores the root causes for the low rates of re-use, and recommends a four-pronged approach that various stakeholders including the government and industry should undertake to improve the segregation, collection, recycling and re-use of plastic waste.

Source : Business Standard

GLOBAL GREEN PACKAGING MARKET TO REACH \$ 203 BN BY 2021

Increasing health awareness among consumers is anticipated to drive the global green packaging market to reach \$ 203.15 billion by 2021 from \$ 132.47 billion in 2014, growing at a CAGR of 6.2% from 2015 to 2021, according to a Transparency Market Research (TAM) report.

The green packaging market can be bifurcated into: recycled content packaging, reusable packaging and degradable packaging. The various categories of recycled content

packaging are paper packaging, plastic packaging, metal packaging, glass packaging and others. The reusable packaging is segmented into drums, plastic container and others.

Currently, consumers are becoming more conscious about their health. Toxic materials used in packaging, especially food packaging is hazardous to consumer's health. "In addition, consumer preference towards healthy and biodegradable packaging is one of the key driving factors responsible for the growth of green packaging market due to its health benefits," said TAM in a press release.

Moreover, increasing environmental concern is also boosting the demand of green packaging globally. With increase in the environmental concern, consumers are shifting towards green packaging as they cause less environmental pollution such as land pollution, landfills and water pollution. In addition, the dearth of natural resources is also contributing to the growing demand for green packaging. As the natural resources are getting exhausted the packaging material manufacturers are leaning towards green packaging as they can be easily recycled.

Among the different packaging segments, food and beverage segment accounts for the highest market share, ie 59.7 percent in overall green packaging market. Being the largest market, growth rate of Canada and Japan is sluggish, since the market penetration of green packaging market is the

highest and the market is matured. Developing countries such as India, China, Germany, Russia and Brazil are the fast growing markets for green packaging and the demand is expected to be high in the coming years. "Large food and beverage industry, rising disposable income and growing awareness about green products are the major factors fuelling the demand for green packaging in these regions," added TAM press release.

Source : Popular Plastics & Packaging

NEW METHOD PRODUCES MORE PLA WITH LESS WASTE AND WITHOUT USE OF METALS

Though gaining popularity, PLA is not yet a full alternative for petroleum-based plastics due to its cost. The production process for PLA is expensive because of the intermediary steps. "First, lactic acid is fed into a reactor and converted into a type of pre-plastic under high temperature and in a vacuum", Professor Bert Sels explains. "This is an expensive process. The pre-plastic - a low-quality plastic - is then broken down into building blocks for PLA. In other words, you are first producing an inferior plastic before you end up with a high-quality plastic. And even though PLA is considered a green plastic, the various intermediary

steps in the production process still require metals and produce waste."

Researchers from the KU Leuven Centre for Surface Chemistry and Catalysis now present a way to make the PLA production process more simple and waste-free. Their findings were published in Science. "We have applied a petrochemical concept to biomass", says postdoctoral researcher Michiel Dusselier. "We speed up and guide the chemical process in the reactor with a zeolite as a catalyst. Zeolites are porous minerals. By selecting a specific type on the basis of its pore shape, we were able to convert lactic acid directly into the building blocks for PLA without making the larger by-products that do not fit into the zeolite pores. Our new method has several advantages compared to the traditional technique: we produce more PLA with less waste and without using metals. In addition, the production process is cheaper, because we can skip a step".

Professor Sels is confident that the new technology will soon take hold. "The KU Leuven patent on our discovery was recently sold to a chemical company that intends to apply the production process on an industrial scale. Of course, PLA will never fully replace petroleum-based plastics. For one thing, some objects, such as toilet drain pipes, are not meant to be biodegradable. And it is not our intention to promote disposable plastic. But products made of PLA can now

become cheaper and greener. Our method is a great example of how the chemical industry and biotechnology can join forces".

Source : Plastics News

RPA ISSUES GUIDELINES AND BEST PRACTICES TO STRENGTHEN SAFETY OF RETURNABLE CONTAINERS IN FOOD SUPPLY CHAINS

The Reusable Packaging Association (RPA) has issued comprehensive and science-based protocols to help ensure the continued safe use of reusable plastic containers (RPCs) for fresh and perishable products in the supply chain. The guidelines encompass the washing, handling, storing, packing, displaying, and collecting of RPCs in the supply chain. They also include rigorous and defined Hazard Analysis & Critical Control Points (HACCP), and hourly, daily, monthly, and quarterly microbiological testing.

There has never been a documented food safety issue associated with RPCs. In order to maintain this stellar record, the RPA established a Food Safety Working Group in 2014 comprised of retailers, grower shippers, manufacturers, industry associations, and RPC providers to ensure their interests

were represented in the resulting guidelines.

This group of contributors spent a year thoroughly reviewing and researching potential points of failure, best practices, and industry regulations. The RPA's resulting guidelines combine common knowledge, best practices and science, and surpass industry regulations. The report details best practices for retailers, growers, and providers of RPCs. To read the complete report, visit the RPA website.

"RPCs have become a pervasive and essential part of the food supply chain. It is important that each member of the supply chain has a clear understanding of their role for the safe and efficient use of RPCs," said Paul Pederson, chair of the RPA Food Safety Working Group and Director of Food Safety & Compliance at IFCO Systems. "The RPA strongly encourages all companies involved in RPC use to implement these recommendations and to treat RPCs with respect and as a critical part of the food safety supply chain."

Although the RPA is not an enforcing body, the association believes the guidelines will be widely adopted because they were developed with broad industry support and input.

Key recommendations for growers and retailers

For growers and retailers, a large part of the recommendations address practices to keep clean RPCs from coming into contact with potential contaminants. For

growers, key practices include:

- Wrapping pallets of clean RPCs
- Transporting RPCs in covered van trailers or flatbed trailers with covers
- Regular inspection of trailers
- Storing RPCs under cover, preferably inside
- Using only RPC compliant labels

Retailer guidelines include handling and loading RPC pallets like any other packaged commodity.

Additionally, the RPA recommends that retailers and growers take steps to properly secure and store used RPCs to minimize their potential to contaminate other products and materials. Key recommendations for growers and retailers include:

- Stack empty or used RPCs in a uniform and interlocking manner, collapsed, to eliminate potential for them to topple over and contaminate other product in the area
- Wrap used pallets tightly and promptly notify RPC provider for pickup

Creating stable and wrapped loads also helps prevent cross-contamination during transit and at the RPC provider's facilities.

Guidelines for adhesive labels

The committee also researched and developed guidelines for adhesive labels to help make sure that RPCs are clean and free of adhesive residue for each trip through the produce supply chain. The RPA also created a protocol to thoroughly test whether adhesive labels meet the new guidelines.

Key recommendations for RPC providers

The most detailed and numerous guidelines affect providers of RPCs. One of the more noteworthy best practices is the adoption of a comprehensive microbiological sanitation and testing regime that covers human and plant pathogens in all aspects. This includes digitally dosing and controlling detergents and sanitizers. Thresholds and parts per million (ppm) should strictly follow chemical manufacturer guidelines for food and food contact materials.

Redundant electronic and manual processes should ensure these parameters are always correct. Additionally, the RPA recommends that suppliers adhere to Hazard Analysis & Critical Control Points (HACCP) to control biological, chemical, and physical hazards in the production process. It is further recommended that companies maintain a trained and qualified individual to monitor compliance with the HACCP program.

The guidelines also provide uniform testing and surveillance practices to ensure the quality and food safety of a company's sanitation processes. The practices include: quality control, systems check log, titration log, surface swab tests, process validation, and preoperational environmental inspection release. The RPA recommends that testing occur hourly, daily, monthly, and quarterly in order to record and monitor a statistically significant sample size representative of the entire production.

"Most RPC suppliers are already doing a thorough job of sanitizing and managing RPCs; however, they have different processes to achieve the end result. Creating and documenting uniform best practices satisfies the need of users of re-useables who need defined guidelines to share with members of their supply chains. And strong adoption of these practices will strengthen the safety of RPCs in the food industry and further their adoption," said Pederson.

The committee also detailed additional best practices for suppliers that cover:

- Transportation
- Two-tier auditing program
- Documentation
- Training program
- Integrated pest management
- Comprehensive security measures for internal, external and shipping
- Transportation

Source : Popular Plastics & Packaging

MEXICAN PETRO-CHEMICALS MARKET TO GROW WELL TILL DECADE-END ON GROWING DEMAND

The Mexican petrochemicals market earned revenues of US\$1.06 bln in 2013 and estimates this to

reach US\$1.64 bln in 2020, as per Frost and Sullivan.

Although the biggest revenue segments for the Mexican petrochemicals market in 2014 were acrylonitrile-butadiene-styrene (ABS) at 381.7 mln and styrene butadiene rubber (SBR) at 332.6 mln, poly butylene terephthalate (PBT) and styrene-butadiene-styrene (SBS) markets are expected to grow at the highest compound annual growth rate (CAGR) from 2014 to 2020, at 11.3% and 8.7% respectively. The main reason for this growth is the steady stream of investments by automotive, electronics, and appliance companies, which are attracted to Mexico's low production costs and strategic geographic location. "While higher vehicle production is the main market driver for the petrochemical market, there is a marked trend toward making vehicles lighter to enhance movement and save fuel," said Frost & Sullivan Energy & Environmental Industry Analyst Mariana Guercia. "This translates to higher demand for plastic materials to replace metal parts, but simultaneously, it also decreases the amount of rubber required per car."

The influx of participants, especially from Asia, is intensifying competition in the market and thereby, lowering the average price of resins. The volatility of raw material prices is further constricting profit margins, as it is

turning the market toward price-based competition.

However, the market has considerable Government backing, which makes it financially viable to do domestic business and keeps the market buoyant in spite of the falling prices. "As Mexico has signed multiple trade agreements with various nations, manufacturers from most countries do not have to pay import taxes," noted Guercia. "The low costs of establishing business stimulate foreign investments, especially in new plants and factories of automotive, appliances and electronics industries, which are the main end users of these resins." Overall, due to the favorable environment created by the Government and the country's advantageous location, the petrochemical market in Mexico is expected to grow at a steady pace.

Source : Plastics News

STUDENT SCOOPS AWARD FOR POLYMER ICE-CREAM PUMP

A young student whipped up a design to help produce a tastier summer treat and claimed first prize at the Design Innovation in Plastics 2015 awards on Friday.

Alexander Bordino, a second year product design student at Nottingham Trent University, won £1,000 for his designs to modernise

ice cream production with the Soft Ice S Pump.

The stainless steel pump which effectively turns liquid ice cream into aerated whipped ice cream was redesigned using a blend of polymers. In addition, the number of parts needed to manufacture was reduced from 15 to seven.

Bordino won a week's visit to Bayer MaterialScience in Leverkusen, Germany and a work placement at PriestmanGoode, a leading global design and brand experience agency specialising in aviation, transport and product design.

Shortly after winning the award, he told PRW: "My family has been in the ice cream business for years, and I could see there were a lot of problems with its use.

"The initial design brief was very broad, but after about two weeks of solid thinking, I came up with the idea."

The theme of this year's competition was 'Design To Transcend Metal: Changing Perceptions'.

Chairman of the judging panel Richard Brown, managing director of G&A Moulding Technology, said: "Alex's research of the market demonstrated an understanding of the challenges the end users faced and he took account of this in his redesign. His use of material selection and approach to provide a total solution was well thought through and executed."

Northumbria University student Megan Cattley won second prize for her work with degradable eye

Contd..... pg.17

GLIMPSES

AN INTERACTIVE SESSION WITH SHRI HANSRAJ GANGARAM AHIR HON'BLE UNION MINISTER OF STATE, GOI

An interactive session of IPF members with Shri Hansraj Gangaram Ahir, Hon'ble Union Minister of State, Chemicals & Fertilisers, Government of India was organised by Indian Plastics Federation at Hotel Golden Parkk, Kolkata on 6th July 2015 at 7.30 pm. Among those present were Dr. S. K. Nayak, Director General of CIPET and Shri Debasish Bhattacharjee, Chief Manager (Projects), CIPET Haldia. A lively interaction with the Hon'ble Minister took place. The Hon'ble Minister gave a patient hearing and assured IPF of all the support needed for the development of Plastic Industry in the Eastern India. Discussions on IPF Knowledge Centre and Indplas'15 took place with both Dr. S. K. Nayak and the Hon'ble Minister. The Audio visual promotional film of Indplas'15 was also shown. Mr. Ashish Agarwal initiated the idea and played an important role in arranging the meeting with the Hon'ble Minister. The meeting was well managed by Mr. K.D.Agarwal and Mr. Sisir Jalan. A few snap shots of the session are given below.





Model-L 65/90/60*1850

Fully Automatic 3 Layers or 5 Layers
Stretch Film Machine Group



Model-L 65/100/80*2350

Latest Most Developed Fully
Automatic 3 Layers or 5 Layers
Stretch Film Machine Group



INDPLAS 2015

HALL: FGH, STALL NO-3

ADD: Science City, Kolkata

TIME: 27th-30th, Nov' 2015

CONTACT: Miss Julie

MOBILE: 0086-13925862307

www.xhdjx.com

咨询热线
400-833-5568

FACTORY ADD: No. 219, Fu Yan Road, Yang Keng Tang Management
Area, Da Lang Town, Dong Guan City, Guang Dong, China.

TEL : (86-769) 82816036 FAX : (86-769) 82816082

EMAIL: sales@xhdjx.com

Automobile

Medical Plastics

Electronic Products

World Class Plastic Auxiliary Equipment Under One Roof



Plastic Auxiliary Equipment

for Drying • Conveying • Blending

for Automobiles • PET • Medical • Extrusion • Woven Sacks • Wires & Cables
• Blown Films • Electricals • White Goods

DRYING



BHD series
Honeycomb Resin Dryer
30 CMH to 3500 CMH
Engineered Above 3500 CMH



HP series
Drying Hopper
6 kg to 3600 kg
Engineered Above 3600 kg



HAD series
Hot Air Dryer
13kg to 400 Kg
Engineered Above 400 Kg



Combo Dryer
30 CMH to 60 CMH

CONVEYING



BVL (F) series
Auto Loader
150kg/hr to 1000 Kg/hr
Engineered Above 1000 Kg/hr



BVL (T) series
Auto Loader Twin
100 kg/hr to 500 kg/hr
Engineered above 500 kg/hr



BVL Tetra series
Auto Loader Tetra
Engineered up to 2000 kg/hr



BCS series (Bry-Air Conveying System)
2.2 kw, 4 kw, 7.5 kw with "n" number of station

BLENDING



BQD series
Gravimetric Blending Unit
160kg/hr to 2150 Kg/hr
Engineered Above 2150 Kg/hr



BYD series
Volumetric Doser
Dosing Screw Throughput
0.2 kg/hr to 26 kg/hr



BTC series
Mould Temperature Controller
90° C with Water &
200° C with Oil



CHA series
Chiller
3.5 TR, 7.5 TR & 10.5TR.

MOULD DEHUMIDIFICATION



MDS series
Mould Dehumidification System
500 CMH to 2500 CMH
Engineered Above 2500 CMH

Extruded Pipes

Blown Films

White Goods

Moulded Products

Electrical Components

PET



BRY-AIR (ASIA) PVT. LTD.

Email: bryairmarketing@pahwa.com

Phone: +91-124-4184444

Web.: www.bryair.com

Leaders in Dehumidification...Worldwide

- 6 Continents, 1400+ Group Employees
- 11 Worldwide Group Manufacturing Facilities
- Installation Base in Over 80 Countries
- Representatives in Over 60 Countries

Plants: India | Malaysia | China | Switzerland | Brazil | USA

International Offices: Indonesia | Philippines | Vietnam | Bangladesh | UAE | Nigeria

Domestic Offices: Delhi | Chandigarh | Mumbai | Vadodara | Kolkata | Bengaluru | Hyderabad | Chennai | Kochi

CIN:U74210DL1981PTC012456

PAHWA GROUP
Innovation is life

SOUTH INDIA

LAND OF OPPORTUNITIES

- ✓ **18000+** PLASTICS PROCESSORS WAITING TO **GROW / EXPAND**
- ✓ PROJECTED DEMAND **3.5 MILLION** TONNES/ ANNUM BY 2020
- ✓ **OVER 12000 MACHINES** TO BE ADDED OVER NEXT 5 YEARS
- ✓ **NEW PETROCHEMICAL** COMPLEX IN S.INDIA PROXIMITY. THE NEW ADVANTAGE

Grab these Opportunities at
South India's Most Promising
International Plastics Exhibition



Book Your Space Now!

 **CALL**

Mr. Hariram Thakkar +91 98450 50290
Mr. Vijayakumar +91 93412 12602
Mr. B.Swaminathan +91 97890 95247

 **WRITE TO**

iplexindia@gmail.com

 **VISIT**

www.iplex15blr.com

Organised by



Supported by



surgical equipment. She took away £500 and a placement with Innovate Product Design, a leading invention development company.

Third-placed student Martyn Billings, a final-year product design student from Coventry University won third prize for his shock-absorbing, non-conductive, non-sparking polymer hammer. He earned £250 and a placement with PDD, a provider of integrated design and innovation skills.

Source : Plastics & Rubber Weekly

IOC BOARD GIVES APPROVAL FOR PARAXYLENE PTA, ETHYLENE GLYCOL UNITS AT PARADIP

The board of Indian Oil Corporation (IOC) has given in principle approval for a 350,000 tpa glycol unit to be set up at cost of Rs 3,800 crore, and a 1 mln tpa paraxylene PTA (purified terephthalic acid) unit at an investment of Rs 8,000-9,000 crore. The two projects are expected to come onstream near its refinery at Paradip by 2020. Both the units are part of the Petroleum, Chemicals and Petrochemical Investment Region (PCPIR) hub being established at Paradip. IOCL is the anchor tenant of this hub. IOCL also has plans to set up a petcoke gasification plant with an investment of more than 15, 000 crore.

These facilities are in addition to a 0.7 mln tpa polypropylene unit coming up in the petrochemical hub.

Source : Plastics News

FOOD, HEALTHCARE PACKAGING DRIVES GROWTH IN DEMAND FOR PLASTIC FILM

U.S. demand for plastic film is expected to grow 1.5% per year through 2018 to 16.4 billion pounds, resulting in sales of \$26.2 billion, according to a report from the Freedonia Group (Cleveland, OH). The greatest growth in film demand will come from food and nonfood packaging, with above-average growth forecast for the medical and pharmaceutical sectors.

Acceleration in manufacturing output and disposable income bode well for plastic film sales in a wide range of markets, reports the market research firm. On the expenditures side, expected price stabilization from increased plastic resin supply will improve the cost-competitiveness of plastic film, allowing it to replace paper and other materials in multiple applications. Increased penetration of pouches, which provide convenience and functionality in new markets, will also boost demand for plastic film. However, environmental concerns will hinder plastic film growth in some applications, particularly plastic retail bags, which are facing

bans in multiple geographies.

LLDPE rising at expense of LDPE

Linear low-density polyethylene (LLDPE) is the largest volume film resin, comprising nearly half of resin usage in 2013, and is expected to maintain solid growth through 2018. LLDPE's high-strength source reduction capabilities have helped spur gains in multiple markets, including pouches for food products and pharmaceutical packaging. Slower growth is forecast for low-density polyethylene (LDPE), which continues to be replaced by LLDPE in some applications and has reached maturity in many of its primary markets.

Above-average growth is forecast for polypropylene film, driven by its usage in packaging for the increasingly popular fresh produce market and its growth in snack food packaging. High-density polyethylene (HDPE) film is expected to exhibit minimal growth in demand through 2018, with growing opposition to single-use plastic bags offsetting gains in food packaging.

Modest gains are also projected for polyethylene terephthalate (PET) through 2018, with healthy gains in food packaging applications replacing demand from the declining magnetic tape and photographic film markets.

Below-average growth is expected for polyvinyl chloride (PVC), hampered by continued declines in nonfood applications including pharmaceutical and medical

products.

Degradable plastic resins will experience the highest growth rate of all film types, because of increasing affordability and adoption by packaging converters. The market exhibiting the greatest growth in film demand is food packaging, driven by the expanding popularity of pouches for a variety of food items, as well as the rise of active and intelligent packaging for food.

Nonfood packaging will also see above average growth stemming from strong demand for pharmaceutical and medical packaging.

Below-average growth is forecast for nonpackaging film, because of the maturity of trash bags and the decrease in photographic and magnetic film, offset partially by robust advances for construction film. Secondary packaging will see the slowest gains, restrained by declines in garment bags and retail bags, although stretch film demand will benefit from a rebound in production activity.

The industry study from Freedonia, Plastic Film, presents historical demand data from 2003, 2008 and 2013 plus forecasts for 2018 and 2023 by plastic film resin and market. The study also considers market environment factors, evaluates company market share and profiles 40 industry players, such as Bemis, AEP and Novolex.

Go to the Freedonia Group website for more information or to purchase the report.

Source : Plastics Today

ADIDAS SHOWCASES CONCEPT SNEAKER MADE FROM OCEAN PLASTIC

In partnership with the Parley for the Oceans, an organization in which creators, thinkers and leaders come together to raise awareness about the disastrous state of the oceans and to collaborate on promising projects that can protect and conserve them, Adidas has created a concept sneaker that is entirely made of marine plastic.

Adidas, who committed earlier this year to recycling ocean waste into its products from 2016, presented the sneaker during a press gathering at the Parley Talks event, which was hosted by the UN in New York at the General Assembly Hall.

“We are incredibly excited to join Parley for the Oceans as they bring the cause of the oceans to the attention of the United Nations,” said Eric Liedtke, Executive Board member of Adidas Athletic Group and a member of the Parley for the Oceans Steering Committee.

Adidas created a world first with a shoe upper made entirely of yarns and filaments reclaimed and recycled from ocean waste and illegal deep-sea gillnets. Parley partner Sea Shepherd retrieved these nets after a 110-day expedition tracking an illegal poaching vessel, which culminated off the coast of West Africa.

Cyrill Gutsch of Parley for the Oceans explained that the organization aims to boost public awareness about the plight of the marine environment. Collaborating with high visibility brands is a good way to achieve this.

“We are extremely proud that Adidas is joining us in this mission and is putting its creative force behind this partnership to show that it is possible to turn ocean plastic into something cool,” he said.

To which Liedtke added: “Adidas has long been a leader in sustainability, but this partnership allows us to tap into new areas and create innovative materials and products for our athletes. We invite everyone to join us on this journey to clean up the oceans.”

The concept shoe illustrates the joint commitment of Adidas and Parley for the Oceans and offers a first look at the kind of consumer-ready ocean plastic products that will be revealed later this year.

Source : Plastics Today

INSTITUTE HONORS PIPE PROJECTS FOR SAVING WATER, ENERGY

When leaks and breaks kept plaguing a 39-inch prestressed concrete cylinder pipe (PCCP) transmitting water along a narrow section of road in League City, Texas, local officials determined

the best fix would be to give it a structural overhaul with a high density polyethylene (HDPE) liner fabricated by Isco Industries.

The Louisville, Ky.-based company's product was installed with a trench-less method called Swagelining, which landed the pipe rehabilitation project on this year's award list of the Plastic Pipe Institute (PPI).

Swagelining has been used in Europe but is considered an emerging trench-less technology in North America. The method calls for using a liner that has a slightly larger outside diameter than the pipe to be renewed. The liner is pulled through a single reduction die to temporarily reduce its diameter before it enters the host pipe. Once inserted, the liner reverts to its original size, expanding until it is stopped by the walls of the host pipe for a very tight fit.

About 1.2 miles of PCCP was lined with HDPE pipe for the city and the Gulf Coast Water Authority. The project involved four pulls ranging from 1,250 feet to 2,100 feet in length.

The limited number of fused sections should eliminate the potential for future leaks, according to the PPI, which recognized the project in its municipal and industrial division.

Other PPI member companies

and individuals given awards for industry contributions and professional achievement include:

- Rehau of Leesburg, Va., for maximizing heating and air conditioning efficiency at a school in Brampton, Ontario, with a cross-linked polyethylene (PEX) pipe network installed in the floors of the facility. The radiant slab heating and cooling system consisted of 104,700 feet of pipe installed in a counter-flow spiral pattern to provide even surface temperatures. The school also reduced noise and increased space by eliminating bulky convectors and ductwork.
- Uponor of Apple Valley, Minn., also for a PEX pipe in-slab radiant heating and cooling system. More than 14 miles of PEX tubing was installed on three floors of the student union at San Diego State University, consuming 40 percent less energy than other systems. That helped the construction project meet platinum requirements for Leadership in Energy and Environmental Design, which is administered by the U.S. Green Building Council.
- Southwire Co., of Carrollton, Ga., for a cable-in-conduit project that connects more than 19,000 solar panels at Ameren's O'Fallon Renewable Energy

Center. The flexible HDPE cable helped speed installation by eliminating the need for a complex arrangement of elbows, sweeps and connectors compared to traditional pipe and wire installations.

- Prinsco Inc. of Willmar, Minn. for a corrugated HDPE pipe water management system at ConAgra Foods dry food distribution center. The project engineer specified concrete pipe but a contractor proposed design changes to cut costs by 8 percent.
- Arkema Inc. of King of Prussia, Pa., for a landfill gas project that uses a 3-mile nylon 11 piping system. The project connects landfill gas to the local gas distribution system operated by Douglas County in Omaha, Neb. Steel had been considered but nylon proved to be more economical. Georg Fischer Central Plastics LLC of Shawnee, Okla., supplied the fittings and transitions.
- Yonas Kebede of Formosa Plastics, Livingston, N.J.; Michael Pluimer of Crossroads Engineering Services, Breezy Point, Minn.; and White Jee of Sasol USA, Houston, Texas, for contributing their time and expertise to the advancement and technical documentation of thermoplastic pipe.

Source : Plastics News

BUSINESS COMMUNITY NEEDS QUICK ACTIONS TO ACCELERATE SUSTAINABLE DEVELOPMENT, SAYS DNV'S REPORT

According to the independent report, "Impact - Transforming Business, Changing the World", prepared by DNV GL on behalf of the United Nations Global Compact, there is an urgent need for global business community to put sustainability into practice.

"Our assessment shows there has been a clear shift in sustainability development, but in the future the necessary transformative change will only become a reality if we are all able to speed up, scale and strengthen our efforts," said Dr Henrik O. Madsen, Group President & Chief Executive Officer at DNV GL. "It's not sufficient that business alone is mobilizing. We must therefore offer arenas for collaboration, including for policy makers, science professionals and society at large."

The report listed 10 key changes over the past 15 years in sustainable development:

- Sustainability is gradually penetrating deeper into markets and sectors all around the world. Global Compact signatories are present in 156 countries, and 25% of the world's largest companies have joined;
- A deeper understanding of the complexity and interdependence of global challenges has emerged. Partnership and collaboration are the new norm;
- More sustainability issues: equality, climate change and corruption, are now on the corporate agenda because they impact performance;
- Business has become more strategic, systematic, integrated, transparent and collaborative regarding sustainability;
- Leading companies are ahead of regulation and drive the debate to make regulations smarter. Yet these companies are in the minority, and less progressive companies are blocking positive change;
- The financial sector shows positive developments through its support for the Principles for Responsible Investment, rapid development of green bonds and Sustainable Stock Exchanges Initiative;
- The local Global Compact networks are very effective in engaging local businesses around the issues that are important for that particular country or region;
- The jury is still out on whether a sustainable and inclusive economy will be achieved. But the UN Global Compact has undoubtedly helped to change the understanding of corporate responsibility all around the world;
- Some companies are talking about a 'net zero footprint' in terms of carbon, water and waste, and some leaders have established concrete goals for reaching zero footprint levels. This is highly promising and such companies will get many followers;
- Leading companies are also beginning to look for ways to turn sustainability risks into new business opportunities.

"This report confirms that the tide is turning in corporate practices. Over the past 15 years, companies around the world have been awakening to their role in society and starting to make important strides to operate more responsibly and innovate for a greener, more sustainable future. But there is still a long way to go, and the UN Global Compact remains strongly committed to mobilizing business everywhere to be a force for good," stated Georg Kell, UN Global Compact Executive Director.

"If we want to see radical transformation, probably even creative destruction, change will need to happen simultaneously across all of three interconnected pathways towards 2030," noted Dr Madsen.

The report outlined several measures for fast mobilization:

- The business sector can like no other contribute human and financial capacity, technology and innovation and should step

up the efforts;

- Progressive companies are already urging governments to enact policies that support sustainable business practice. One example is to establish a price on carbon regionally or globally. This would be a powerful signal;
- Responsible investment is another key measure. We should also stop absurd and detrimental subsidies that hinder progress;
- Gender equality is a critical part of the solution. We will see a multiplier effect if we invest in women's education and economic empowerment and in securing women's rights;
- Leaders across all domains must take responsibility for steering the world towards a resilient, stable and equitable future.

Source : China Plastic & Rubber

SABIC AND CIMA NANOTECH COLLABORATION ANNOUNCES WORLD'S FIRST TRANSPARENT CONDUCTIVE PC FILM

SABIC and Cima NanoTech, a Singapore and US-based company, have announced the joint development of a plastics industry first: a transparent conductive polycarbonate (PC) film.

The new material is designed to provide “next generation” functionality for consumer electronics, household goods, automotive, architecture and healthcare, according to Ernesto Occhiello, SABIC Executive Vice President, Technology and Innovation.

The collaboration combines both Cima NanoTech's proprietary SANTE nanoparticle technology and SABIC's LEXAN PC film. The result is a new series of transparent conductive materials that are lightweight with high transparency, conductivity and flexibility, according to SABIC.

This could translate into faster response touch screens for consumer electronics, transparent “no-line” anti-fogging capabilities for automotive windows, better EMI shielding effectiveness for electronics, and transparent WiFi/Bluetooth antennas for mobile devices like smartphones, tablets, laptops and all-in-one computers.

SABIC engaged in a joint collaboration with Cima NanoTech in the latter half of 2013 to develop this new material. It is said to be available for customer trials later this year.

“Transparent conductive polycarbonate is a breakthrough material that customers in consumer electronics and other important industries have been seeking,” Matt Gray, Director of Marketing, Consumer Electronics for SABIC's Innovative Plastics business, says.

“We are very pleased to be working with SABIC to bring the key advantages of SANTE nanoparticle technology forward into a number of diverse consumer and industrial markets,” Jon Brodd, CEO, Cima NanoTech, states.

SANTE, a patented self-assembling nanoparticle technology platform, provides high transparency with ultra-low electrical resistance, which is said to be ten times better than the incumbent indium tin oxide (ITO).

In addition to its ability to meet optical grade specifications for display and touch applications, SANTE nanoparticle technology is also more cost effective as coating is performed via a wet coating, roll-to-roll process versus sheet-to-sheet, according to Mr. Brodd.

The conductive SANTE network is also mechanically robust, thus allowing it to withstand flexing, stretching, torsion and tension for flexible applications. The substrate can also be thermoformed into various curved and 3D form factors.

Source : China Plastic and Rubber

SELF-HEALING MATERIALS MARKET TO REACH US\$2.7 BILLION BY 2020, PREDICTS N-TECH

Industry analyst firm n-tech Research released a new report titled "Markets for Self-Healing

Materials: 2015-2022", predicting the market for self-healing materials will grow to around US\$2.7 billion by 2020.

This report quantifies the markets for self-healing materials in consumer products (including consumer electronics); construction (products such as self-healing concrete and asphalt); the automotive industry (both interior and exterior surfaces), the energy generation sector (turbines and solar); medicine and healthcare; and military and aerospace.

The types of material include reversible polymers, inorganic capsule and vascular systems, biomaterials, relevant shape memory materials and other self-healing coatings.

n-tech estimated that the largest market for self-healing materials will be found in the automotive industry where revenues will reach US\$1.6 billion by 2020.

In this market, suppliers of self-healing materials can build on the existing demand for anti-scratch coatings, as well as the fact that automobile industry is currently interested in making both the interiors and exteriors of cars more intelligent as part of their competitive strategy.

In addition, self-healing materials can bring many practical advantages to the automotive sector including improved asset life and reductions in maintenance and overall cost of ownership.

The market for self-healing materials used in the consumer products sector (mobile electronics, furniture and appliances) is

expected to reach around US\$480 million in 2020.

n-tech believed that consumer markets will be an excellent point of market entry for self-healing materials because the requirements for self-healing consumer products are less demanding than for products the construction industry.

In the mobile electronics business, the LG G Flex 2 phone is showing how novel self-healing materials can protect products, perhaps eventually rendering a separate smartphone case unnecessary.

n-tech sees the biggest opportunity from the materials perspective coming from inorganic capsule and vascular materials systems. The market for these materials is negligible now, but will reach US\$1.3 billion by 2020. The advantages of these capsule/vascular materials systems are that they are truly autonomic needing no outside thermal or light stimulus to self-repair.

Source : China Plastic and Rubber

MODULAR QUICK-CHANGE SYSTEM FOR MEDICAL EXTRUSION REDUCES JOB-CHANGE TIME TO 3 MINUTES

American Kuhne will introduce a quick changing modular extrusion system for tubing and other small-diameter medical products at MD&M East 2015.

It allows processors to run a new job just three minutes after the previous run, according to the company.

American Kuhne's Modular Quick-Change system has four components: an extruder drive module for the clean room; a purge module for the tool room or other maintenance area; and two barrel modules, one used on-line while the alternate is purged and cleaned.

At the end of a job, the "dirty" barrel module, including die head, is rolled away to the tool room for cleanout - a procedure that typically takes two hours. The alternate barrel module, preheated and with the new job recipe pre-loaded, can be installed on-line in about three minutes.

Based on Single-Minute Exchange of Die (SMED) concepts, the new system is especially suited for medical and other contamination-sensitive applications, noted to Bill Kramer, Chief Technology Officer for Extrusion Systems.

"The medical industry demands best practices in machine design that provide stability, efficiency, and control," he said. "Beyond these, this SMED solution enables a novel hot-swap process that reduces to minutes what would otherwise take hours and, perhaps more importantly, preserves the clean room environment."

The Modular Quick-Change system is available for extruders up to 51mm, with custom-engineered systems available for larger units.

Source : China Plastic & Rubber

The Inherent of Business

Dr. Devdutt Pattanaik

Some of the most powerful entrepreneurs and heads of industry in India believe in non-violence, which is translated as eating vegetarian food and imposing these practices on their employees, and not supporting industries involved in the production and distribution and sale of non-vegetarian food. This is simplistic, convenient, even romantic view of the doctrine of ahimsa overlooks the reality of violence inherent in business. A more realistic view was explored in the Vedas but was often overlooked by later scholars, many of whom were hermits, uninterested in the worldly path of business. A romantic view of ahimsa prevails even today amongst many entrepreneurs and activists and policy makers often to the detriment of development, and good governance.

The Vedas recognize that food forms the cornerstone of life. In a world of inanimate objects, there is no hunger and so no need for food. The presence of life means the quest for food. It is the quest for food that makes plants grow and animals run. Hunger (bubhuksha) stems from fear of death (bhaya) and is satisfied by food (bhog). To get food, plants devour elements like water, earth, wind and sunlight. Animals devour plants and animals. Thus in order to stay alive, something is being destroyed and killed, be it elements, plants or animals. This is himsa (violence) that we call sacrifice (bali) to generate bhog to satisfy bubhuksha to take away the bhaya of death.

Where there is fear of death, there is himsa. He who does not fear death, does not seek food, hence does not have to kill. This is the path of the monk. But the householder is concerned with the hunger of those around him. He has to be violent in order to feed those who cannot feed themselves. Hence the concept of pancha-yagna, or the five-fold feeding: of the gods (devas), to the self (atma), to the family (putra), to the ancestors (pitra) and to the other beings that constitute nature (bhutas). As long as violence is there to satisfy authentic hunger, or need, it is dharma. As soon as violence is indulged to satisfy imagined hunger fuelled by insecurity, or greed, it is adharma. How many businessmen and shareholders can say they indulge in satisfying need only?

Modern markets are based on greed. We want consumers to consume more and more goods and services. We want them to stay hungry and paranoid. In fact, some management gurus consider

this a virtue. More and more is the mantra. And so violence is perpetrated directly, indirectly, physically and psychologically, against nature and culture.

Direct violence can be seen in the act of destroying nature to build farms and human settlements and mines and dams and factories. Activists and gurus oppose this as this is tangible violence evident to all. Indirect violence is seen in the practice of banking, investment and trading that ensures there is constant supply and demand for products produced by violence. Physical violence like slavery and bonded labor and child labor continues in many forms across the industries, often outsourced to faraway countries by companies that claim to be ethical in their balance sheets, until the law catches up with them. Then there is psychological violence perpetrated by draconian rules, and work life imbalance and foul language used to stress people into letting themselves be exploited. So while we speak of 8-hour working days, companies use the mobile phone and connectivity to get people to work 24x7, thus perpetrating brutal mental violence, that is not constituted as violence, as there is no blood to be seen anywhere. But who are we fooling.

Most significantly, increasingly industries are gearing themselves to destroy culture.

We want everyone to be a consumer and so we want to destroy contentment. We want tribal people to give up claims to their forests, go to school so that they can be employees in our offices, our mines and our fields and our stores, abandoning all traditional means of livelihood, and be consumers in our markets, for our way of life is better than their way of life. We want everyone to be restless and aspirational, always hungry for more goods, more products and more ideas. We want to create consumer-junkies. For only then the market will grow and there will be prosperity all around. More bhog, demands more bali: tangible violence, intangible violence, direct violence, indirect violence, physical violence, psychological violence, consumption of non-vegetarian food notwithstanding.

Where there is violence (himsa), there is action (karma), and where there is karma there is no freedom (moksha), for we have to face the consequences of our actions, no matter how justified they may be by economists and politicians, or even religious leaders and spiritual gurus. If not by us, then by our children, or our children's children. There is no such thing as a free bhog.



C I R C U L A R

TO ALL MEMBERS OF THE FEDERATION

MEMBERS ARE REQUESTED TO SEND THEIR GRIEVANCES / PROBLEMS FACED ON VAT / CST / ENTRY TAX ETC. IN DETAILS ALONGWITH SUPPORTING DOCUMENTS TO THE IPF SECRETARIAT SO THAT WE CAN PUT THE SAME TO THE CONCERNED AUTHORITY.

PLEASE SEND THE SAME TO THE HONY. SECRETARY, INDIAN PLASTICS FEDERATION
8B, ROYD STREET, 1ST FLOOR, KOLKATA – 700 016.

E-MAIL: office@ipfindia.org, FAX : 22176005

FREE CONSULTANCY OFFER TO IPF MEMBERS

MEMBERS WANT TO SET UP NEW PLASTIC INDUSTRY AND TO AVAIL SUBSIDY AND OTHER GOVERNMENT BENEFITS AVAILABLE FOR MSMES' MAY CONSULT WITH **MR. PINAKI SINHA ROY, EX-PROJECT MANAGER, DIC AT IPF SECRETARIAT, 8B, ROYD STREET, 1ST FLOOR, KOLKATA – 700 016 ON EVERY WEDNESDAY FROM 3.00 P.M. TO 5.00 P.M. WITH PRIOR APPOINTMENT.** INTERESTED MEMBERS MAY CONTACT DIRECTLY WITH THE IPF SECRETARIAT AND FIX AN APPOINTMENT AT LEAST 2 DAYS BEFORE THE SCHEDULED MEETING. MR. ROY WILL PROVIDE THE KNOWLEDGE REQUIRED FOR SETTING UP PLASTIC INDUSTRY UNDER MSME POLICY 2013 ISSUED BY DEPT. OF MSSE & TEXTILE, GOVT. OF WEST BENGAL.

PLEASE FIX AN APPOINTMENT AT

2217 5699 / 5700 / 6004; FAX: 033-2217 6005, E-MAIL : office@ipfindia.org

SPECIAL ADVERTISEMENT TARIFF FOR IPF MEMBERS

The Federation has decided to offer advertisements to IPF members at a Special Rate of Only ` 1000/- (Rupees one thousand only) per insertion in our monthly Journals for the undermentioned advertisements (**Maximum 60 words per advertisement**)

Advertisement can be only made for:

1. **Spare Product capacity for sale**
2. **Used Machinery for sale**

Members desirous to advertise may send their advertisement materials in high resolution (**pdf format or cdr**) by 10th of each month along with their requisite payment. Please send to The Editor, **INDIAN PLASTICS FEDERATION** 8B, Royd Street, 1St Floor, Kolkata – 700 016. E-mail: office@ipfindia.org

IPF NEW MEMBERS & CIRCULAR

IPF WELCOMES TO NEW MEMBERS TO ITS FAMILY APPROVED IN THE EXECUTIVE COMMITTEE MEETING HELD ON 24/06/2015

Name of the Company	Class of Membership	Membership No.
M/s Prabhu Poly Color Ltd.	Conversion from Producer member to Manufacturer Member	M – 301

CIRCULAR NO. 39/2015

20th July 2015

The Federation has received the following applications for membership of the Federation :

1. a) Name & Address of the Applicant Firm : **M/S. BT POLYMERS PVT. LTD.**
19, Janata Road
New Santoshpur
Kolkata – 700 075.
- b) Class of membership : **Dealer member**
- c) Proposed by : M/s Techcon India (P) Ltd.
- d) Seconded by : M/s Ever Bright Plastic (P) Ltd.
- e) Name of Representative : Mr. Pratyusha Mallick - Business Dev. Executive
- f) Items dealt in : Dealer of Non-food items - Plastic goods

(Circulated in terms of Article 15 of the Articles of Association of the Federation)

Circular No.40/2015

Sub : Consumer Price Index Nos. for Industrial Workers for Kolkata for the Month of January to March 2015

Month	Consumer	Price	Index
	Base (1982=100)	Base (1960=100)	
January, 2015	1244	5897	
February, 2015	1239	5873	
March, 2015	1239	5873	



**Plastics-
Use wisely...Dispose responsibly**

C I R C U L A R

ADVERTISEMENT TARIFF FOR 'PLASTICS INDIA' JOURNAL (Per Insertions)

Front Cover (Colour)	:	~ 15,000/-
Inside Front Cover (Colour)	:	~ 11,500/-
Back Cover (Colour)	:	~ 12,500/-
Inside Back Cover (Colour)	:	~ 11,500/-
Colour Full Page	:	~ 6,000/-
Bi-Colour (2 Colours) Full Page	:	~ 4,000/-

MECHANICAL DATA

Overall Size of the Journal	:	28.5 cm X 22.0 cm
Front Cover [Print Area]	:	20.0 cm X 18.0 cm
Full Page [Print Area]	:	23.5 cm X 18.0 cm

Note : 15% discount will be allowed on 12 insertions
10% discount on 6 insertions to DIRECT ADVERTISERS



Do You Have Any Interesting Info?

Send articles with photograph,
Latest Innovations, Research
& Technical Articles

Address to :
The Editor, Indian Plastics Federation
8B, Royd Street, 1st Floor,
Kolkata - 700 016
Ph : 033-22175699/5700/6004
E-mail : office@ipfindia.org

IPF IS ON SOCIAL NETWORKING SITES :

Like us on facebook :
[www.facebook.com / indianplasticsfederation](http://www.facebook.com/indianplasticsfederation)

Follow us on Twitter :
[@ipf_india](https://twitter.com/ipf_india)

See us on, You Tube :
www.youtube.com/IPFINDIA

**Like us, Follow us
and remain connected with us.**

Supported by:



Organised by



Supported by:



Indiplas® '15

meet • share • exchange • profit

7th INTERNATIONAL EXHIBITION ON PLASTICS

November 27th - 30th, 2015 | Science City Ground, Kolkata, India



Turning **Plastics**
into **Wealth**

“Limited stalls available”

Book your space
immediately online at
www.indiplas.in

Don't miss the
golden opportunity
Make your presence
in the most
promising developing
market in India



INDIAN PLASTICS FEDERATION

8B, Royd Street, Kolkata 700016, India | Ph.: +91 33 2217-5699 / 5700 / 6004
Fax: +91 33 2217-6005 | E-mail: office@ipfindia.org
Website: www.indiplas.in / www.ipfindia.org

f : www.facebook.com/indianplasticsfederation

t : @ipf_india

y : www.youtube.com/IPFINDIA

Platinum Sponsors:



Kkalpana Industries (India) Limited



WINDSOR
Partner in Progress

Gold Sponsors:



KLJ GROUP OF INDUSTRIES



Linc Pen & Plastics Limited



PRATAP GROUP OF COMPANIES



Hi-performance Masterbatch



People who know plastics best



Uma Plastics Ltd



Utkarsh Tubes & Pipes Ltd.

Silver Sponsors:



Calco



EASTERN POLY-CRAFT
AN ISO 9001:2000 CERTIFIED COMPANY



FOGLA GROUP



G



Indo Plast Udyog Pvt. Ltd.
100% Promoters • 100% Equity • 100% Export



KKPC
The masterbatch company



Longlast Pipes (India) Pvt. Ltd.



MAGNUM
Propelling Growth



neoplast
People you can believe



MALSON™
Malsons Polymers Pvt. Ltd.



PLASTI-PACK



PRABHU
POLY COLOR POLY FIBRE NATRAJ



Rannag



ShriMaa GROUP
SUSTAINABLE PACKAGING SOLUTIONS



Sonal Polyplast Pvt. Ltd.



UMA
cosmoplastics



UMA
cosmoplastics



VAPL
VINTEN POLYMERS PVT. LTD.

Support Associations:



OPP
Organization Of
Plastics Processors Of India



PMMAI
Plastic Manufacturers Association of India



TAPMA
The Association of
Plastic Processors of India



K K POLYCOLOR ASIA LTD

An ISO 9001:2008 Certified Company

405 Ajit Sen Bhawan, 13, Crooked Lane, Kolkata - 700 069, India
Ph: +91-33-2248 8539, 3028 0119/0122/0492 Telefax: +91-33-2210 1379
Email: info@kkpc.in | Website: www.kkpc.in



Manufacturer of plastic compounds & Masterbatch
State of the art production facility
Customized and tailor-made solution

One Life, Many Colours